

**MOTUL** *TECH*

**PRODUCT CATALOGUE**

# INDUSTRIAL LUBRICANTS



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**CASTED - DRILLED - FILLED**  
THE ROAD TO SUCCESS BY



**MOTUL** **TECH**

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# MOTULTECH THE INDUSTRIAL LUBRICANTS DIVISION OF THE MOTUL GROUP

*MotulTech is a division of the Motul Group, a family owned international company manufacturing lubricants for more than 160 years. MotulTech develops, blends and sells top tier industrial manufacturing lubricants for metal working and machinery lubrication. MotulTech is present in many countries in the world through its products and services, as well as its manufacturing sites and R&D laboratories.*



**INDUSTRIAL AND  
AUTOMOTIVE  
SECTORS ARE KNOWN  
FOR THEIR DYNAMISM  
AND CONTINUING  
EVOLUTION.  
PURSUING  
PERFECTION IMPLIES  
MASTERING EVERY  
SINGLE PROCESS THAT  
A COMPANY WILL  
HAVE TO FACE.**

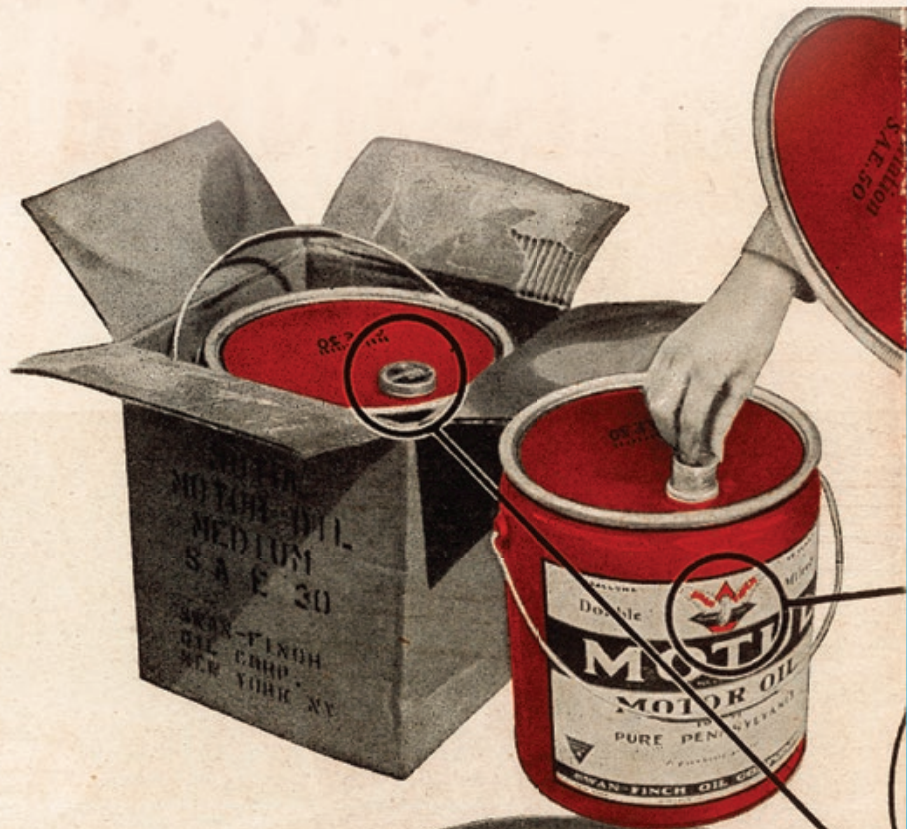
# metal working lubricants



oils

compounds

emulsions



**SWAN-FINCH OIL CORPORATION**  
RCA BUILDING WEST - NEW YORK 20, NEW YORK



MOTUL est aussi livrée en :  
 Bidons de 2/4 de gallon (2 litres env.)  
 » de 2 » (7 litres 1/2)  
 Seaux de 5 » (19 litres)  
 Tonnelets d'origine de 58 litres  
 » » 116 »  
 Grands fûts d'origine de 210 litres

Approvisionnez - vous  
 directement à la  
 Source de production  
 par ces emballages  
 d'origine! →

## LA MARQUE SWAN-FINCH

est synonyme de la plus haute qualité et représente pour vous une

**garantie incontestable**

Cette marque "SWAN-FINCH" fondée en 1853 renferme 80 ans d'études et d'expériences mises en valeur pour vous.

**"MOTUL" est préparée**

exclusivement avec du GRADE A



Le Grade A est la

plus haute qualité de Naphte existant seul dans un secteur très restreint, est raffiné selon des méthodes uniques brevetées de la Swan Finch Oil Corporation.

## LES SCELLÉS D'ORIGINE

de la Swan-Finch Oil Corporation sont apposés sur tous les emballages à la source même de la production et vous fournissent ainsi une

**sécurité absolue !**

**MOTUL** vous garantit double kilométrage, elle va deux fois aussi loin que toute autre huile.

**MOTUL** est indentifiée par le Ministère de l'Air sous les N°s 2550 et 9191, comme étant conforme à la norme Air N° 3560.

**MOTUL** est, malgré son prix légèrement plus élevé, l'huile la plus économique du Marché.

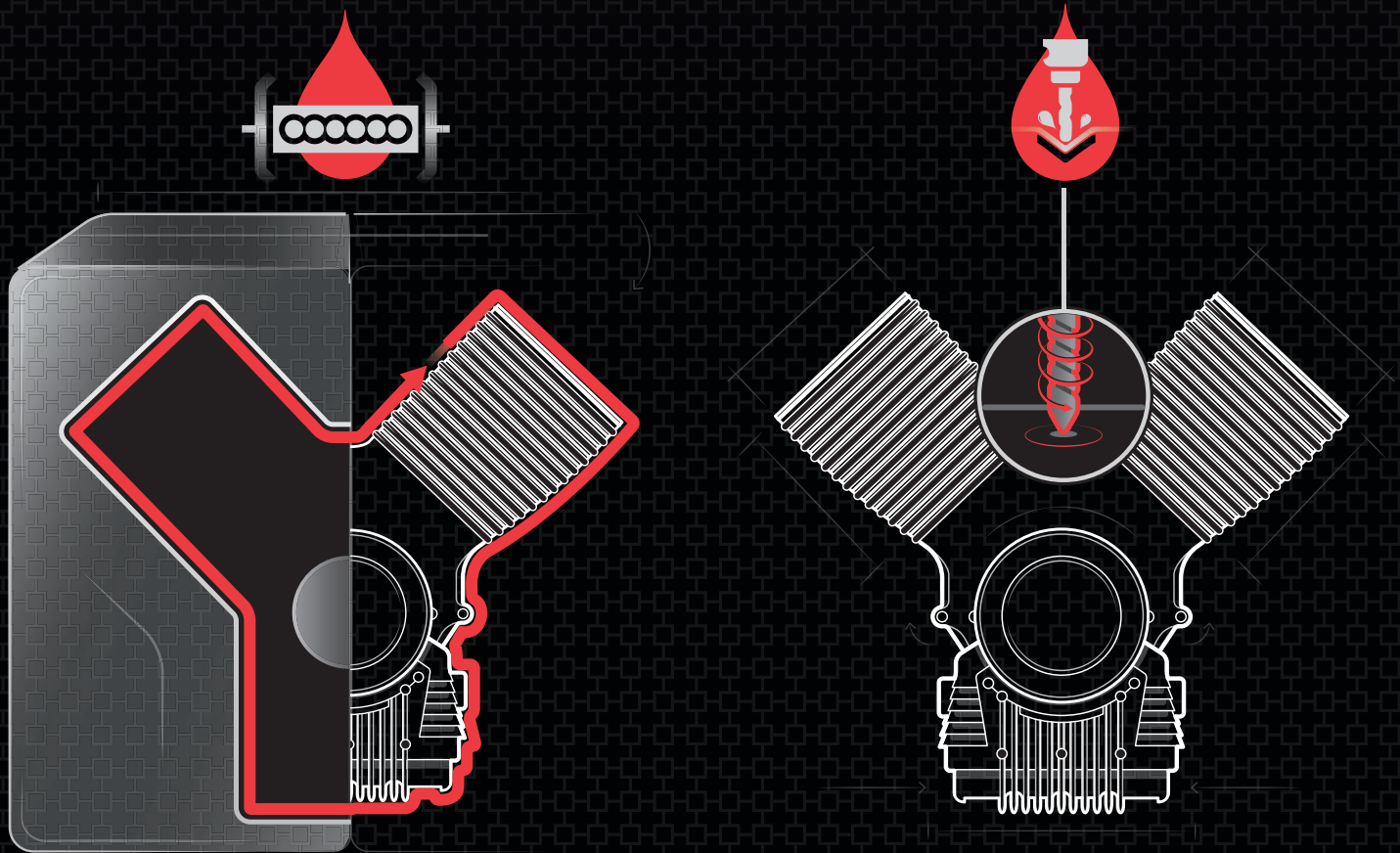
Utilisez pour le maintien de votre matériel les incomparables graisses

**MOTUL**

**MOTUL** TECH

# MOTUL GROUP EXPER

**MOTUL** TECH

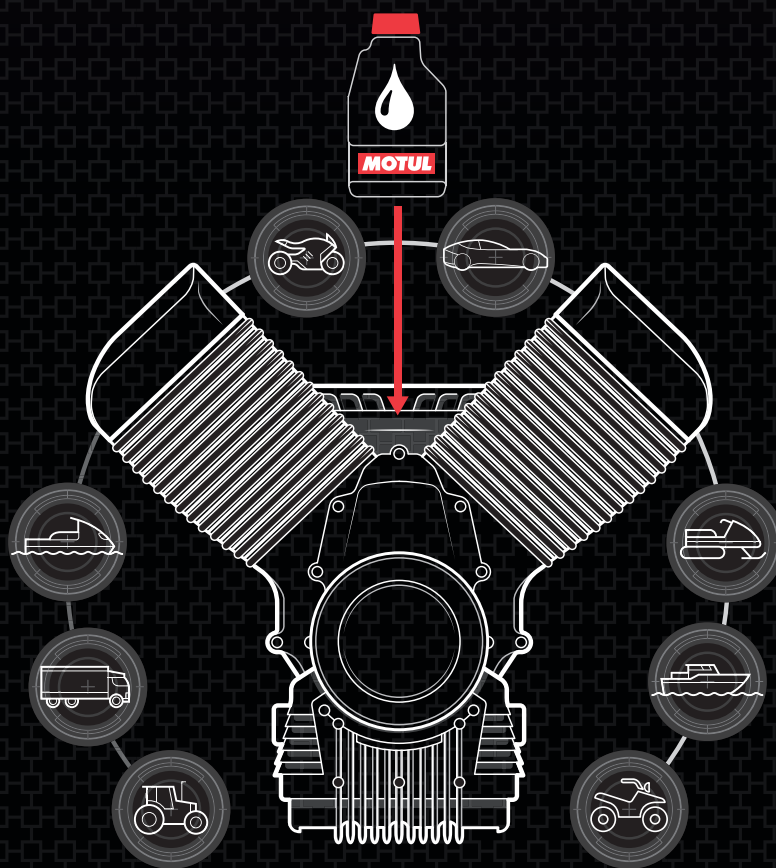


**01** **CASTED**  
FROM MELTED METAL TO DIE  
CASTED METAL BODIES

**02** **DRILLED**  
TRANSFORMING RAW METAL  
INTO FINISHED PARTS

# TISE

## MOTUL



# 03 FILLED

GETTING THE BEST FROM ALL TYPES OF ENGINES  
WITH HIGH PERFORMANCE LUBRICANTS



PART 1

PROCESS LUBRICANTS

## 01

METAL  
WORKING

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*Each machining application is unique, each of our clients has specific needs. The MotulTech offer to its customers encompasses a wide range of neat & soluble machining fluids; this range is the result of a long collaboration process with specialists in machining. By listening to your needs, our experts develop products that reconcile the search for performance and productivity with respect for users and the environment. Conceived to optimize the performance/consumption ratio, these products make it possible to obtain high quality parts at the highest production rates and optimized cost. The ethos behind formulation is to meet the most stringent requirements for hygiene & safety whilst retaining ease of maintenance. MotulTech offers you an extensive set of products and services, including soluble fluids, neat oils and minimum quantity lubrication products. The solution to your quality, productivity or technical problem, will be found in our range.*



# NEAT MACHINING OILS

Dedicated to machining by chips removal, the MotulTech neat oils range covers many applications. It provides customized solutions and allows to make a rational choice depending on the machined material, the operation severity and the required level of performance. Each product viscosity and formulation are studied to offer an optimal performance/price ratio. The MotulTech neat machining oils range has been developed to answer the specific needs of our clients and to allow them to choose the best option with optimal technical performances without compromising the safety and comfort of the user.



## SUPRACUT SUPRACUT G



(SUPRACO 1000)

**APPLICATION**

For the general machining of ferrous and non-ferrous metals. Recommended for turning operations on brass and mild steels. Can also be used in hydraulic systems of machine-tools.

**ADVANTAGES**

- Compatible with all metals.
- Optimum lubricating and anti-wear properties.
- Good cooling properties.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut 15 G	15	1a	> 160	107184	107185
Supracut 20 G	20	1a	>200	107357	104342
Supracut 30 G	30	1a	>230	107168	107167
Supracut 45 G	45	1a	>230	107042	107043





## SUPRACUT SUPRACUT 15X

**APPLICATION**

High-performance neat cutting oil designed for all kind of machining operations on non-ferrous and ferrous metals.

**ADVANTAGES**

- Excellent anti-wear and Extreme-pressure performances.
- Low misting.
- Detergency properties.
- Optimized consumption.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut 15 X	15	4c	> 180	110721	110722



## SUPRACUT SUPRACUT 20X

(SUPRACO 3020)

**APPLICATION**

High performance neat cutting oil specially developed for difficult machining on ferrous metals.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Wide range of applications.
- High lubricating and Extreme-Pressure properties.
- Good cooling properties.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut 20 X	22	4c	>190	110527	104773



## SUPRACUT EVO SUPRACUT EVO G



(SUPRACO EVO 200)

**APPLICATION**

For all standard machining operations on ferrous and non-ferrous metals. Particularly suitable for machining operations on aluminum, brass, copper and all types of steels.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Reinforced lubricating properties.
- Good anti-wear properties.
- High flash point and high viscosity index.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut EVO 15 G	15	1b	> 190	107893	107895
Supracut EVO 30 G	30	1b	230	107894	107896



## SUPRACUT EVO SUPRACUT EVO M



(SUPRACO EVO 300)

**APPLICATION**

For all standard turning operations of hard materials (steel, titanium and Inconel), non-ferrous metals and mild steels.

**ADVANTAGES**

- Free from chlorinated paraffins.
- High lubricating and Extreme-Pressure properties.
- High flash point and high viscosity index.
- Reduced oil consumption: less mist and less evaporation.
- Improved resistance to oxidation.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut EVO 10 M	10	1b	>170	108191	108192
Supracut EVO 15 M	15	1b	> 180	107928	107929
Supracut EVO 20 M	22	1b	>210	107984	107985
Supracut EVO 30 M	30	1b	>220	107963	107964
Supracut EVO 45 M	45	1b	>220	108193	108194



## SUPRACUT EVO SUPRACUT EVO X



(SUPRACO EVO 400)

### APPLICATION

For difficult machining on hard metals, stainless steels and hard steels as well as non-ferrous metals.

### ADVANTAGES

- Free from chlorinated paraffins.
- Optimized lubricity and high Extreme-Pressure capabilities.
- Good cooling properties.
- Machine safety (high flash point).

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut EVO 10 X	10	1b	>160	109512	109513
Supracut EVO 15 X	15	1b	>180	111640	111641
Supracut EVO 20 X	22	1b	>200	108923	108922
Supracut EVO 30 X	32	1b	>190	110023	110024
Supracut EVO 45 X	46	1b	>210	110025	110026



## SUPRACUT EVO SUPRACUT EVO 2515

### APPLICATION

For all standard machining operations on ferrous and non-ferrous metals. Particularly suitable for machining operations on all types of steels.

### ADVANTAGES

- Free from silicone.
- Good resistance to oxidation.
- High lubricating power and enhanced Extreme-Pressure power.
- Very good anti-wear power: very good surface condition of the parts.
- High flash point.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				IBC 1000 L 	
Supracut EVO 2515	15	1b	180	108239	




## SUPRACUT INO SUPRACUT INO BG

### APPLICATION

Premium chlorine and sulphur-free range of neat cutting oils designed for hard machining operations on ferrous metals and hard metals with very poor machinability.

### ADVANTAGES

- Consumption optimization.
- Reinforced lubricating and cooling power.
- Excellent anti-wear and Extreme-Pressure properties.
- High flash point.
- Low volatility.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supracut INO 15 BG	15	3a	>180	110929	110930






## SUPRACUT INO SUPRACUT INO GG

**APPLICATION**

Premium chlorine and sulphur-free range of neat cutting oils designed for standard machining operations on ferrous and non-ferrous metals.

**ADVANTAGES**

- Consumption optimization.
- Chlorine and zinc-free.
- Good anti-wear properties.
- High flash point.
- Low volatility.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supracut INO 20 GG	22	1a	>230	110041	110042	110043






## SUPRACUT INO SUPRACUT INO MG

**APPLICATION**

Premium chlorine and sulphur-free range of neat cutting oils designed for general machining operations of all types of metals and in all types of machines.

**ADVANTAGES**

- Consumption optimization.
- Reinforced lubricating and cooling power.
- Excellent anti-wear and Extreme-Pressure properties.
- High flash point.
- Low volatility.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supracut INO 20 MG	21	1a	>200	110038	110039	110040






## SUPRACUT INO SUPRACUT INO XG

**APPLICATION**

Premium chlorine and sulphur-free range of neat cutting oils designed for all hard machining on ferrous and non-ferrous metals.

**ADVANTAGES**

- Consumption optimization.
- Reinforced lubricating and cooling power.
- Excellent Extreme-Pressure properties.
- High flash point.
- Low volatility.
- Compatible with high pressures.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supracut INO 20 XG	22	1a	>200	110020	110021	110022



## SUPRACUT SUPRACUT B




(SUPRACO 5000)

**APPLICATION**

For severe machining like deep drilling, tapping, deep reaming, broaching operations and all hard machining on ferrous metals and high alloy steels (Inconel, stainless steel, titanium).

**ADVANTAGES**

- Free from chlorinated paraffins.
- Very high lubricating properties and Extreme-Pressure capacity.
- High cooling properties.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supracut 15 B	15	4c	>145	-	104819	104754
Supracut 30 B	30	4b	>190	-	104685	104603
Supracut 40 B	40	4c	>190	-	104753	104751
Supracut 50 B	50	4c	>200	108234	108236	108237



## SUPRACUT SUPRACUT 30 K

(SUPRACO 556 SB)

**APPLICATION**

Special neat oil, designed for threading operations by knurling deformation of mild steels and high alloyed steels.

**ADVANTAGES**

- Very good anti-rust and anti-corrosion properties.
- Very good Extreme-Pressure property.
- High lubricating and cooling power.
- Excellent stability in use.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	FLASH POINT °C	AVAILABLE PACKAGING
			DRUM 180 KG 
Supracut 30 K	32	220	100599




## SUPRACO SUPRACO SPRAY

**APPLICATION**

For very severe machining on all ferrous metals such as manual thread, comb thread, rolling thread, die thread, drilling, manual and semi-automatic tapping.

**ADVANTAGES**

- Very high lubricating properties and Extreme-Pressure capacity.
- Good anti-wear properties.
- Increased tool life.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING
				6 x AEROSOLS 400 ML 
Supraco Spray	53	4c	100	108719



**SUPRACUT**  
**SUPRACUT EDM 03**  
 (SAFCO EROLEC 100)

**APPLICATION**

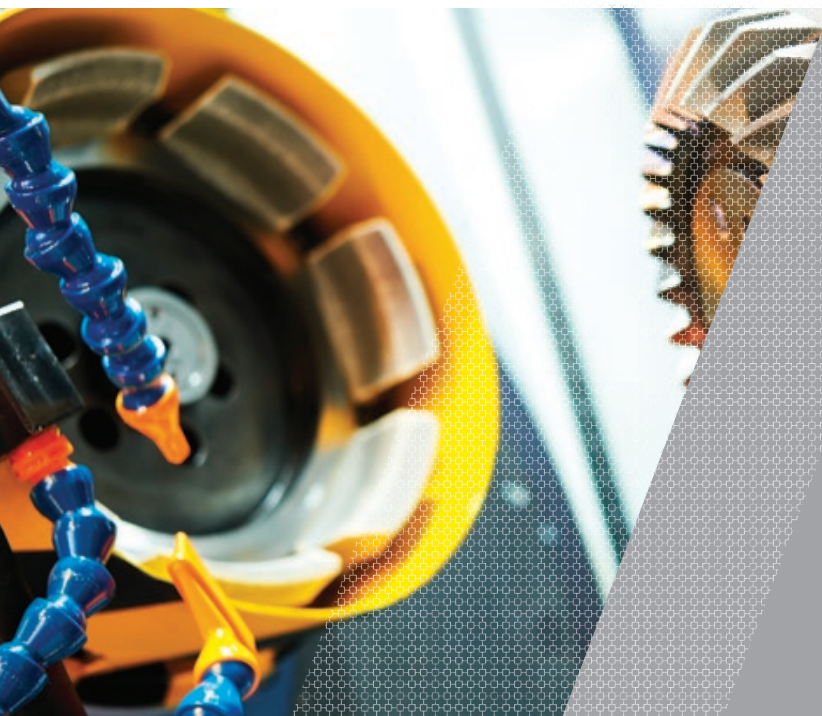
Multipurpose dielectric fluid for use in all discharge machines working by penetration especially for roughing, finishing and superfinishing work.

**ADVANTAGES**

- Excellent detergent and cooling power.
- High oxidation and pyrolysis resistance.
- Adapted to every type of spraying.
- Strong chips decantation power.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 208 L 
Supracut EDM 03	2.3	1a	103	108598	108628





# GRINDING & SUPERFINISHING

The MotulTech range of grinding products has been formulated to efficiently meet the requirements of superfinishing operations on ferrous and non-ferrous metals. Each product of the range has been developed to answer a specific need. Their formulation ensures high efficiency and the good decantation of fines. Base oils have been carefully selected to limit vaporisation and mists. The viscosity of each product is perfectly adapted to limit consumption.



## SUPRAGRIND SUPRAGRIND 05 G




(PROFILINE 1005)

### APPLICATION

For high yields machining operations of all types of materials, lapping, grinding and sharpening of HSS and carbide tools with diamond or CBN wheels.

### ADVANTAGES

- Free from chlorinated paraffins and sulphur.
- Compatible with all metals.
- High lubrication and good cooling properties.
- Enhance the finished aspect of the parts.
- High flash point and viscosity index.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supragrind 05 G	5	1a	132	108278	108279	108280



## SUPRAGRIND SUPRAGRIND 10 X


(PROFILINE 10EP)

### APPLICATION

Grinding hard metals of poor machinability and for grinding carbide and high-speed steel tools using diamond grinding wheels or CBN grinding wheels.

### ADVANTAGES

- Free from chlorinated paraffins.
- Clear and odourless.
- Compatible with all metals.
- Good lubricating and Extreme-Pressure properties.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supragrind 10 X	10	1b	155	108878	106995



## SUPRAGRIND EVO SUPRAGRIND EVO 08 M




(PROFILINE 1008)

**APPLICATION**

For high yields machining operations of all types of materials, lapping, grinding and sharpening of HSS and carbide tools with diamond or CBN wheels.

**ADVANTAGES**

- Free from chlorinated paraffins and sulphur.
- Compatible with all metals.
- High lubrication and good cooling properties.
- Enhance the finished aspect of the parts.
- High flash point and viscosity index.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supragrind EVO 08 M	8	1a	170	110335	106892	105862



## SUPRAGRIND INO SUPRAGRIND INO 08 GV

(PROFILINE XS8)

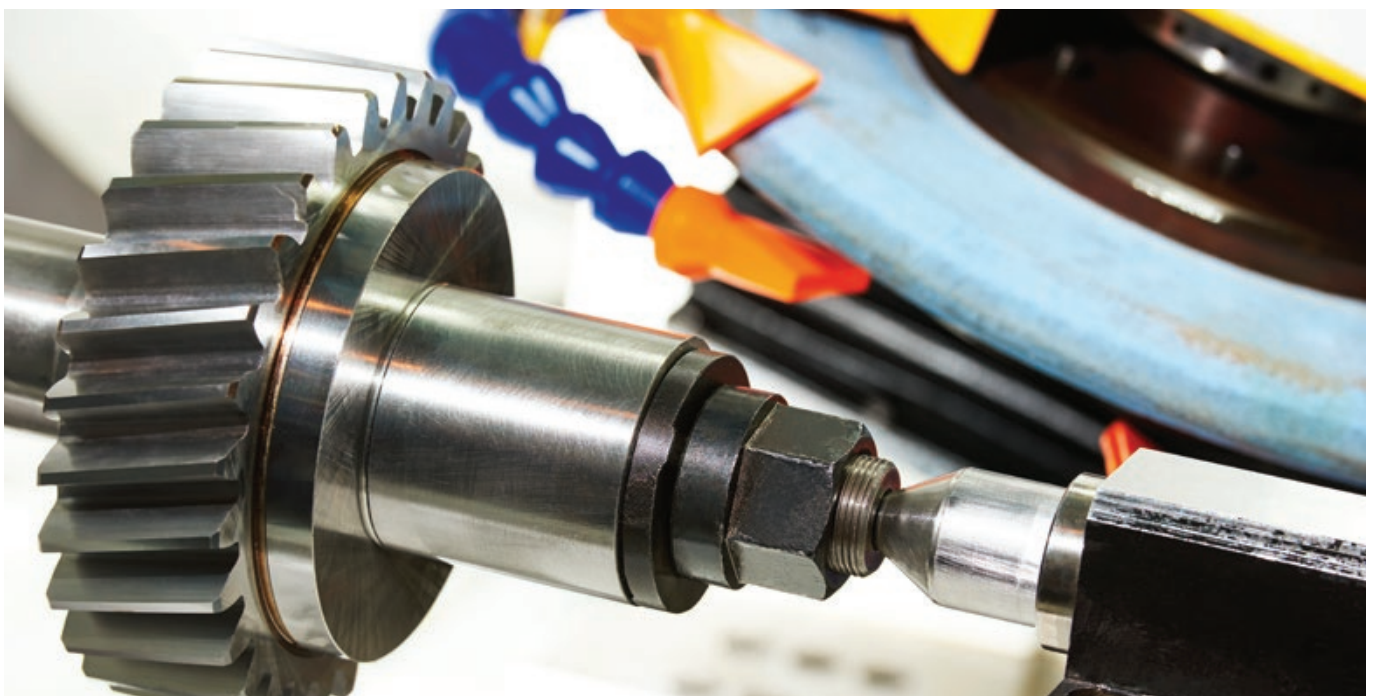
**APPLICATION**

For grinding and sharpening operations with diamond or cubic boron nitride wheels of carbide and HSS tools. Formulated with synthetic and biodegradable esters.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Compatible with all metals.
- High lubricating power and high pressure absorbing capacity.
- Good cooling properties.
- High flash point.
- Low mist.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Supragrind INO 08 GV	8	1a	>180	109612	109611





# MINIMUM QUANTITY LUBRICATION

The Supracut MQL range dedicated to minimum quantity lubrication is particularly adapted to sawing, drilling, threading and milling operations on every type of material. Each product has a high flash point and a high biodegradability level. The whole range allows minimum oil consumption and easy parts degreasing, with no regulatory labelling.



## SUPRACUT MQL SUPRACUT MQL




(SUPRACO 1308E, 1309, 1315, 1320WR)

### APPLICATION

For machining involving chips removal of ferrous and non-ferrous metals, with a micro-spray circulation system. Designed for operations of milling with milling and sawing tools, cutting and tapping.

### ADVANTAGES

- High lubrication and anti-wear properties.
- Very good wettability.
- High viscosity index.
- High flash point.

PRODUCT NAME	VISCOSITY GRADES AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	BASE OIL	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 50 KG 	DRUM 190 KG 
Supracut MQL 15	15	1a	>210	Ester + Vegetable	105575	-	-
Supracut MQL 20	22	1a	180	Synthetic alcohol	110513	102939	-
Supracut MQL 30	35	1a	>260	Ester	104375	-	-
Supracut MQL 45	46	1a	>320	Ester	104237	-	100561





# SOLUBLE MACHINING FLUIDS

MotulTech high performance soluble fluids cover a wide range of machining applications. Their formulations answer the highest regulation standards. In addition, MotulTech proposes a complete range of products and services to ensure fluid maintenance and guarantee the best performances level.




## SYNTHETIC FLUID BIOCOOL 3130

**APPLICATION**

Light to moderate machining and grinding operations on ferrous and hard metals.

**ADVANTAGES**

- Formaldehyde free.
- Excellent cooling and detergency.
- Good separation from tramp oils.
- Very good protection against corrosion.
- Excellent biostability and stability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
					DRUM 208 L 
Biocool 3130	Clear yellow-green	3 - 6%	0 - 800	3.1	108514






## SYNTHETIC FLUID BIOCOOL 3210

**APPLICATION**

Light to moderate grinding and machining operations on ferrous metals and titanium. Recommended for low to medium water hardness.

**ADVANTAGES**

- Formaldehyde free.
- High cooling properties.
- Approved by SNECMA on titanium.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 200 L 	IBC 1000 L 
Biocool 3210	Clear yellow-green	4 - 14%	0 - 800	2.3	105690	105693	105691




## SYNTHETIC FLUID **BIOCOOL 3220**

**APPLICATION**

Recommended for all grinding and machining operations on any ferrous or non-ferrous metals.

**ADVANTAGES**

- FRA free.
- Excellent cooling properties.
- Excellent stability and biostability in use.
- Good separation of tramping oils.
- Excellent protection against corrosion.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					DRUM 200 L	
Biocool 3220	Clear yellow-green	3 - 12%	0 - 600	1.9	105688	





## SYNTHETIC FLUID **BIOCOOL 3520**

**APPLICATION**

Dedicated to carbides and hard steel grinding requiring advanced cooling properties.

**ADVANTAGES**

- FRA free.
- Excellent biostability and stability in use.
- Good separation from tramp oils.
- Very good particles settling.
- Avoid cobalt leaching.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 208 L 
Biocool 3520	Clear yellow-green	3 - 6%	0 - 600	2.3	108530	108318




## SYNTHETIC FLUID **BIOCOOL 3740**

**APPLICATION**

All grinding and machining operations on hard metals. Particularly suited to metalworking which requires high pressure (from 50 to 600 bars).

**ADVANTAGES**

- FRA and boron free.
- SNECMA approval on titanium.
- Excellent lubrication and cooling properties.
- Good separation from tramp oils.
- Optimization of surface roughness and finishes.
- Excellent biostability and stability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					DRUM 208 L	
Biocool 3740	Clear yellow-green	3 - 15%	0 - 800	1.6	108524	





## SYNTHETIC FLUID **BIOCOOL 3820**

**APPLICATION**

Light to moderate grinding and machining operations on ferrous metals and non-ferrous metals. Recommended for low to medium water hardness.

**ADVANTAGES**

- Boron free.
- Formaldehyde free.
- Good lubricity and cooling properties.
- Excellent biostability and stability in use.
- Good separation from tramp oils.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 200 L 
Biocool 3820	Clear yellow-green	3 - 12%	0 - 800	2.3	107852	106328




## SYNTHETIC FLUID **BIOCOOL 3837 GR**

**APPLICATION**

Moderate to severe grinding and machining operations on ferrous metals. Recommended for low to medium water hardness.

**ADVANTAGES**

- Boron free.
- Formaldehyde free.
- Excellent air release properties.
- Very good lubricity and cooling properties.
- Improvement of tool life.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					DRUM 202 L 	
Biocool 3837 GR	Clear yellow-green	4 - 12%	0 - 400	1.3	108542	





## SYNTHETIC FLUID **BIOCOOL SAVEMAX**

**APPLICATION**

Recommended for machining of cast iron, alloy steel, plain carbon steel, and yellow metal.

**ADVANTAGES**

- FRA free.
- Free from mineral oil.
- Excellent cooling and detergency properties.
- Intensive reduction in consumption.
- Reduced tool wear.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 200 L 
Biocool Savemax	Translucent	6 - 15%	100 - 500	1.3	111621	111622






## SEMI-SYNTHETIC FLUID **SAFKOOL 6110 CS**

**APPLICATION**

Light to moderate grinding and machining on ferrous metals. Recommended for low to medium water hardness.

**ADVANTAGES**

- Formaldehyde free.
- High cooling properties.
- Low consumption.
- Very good biostability.
- Cleanliness of machines and parts.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6110 CS	Translucent	3 - 8%	100 - 400	2.2	109361	109360	109359






## SEMI-SYNTHETIC FLUID **SAFKOOL 6120**

**APPLICATION**

Recommended for grinding and general machining operations on cast iron and steel.

**ADVANTAGES**

- Formaldehyde releasers free.
- Excellent cooling and detergency properties.
- Excellent biostability and stability in use.
- Good separation of tramp oils.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6120	Translucent	3 - 8%	200 - 600	1.7	109165	109166	109167






## SEMI-SYNTHETIC FLUID **SAFKOOL 6210**

**APPLICATION**

Light to moderate grinding and machining on ferrous metals. Can also be used for standard machining operations on yellow metals in certain conditions.

**ADVANTAGES**

- Formaldehyde free.
- Excellent cooling properties.
- Excellent biostability and stability in use.
- Operator friendly.
- Cleanliness of working environment.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6210	Translucent	3 - 8%	200 - 500	1.7	108531	108512	108513






## SEMI-SYNTHETIC FLUID **SAFKOOL 6220**

**APPLICATION**

Light to moderate machining operations on ferrous and non-ferrous metals. Recommended for medium to very high-water hardness.

**ADVANTAGES**

- Formaldehyde and bactericide free.
- Excellent stability in hard waters.
- Cleanliness of machines and parts.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6220	Translucent	4 - 15%	200 - 800	1.6	109628	109626	109627






## SEMI-SYNTHETIC FLUID **SAFKOOL 6420**

**APPLICATION**

Moderate to severe machining and grinding operations on all metals, including aerospace alloys. Recommended for soft to medium water hardness. Suitable for high pressure jet (up to 70 bars).

**ADVANTAGES**

- Formaldehyde free.
- Good release of tramp oils.
- Approved by SNECMA on aluminum and titanium.
- Reduction of tools wear and improvement of surface roughness.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6420	Translucent	3 - 15%	50 - 800	1.7	109758	109747	109746





## SEMI-SYNTHETIC FLUID **SAFKOOL 6620**

**APPLICATION**

For severe operations like broaching, boring, tapping and some forming applications on ferrous, high alloyed and stainless steels.

**ADVANTAGES**

- Formaldehyde free.
- Excellent cooling and Extreme-Pressure properties.
- Optimization of surface finish.
- Excellent biostability and stability in use.
- Operator friendly.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 200 L 
Safkool 6620	Translucent	4 - 20%	200 - 500	1.6	105682	105683





## SEMI-SYNTHETIC FLUID **SAFKOOL 6817 GR**

**APPLICATION**

Light to moderate machining and grinding operations on ferrous and non-ferrous metals.

**ADVANTAGES**

- Formaldehyde and boron free.
- Very good cooling and detergency properties.
- Very good particles settling properties.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					DRUM 200 L 	IBC 1000 L 
Safkool 6817 GR	Translucent	5 - 10%	100 - 500	1.5	107375	111620






## SEMI-SYNTHETIC FLUID **SAFKOOL 6820 SW**

**APPLICATION**

Machining of ferrous and non-ferrous alloys, including standard aluminum alloys. Suitable for dilution in soft water and uses under high pressure.

**ADVANTAGES**

- Boron and FRA free.
- Excellent lubricating & cooling properties.
- Excellent non-foaming properties.
- High pressure compatible.
- Optimization of surface finish and endurance.
- Excellent biostability and stability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6820 SW	Translucent	4 - 15%	100 - 500	1.5	109491	109492	109495





## SEMI-SYNTHETIC FLUID **SAFKOOL 6847 BF**

**APPLICATION**

Recommended for grinding and machining of alloy steel and cast iron metallurgies. Suitable for grinding and light and medium machining applications.

**ADVANTAGES**

- Formaldehyde and formaldehyde releasers free.
- pH-stable emulsion.
- Excellent emulsion biostability.
- Can be used in large centralized coolant systems and single sump machines.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 208 L 
Safkool 6847 BF	Translucent	5 - 9%	200 - 600	1.7	111571	111572






## SEMI-SYNTHETIC FLUID **SAFKOOL 6920 CS**

**APPLICATION**

Recommended for usage in large centralized coolant systems and single pump machines. Suitable for heavy duty machining.

**ADVANTAGES**

- Boron and formaldehyde releasers free.
- pH-stable emulsion.
- Multimetal emulsion.
- Excellent emulsion biostability.
- Reduction of tools wear.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Safkool 6920 CS	Translucent	4 - 15%	200 - 1000	1.4	111386	111387	111428




## SEMI-SYNTHETIC FLUID **SAFKOOL TMC**

**APPLICATION**

Water emulsifying metalworking fluid concentrate dedicated to steel ERW tube manufacturing operations (including galvanized steels).

**ADVANTAGES**

- Boron and FRA free.
- Excellent cooling & detergent properties.
- Good separation from tramp oils.
- Very good protection against corrosion.
- Excellent biostability and stability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
					DRUM 208 L 
Safkool TMC	Translucent	5 - 7%	5 - 500	1.4	107966





## EMULSION **STABILIS 9120**

**APPLICATION**

Water soluble metalworking fluid concentrate dedicated for general machining of copper alloys, cast iron, steel and standard aluminum alloys.

**ADVANTAGES**

- Boron free.
- Excellent lubricating and cooling properties.
- Low foaming product.
- Excellent biostability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 208 L 
Stabilis 9120	Milky white	4 - 10%	100 - 600	0.88	110957	110978






## EMULSION STABILIS 9220

**APPLICATION**

Light to moderate machining operations on ferrous and non-ferrous metals. Suitable for medium to high hardness water.

**ADVANTAGES**

- Formaldehyde free.
- Good compromise between lubricating and cooling properties.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9220	White opalescent	4 - 12%	100 - 600	1.2	108526	108509	108510






## EMULSION STABILIS 9230

**APPLICATION**

Medium to severe machining operations on ferrous and non-ferrous metals, including all aerospace alloys. High pressure compatible (up to 70 bars).

**ADVANTAGES**

- Formaldehyde free.
- High lubrication performance.
- Optimization of surface roughness and finishes.
- Approved by SNECMA on aluminum and titanium.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9230	White opalescent	4 - 15%	200 - 500	1.0	108529	108520	108523






## EMULSION STABILIS 9830

**APPLICATION**

Recommended for ferrous and non-ferrous alloys, including standard aluminum alloys, nickel, and titanium. Suitable for heavy duty machining. High pressure compatible (up to 70 bars).

**ADVANTAGES**

- Boron and formaldehyde releasers free.
- Multi-purpose emulsion.
- Excellent pH-stability.
- Excellent biostability.
- Excellent anti-wear properties.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9830	White opalescent	4 - 15%	250 - 500	1.1	111007	111068	111069






## EMULSION **STABILIS 9837 AL**

**APPLICATION**

Heavy duty machining on aluminum (cast & automotive) and steel alloys. Suitable for both soft and hard water.

**ADVANTAGES**

- Formaldehyde and boron free.
- Good cooling and detergency properties.
- Very good lubricity.
- Good emulsion stability, even in hard waters.
- Excellent biostability.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 200 L 	IBC 1000 L 
Stabilis 9837 AL	Milky white	5 - 15%	100 - 800	1.0	107374	107373	108605






## EMULSION **STABILIS 9910 AL**

**APPLICATION**

Water soluble concentrate particularly suited to all machining processes on steels, aluminum and its alloys. Particularly effective for all machining operations on ferrous and non-ferrous alloys on both soft and hard water.

**ADVANTAGES**

- Formaldehyde and boron free.
- Good cooling and detergent properties.
- Excellent biostability and stability in use.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9910 AL	Milky white	5 - 15%	100 - 600	0.97	109550	109551	109549






## EMULSION **STABILIS 9920 AL**

**APPLICATION**

All machining processes on aluminum and its alloys. All machining operations on ferrous and non-ferrous alloys on both soft and hard water.

**ADVANTAGES**

- Boron and FRA free.
- Very good cooling and detergency properties.
- Good lubrication properties.
- Excellent stability in use.
- Excellent biostability.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9920 AL	Milky white	4 - 15%	100 - 600	0.98	108258	109514	108260






## EMULSION **STABILIS 9827 MG**

**APPLICATION**

Suitable for the machining of Magnesium, Aluminum, and its alloys such as 2024, 6061, 6082, 7075 as well as yellow metals. It can also be used for general machining of medium-duty steel alloys as well as plain carbon steel and cast iron. Recommended for machining in extreme hard water conditions.

**ADVANTAGES**

- Boron and FRA free.
- Multimetal machining.
- pH stable product emulsion.
- Reduced tool wear.
- Water hardness stability up to 2600 ppm.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
					JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Stabilis 9827 MG	Translucent	5 - 12%	100 - 600	1.2	111453	111454	111869





## EMULSION **SAFCOLITH GR 2 NS**

**APPLICATION**

Soluble concentrate which facilitates granite cutting and increases the life of diamond tools. It can be used for cutting of granite blocks on cutting machines or multi-disks machines.

**ADVANTAGES**

- Formaldehyde & boron free.
- Can be used on a wide range of granite.
- Excellent lubricating power for stone cutting.
- Increased diamond tools life.
- No gumming.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION OF USE (DEPENDS ON THE APPLICATION AND THE MATERIALS)	WATER HARDNESS (PPM)	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
					DRUM 170 KG 	IBC 1000 L 
Safcolith GR 2 NS	Milky white	1.5 - 2.5%	100 - 300	1.1	101962	100715





**PART 1**

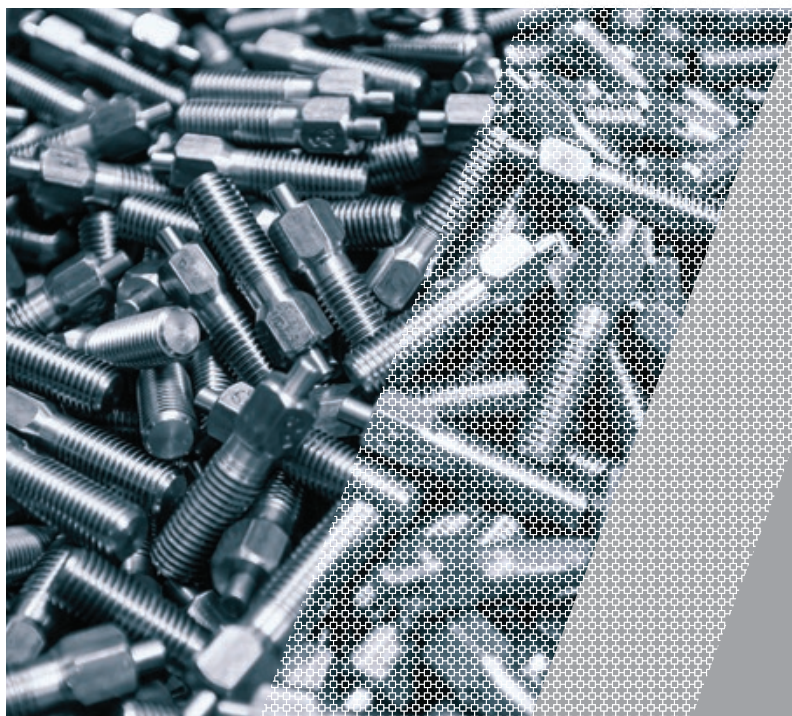
**PROCESS LUBRICANTS**

# 02

## METAL & SURFACE TREATMENT

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# FORMING

Every forming, drawing and pressing application has specific constraints, each of our customers is unique. It is for this reason that MotulTech offers a wide range of soluble and neat deformation products. Listening to your requirements, our experts develop products that reconcile the search for high performance and productivity with the respect for users and the increasingly important environmental factors. Expert assistance is always available to tailor-make solutions to fit your process.






## COLD FORMING UNIVERSELLE SC

### APPLICATION

Multi-purpose range of neat oils for cold heading, tapping applications and suitable for the machine-tools lubrication. UNIVERSELLE 800 SC can be used as a booster for neat cutting and forming oils from 5 to 20%.

### ADVANTAGES

- Free from chlorinated paraffins.
- UNIVERSELLE SC covers cold heading and lubrication applications at once.
- Non-staining on non-ferrous metals.
- Very high Extreme-Pressure capacities.
- No corrosion.
- Very high lubrication properties.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Universelle 55 SC	54	1a	214	-	108488	108489
Universelle 68 SC	68	1a	224	-	-	104855
Universelle 90 SC	90	1a	214	-	104875	104609
Universelle 150 SC	145	1a	216	-	-	108490
Universelle 800 SC	154	4b	230	104787	106398	104771



## COLD FORMING UNIVERSELLE 68 EP

**APPLICATION**

High-Performance neat oil designed for severe cold heading and tapping operations on ferrous metals.

**ADVANTAGES**

- Free from chlorinated paraffins.
- High wettability ensuring an even distribution of the lubricant between the tool and machining part.
- High Extreme-Pressure properties.
- High oxidation stability.
- Good separation from wire drawing soaps.
- Limited smoke.
- Easy to clean with standard cleaning processes.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Universelle 68 EP	69	4c	> 200	109718	109979



## COLD FORMING UNIVERSELLE 90 EP

**APPLICATION**

High performance neat oil, free of chlorinated paraffins, suitable for severe forming applications including cold heading.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Excellent Extreme-Pressure properties.
- High wettability.
- Resistance to oxidation.
- Good separation from wire drawing soaps.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				IBC 1000 L 	
Universelle 90 EP	90	4c	208	111874	



## COLD FORMING UNIVERSELLE 90 MP

**APPLICATION**

Multi-purpose oil, suitable for severe forming applications including cold heading.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Extended tool life thanks to Extreme-Pressure and lubricating properties.
- Multi-metals compatibility.
- Easy to degrease.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Universelle 90 MP	91	1a	226	110999	109809



## COLD FORMING CENTER OIL FZ-4001E

**APPLICATION**

High-performance neat cold forming oil suitable for cold forging, drawing, and stamping of press on steel, carbon steel, alloyed steel and stainless steel.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Extended tool life.
- Better surface finishing.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L	
Center Oil FZ-4001 E	135	1a	194	104602	



## BLANKING & STAMPING CENTER OIL FZ-8081 E

**APPLICATION**

High-performance neat oil designed for vertical press or transfer machines applications. Recommended for thin metal sheets (around 3 mm) stamping and cutting. Particularly suitable for stainless steels.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Extended tool life thanks to Extreme-Pressure and lubricating properties.
- Better surface finishing.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L	
Center Oil FZ-8081 E	22	4a	188	106508	



## BLANKING & STAMPING CENTER OIL FZ-8201 E

**APPLICATION**

High-performance neat oil specially designed for forming applications on ferrous metals. It is also a high-performance product for the molding of plate material operations such as drilling, bending and aperture.

**ADVANTAGES**

- Free from chlorinated paraffins.
- Extended tool life thanks to Extreme-Pressure and lubricating properties.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L	
Center Oil FZ-8201 E	135	4c	188	104815	



## BLANKING & STAMPING CENTER OIL FZ-8209 E

### APPLICATION

High-performance neat oil designed for vertical press or transfer machines applications. Recommended for thin metal sheets (around 3 mm) stamping and cutting. Particularly suitable for stainless steels.

### ADVANTAGES

- Free from chlorinated paraffins.
- Extended tool life thanks to Extreme-Pressure and lubricating properties.
- Better parts finishing.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING
				DRUM 208 L 
Center Oil FZ-8209 E	387	4c	192	105801



## STAMPING & BLANKING SUPRACO ELECTRIC 40A

### APPLICATION

Neat oil used for the impregnation of induction core contactors, circuit breakers and other similar devices.

### ADVANTAGES

- Reduced compaction of induction metal sheet.
- Can be used for both degreasing and impregnation before assembly.
- Reduced consumption (less than 50 mg per assembly).
- Water repellent, prevents scrubbing and oxidation.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING
				DRUM 180 KG 
Supraco Electric 40A	48	1a	238	100816




## STAMPING & BLANKING CADREX DR SC

### APPLICATION

Neat oil designed for drawing, bending, reshaping and fine blanking on all ferrous and non-ferrous metals, under low-duty conditions. Approved by RENAULT.

### ADVANTAGES

- Non-chlorinated product.
- No yellowing under HPRL lightning.
- Provides short-term protection if not rinsed.
- Lubricant residues easy to clean before paint application.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING
				DRUM 208 L 
Cadrex DR 20 SC	20	1a	> 170	111878
Cadrex DR 40 SC	40	1a	> 170	107345
Cadrex DR 100 SC	100	1a	> 200	106980
Cadrex DR 220 SC	220	1a	> 250	106952



## VANISHING OIL CADREX V 877

**APPLICATION**

Vanishing fluid designed for the forming and cutting of thin sheets of ferrous and non-ferrous metals.

**ADVANTAGES**

- Multi-purpose and versatile thanks to its fluidity.
- No degreasing step after metalworking.
- Ready to use.
- Contains an Extreme-Pressure, chlorine-free additive.
- Compatible with non-ferrous metals.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
Cadrex V 877	1.5	1a	> 62	110506	104874



## VANISHING OIL CADREX EV

**APPLICATION**

Vanishing fluid, specifically designed for the forming and cutting of steel, stainless steel, aluminum and copper alloys. Complies with US FDA status and meets the requirements of the food industry.

**ADVANTAGES**

- Odourless.
- High evaporation rate.
- Low surface tension.
- Application: low pressure spraying, roller, impregnation by dipping.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
Cadrex EV 1000	< 7	1a	65	-	111274
Cadrex EV 1100	1.3	1a	62	109829	104715
Cadrex EV 1400	1.4	1a	62	109830	107358
Cadrex EV 1600	1.5	1a	62	110281	-
Cadrex EV 1800	< 7	4b	70	109563	-
Cadrex EV 4012	2.6	1a	105	109831	105855




## NEAT & SOLUBLE FORMING FLUID CADREX FL 100

**APPLICATION**

Emulsifying neat oil for deformation, stamping and fine blanking operations from medium to heavy duty. Reinforced Extreme-Pressure properties allowing operations on hard materials such as stainless steel. Particularly suitable for stainless steels.

**ADVANTAGES**

- Very high lubrication properties.
- Very high Extreme-Pressure capacities.
- Low foaming.
- Excellent biostability.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING	
				DRUM 208 L 	
Cadrex FL 100	100	4b	194	106088	




## NEAT & SOLUBLE FORMING FLUID **CADREX FL 100S**

**APPLICATION**

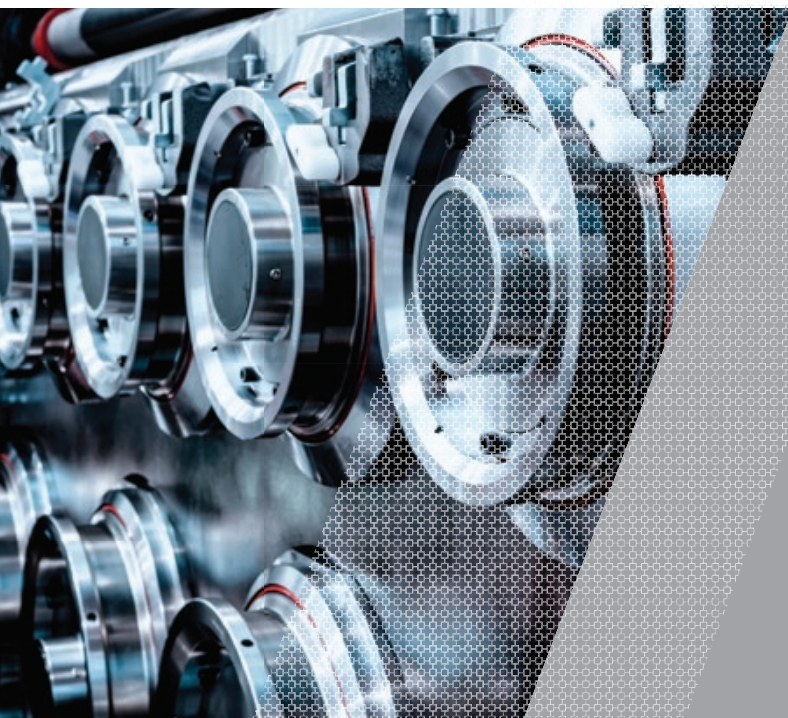
Soluble deformation oil, designed for deformation, stamping and fine blanking operations from medium to heavy duty. Provides an outstanding wettability on the metal. Innovative, its latest generation of additives give excellent Extreme-Pressure performances while meeting the most stringent regulatory standards.

**ADVANTAGES**

- Very high lubrication properties.
- Very high Extreme-Pressure capacities.
- Outstanding stability and biostability.
- Less consumption.
- Compatible with all materials.

PRODUCT NAME	APPEARANCE IN DILUTION	pH AT 5%	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
				DRUM 208 L 
Cadrex FL 100S	Milky white	9.3	1.5	TBD





# WIRE DRAWING

SUPRADRAW is a comprehensive range of wire drawing lubricants which is dedicated for copper wire drawing applications. MotulTech is committed to provide the best balance between lubrication and detergency depending on the application. Our range is designed to be used on rod breakdown, single wire and multi-wire machines.




## COPPER WIRE DRAWING SUPRADRAW 211

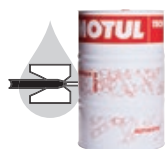
**APPLICATION**

Water-emulsifiable concentrate dedicated to copper wire drawing applications. Suitable for applications ranging from Rod breakdown to fine copper wire, tinned copper or enamelled copper wire.

**ADVANTAGES**

- Optimal lubrication.
- Very good surface condition of the wires.
- Low foaming.
- Resists destabilization by hard water salts and dissolved copper ions.
- Excellent filterability.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION %	PH AT 5%	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
					DRUM 208 L 
Supradraw 211	Milky	4-15%	9.1	1.1	109956




## COPPER WIRE DRAWING SUPRADRAW 311

**APPLICATION**

Soluble concentrate developed for intermediate to super fine copper wire drawing operations. Excellent lubrication and detergency properties which are particularly suitable for fine and super fine copper wire drawing operations.

**ADVANTAGES**

- Reduces the risk of wire breakage.
- Reduces die wear.
- Very good biostability.
- Low foaming.
- Allows a clean finish.
- Good filtration.
- Corrosion resistance.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION %	PH AT 5%	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
					DRUM 208 L 
Supradraw 311	Milky	2-10%	8.9	1.2	110694




## COPPER WIRE DRAWING SUPRADRAW 411

**APPLICATION**

Soluble concentrate developed for copper wire drawing operations. Excellent detergency properties which are particularly suitable for fine and super fine copper wire drawing operations.

**ADVANTAGES**

- Reduces the risk of wire breakage.
- Very good biostability.
- Low foaming.
- Allows a clean finish.
- Good filtration.
- Corrosion resistance.

PRODUCT NAME	APPEARANCE IN DILUTION	CONCENTRATION %	PH AT 5%	REFRACTOMETER FACTOR	AVAILABLE PACKAGING
					DRUM 208 L 
Supradraw 411	Colorless	2-7%	9.6	2.1	110553



## ALUMINUM WIRE DRAWING SUPRADRAW 4521

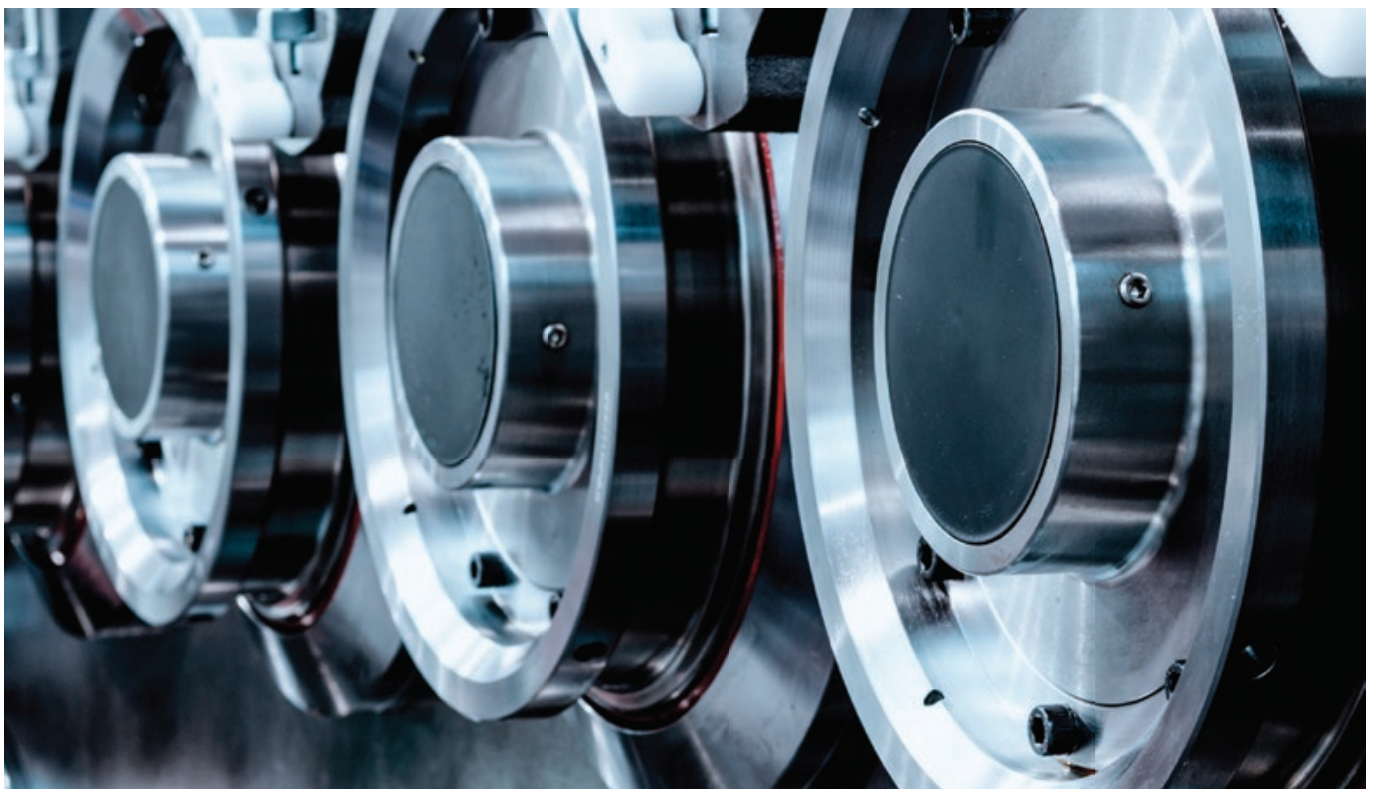
**APPLICATION**

Neat oil developed for aluminum wire drawing operations from rod breakdown to intermediate wires.

**ADVANTAGES**

- Oxidation stability.
- Lower the wire breakages.
- Lower the wear of the dies.
- Stability to external pollution.
- Clean finition.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	COPPER CORROSION	FLASH POINT °C	AVAILABLE PACKAGING
				DRUM 208 L 
Supradraw 4521	137	1a	226	110973





# HEAT TREATMENT

In the light of extensive expertise, and being a crucial member of the A3TS Heat Treatment Association, MotulTech offers a range covering all applications from cold quenching with an aqueous quenching polymer to hot quenching at 180°C. This range is the result of a long joint development program with heat treatment specialists. The search for high performance and productivity, with the respect for users and the environment, are the key factors. MotulTech technical experts will share their knowledge with the fundamental aim of assisting in your process improvement programmes by combining expertise with a comprehensive range of Heat Treatment products and services.



## COLD QUENCHING THERMIC TO 10

**APPLICATION**

Quenching of parts of simple geometry, made of good quenching power steel.

**ADVANTAGES**

- Excellent thermic shock resistance.
- Reduced calefaction area.
- Reduced fire risks thanks to its high flash point.
- Range of working temperature: 30°C - 90°C.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L	
Thermic TO 10	27	> 220	Normal	109467	




## COLD QUENCHING THERMIC TO 19 R

**APPLICATION**

Quenching of parts of complex geometry, made of semi-hard carbon steel, low to medium alloyed.

**ADVANTAGES**

- Reduced strain and crack risks.
- Excellent thermic shock resistance.
- Reduced calefaction area.
- Reduced fire risks thanks to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic TO 19 R	29	218	Accelerated	108497	109498





## COLD QUENCHING THERMIC TO 26 R

**APPLICATION**

Quenching of alloyed or non-alloyed steels, semi-hard or hard to treat with complex geometry.

**ADVANTAGES**

- Reduced strain and crack risks.
- Excellent thermic shock resistance.
- Reduced calefaction area.
- Reduced fire risks thanks to its high flash point.
- Range of working temperature: 30°C - 90°C.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic TO 26 R	27	> 210	Very accelerated	109328	109329



## COLD QUENCHING THERMIC INO 130

**APPLICATION**

Very accelerated cold quenching oil formulated on the basis of synthetic base stocks coming from natural gas. Designed for heat treatment of alloyed or non-alloyed steel parts.

**ADVANTAGES**

- Reduced evaporation.
- Minimizes deformation and cracks risks.
- Very short vapor phase on cooling curve.
- Very good resistance to oxidation.
- Fire risks reduced thanks to its high flash point.
- Low consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic INO 130	22	> 230	Very accelerated	109994	110592





## COLD QUENCHING THERMIC EVO 120

**APPLICATION**

Quenching oil with a high flash point used for heat treatment of good hardenability steel and parts with complex geometric shapes.

**ADVANTAGES**

- Reduced evaporation.
- Minimizes deformation and cracks risks.
- Very good resistance to oxidation.
- Fire risks reduced thanks to its high flash point.
- Low consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic EVO 120	28	> 220	Accelerated	111003	111004



## COLD QUENCHING **THERMIC EVO 130**

**APPLICATION**

Cold quenching oil with a high ignition point, used for quenching of low and medium alloyed steels with complex shapes.

**ADVANTAGES**

- Reduced evaporation.
- Minimizes deformation and cracks risks.
- Very good resistance to oxidation.
- Fire risks reduced thanks to its high flash point.
- Low consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic EVO 130	27	> 220	Very accelerated	111005	111006





## COLD QUENCHING **THERMIC EVO 140**

**APPLICATION**

Quenching oil formulated from highly refined base oils, especially adapted for heat treatment of parts in non-alloyed and alloyed steels with bad hardenability.

**ADVANTAGES**

- Use temperature: 40-70°C.
- Minimum loss on parts thanks to its fluidity.
- Low evaporation.
- Reduced deformation and cracks risks.
- Excellent resistance to oxidation.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic EVO 140	13	> 185	Very accelerated	110256	110257





## SEMI-HOT QUENCHING **THERMIC 15**

**APPLICATION**

Martensitic quenching of light geometry parts made of low to medium alloyed steels for mechanic construction.

**ADVANTAGES**

- Reduced strain and crack risks.
- Excellent thermic shock resistance.
- Cost effective product, thanks to its fluidity at working temperature.
- Optimized production due to the stability of quenching power.
- Reduced fire risks thanks to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic 15	40	> 230	Slightly accelerated	108778	108770





## SEMI-HOT QUENCHING THERMIC 30 R

**APPLICATION**

Semi-hot quenching oil recommended for the quenching of steels or alloyed steels, with low hardening capacities.

**ADVANTAGES**

- Reduced strain and crack risks.
- Excellent thermic shock resistance.
- Cost effective product, thanks to fluidity at working temperature.
- Reduced calefaction area.
- Reduced fire risks thanks to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic 30 R	28	> 210	Very accelerated	109330	109331




## SEMI-HOT QUENCHING THERMIC INO 235

**APPLICATION**

Semi-hot neat quenching oil formulated on the basis of synthetic base stocks coming from natural gas. Designed for quenching of steels with bad hardenability.

**ADVANTAGES**

- Reduced deformation and crack risks.
- Excellent resistance to oxidation.
- Reduced calefaction area.
- Reduced fire risks thanks to its high flash point.
- Low consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	
Thermic INO 235	25	> 220	Very accelerated	110096	



## HOT QUENCHING THERMIC 100

**APPLICATION**

Heat treatment of alloyed steels and semi-alloyed steels: case hardening of low to medium alloyed steels, carburizing of low alloyed steels, and hot quenching of carbon hard steels. Approved by PEUGEOT CITROEN.

**ADVANTAGES**

- Reduced strain and crack risks.
- Excellent thermal stability.
- High quenching speed.
- Even results due to stable viscosity.
- Reduced fire risks thanks to its high flash point.
- Low consumption due to fluidity, reduced drag-out losses.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic 100	123	> 245	Accelerated	109282	109283



## HOT QUENCHING THERMIC 100 FC

**APPLICATION**

Quenching of low and medium alloyed steels with complex shape.

**ADVANTAGES**

- Wide range of use temperature: 80-160°C.
- Reduced strain and crack risks.
- Excellent thermal stability.
- Uniformed results.
- Reduced fire risks thanks to its high flash point.
- Low consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L	
Thermic 100 FC	111	> 260	Very accelerated	108898	



## HOT QUENCHING THERMIC EVO 310

**APPLICATION**

Quenching oil with a high ignition point, used for quenching of low and medium alloyed steels with complex shapes.

**ADVANTAGES**

- Temperature of use: 60-180°C.
- Reduced strain and crack risks.
- Excellent thermal stability.
- Reduced fire risks thanks to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				DRUM 208 L 	IBC 1000 L 
Thermic EVO 310	110	> 270	Very accelerated	111608	111063




## VACUUM QUENCHING THERMIC SV 6

**APPLICATION**

Vacuum heat treatment and quenching oil incorporated on all kind of parts, every size and geometry.

**ADVANTAGES**

- Constant cooling power.
- Leaves no stain on the parts.
- Simplified and economical waste treatment.
- Excellent oxidation and cracking resistance.
- Working temperature: 30°C-130°C.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				IBC 1000 L	
Thermic SV 6	35	> 240	Normal	108496	




## VACUUM QUENCHING THERMIC EVO 420

### APPLICATION

Accelerated quenching oil formulated from highly refined base oils dedicated to carbon steels and alloyed steels vacuum quenching. It can also be used in BATCH furnaces for quenching, cementation and carbonitriding operations.

### ADVANTAGES

- Use temperature: 50-130°C.
- Minimum loss on parts thanks to its fluidity.
- Reduced deformation and crack risks.
- Excellent resistance to oxidation.
- Reduced fire risks due to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				IBC 1000 L	
Thermic EVO 420	29	> 220	Accelerated	109707	




## VACUUM QUENCHING THERMIC EVO 430

### APPLICATION

Very accelerated quenching oil formulated from highly refined base oils dedicated to bad hardenability steels vacuum quenching. It can also be used in BATCH furnaces for quenching, cementation and carbonitriding operations.

### ADVANTAGES

- Use temperature: 50-130°C.
- Minimum loss on parts thanks to its fluidity.
- Reduced deformation and crack risks.
- Excellent resistance to oxidation.
- Reduced fire risks due to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				IBC 1000 L	
Thermic EVO 430	29	> 220	Very accelerated	110019	




## VACUUM QUENCHING THERMIC INO 430

### APPLICATION

Very accelerated quenching oil formulated on the basis of synthetic base stocks coming from natural gas. Especially adapted for heat treatment under vacuum and can also be used in BATCH furnace type for quenching, cementation and carbonitriding operations. Designed for heat treatment of bad hardenability steels.

### ADVANTAGES

- Use temperature: 50-110°C.
- Reduced evaporation.
- Reduced deformation and crack risks.
- Excellent resistance to oxidation.
- Reduced fire risks due to its high flash point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	FLASH POINT °C	COOLING SPEED	AVAILABLE PACKAGING	
				IBC 1000 L	
Thermic INO 430	29	> 240	Very accelerated	110018	






## SUPERFICIAL QUENCHING THERMIC SH 615

**APPLICATION**

Soluble quenching polymer designed for superficial quenching and heating by induction or conduction. Can also be used for tempering stop.

**ADVANTAGES**

- Formaldehyde free.
- Economic: low concentration in use.
- Wide range of use allowing treatment of different steels.
- Very good resistance to microorganisms (bacteria and fungi).
- Good protection against corrosion (machine parts and quenched parts).
- Easy cleaning of quenched parts.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	PH AT 10%	REFRACTOMETER FACTOR	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Thermic SH 615	62	9.3	2.5	104374	100777	100778



## INDUCTION QUENCHING THERMIC SP

**APPLICATION**

Water soluble, synthetic liquid, used diluted in water for induction hardening operations which facilitates efficient protection against the corrosion of the treated parts as well as machine parts.

**ADVANTAGES**

- Product stable in service.
- Can be used in several water hardness.
- Leaves no deposit on the parts.
- Excellent filterability.
- Strong resistance to microorganisms.

PRODUCT NAME	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
		JERRYCAN 20 L 	DRUM 208 L 
Thermic SP	3.3	107289	108499





## BLACKENING THERMIC B

**APPLICATION**

Tempering and blackening operations. Suitable for tempering of small parts not sensitive to distortion. Suitable for blackening and corrosion protection of steel parts.

**ADVANTAGES**

- Odourless fine emulsion.
- Good stability in use.
- Boron free.
- Good protection against corrosion.

PRODUCT NAME	REFRACTOMETER FACTOR	AVAILABLE PACKAGING	
		DRUM 208 L 	IBC 1000 L 
Thermic B	1.1	107909	110526





## MASS QUENCHING **THERMIC FGP**

**APPLICATION**

Water soluble synthetic fluid for mass quenching. Can be diluted between 10% to 25%, according to steels grades to be treated. Recommended bath temperature between 25°C and 45°C.

**ADVANTAGES**

- Reduced fire risks and smokes emissions.
- Reduced cracking risks.
- Stable in use.
- Reduced consumption.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	AVAILABLE PACKAGING	
		DRUM 210 KG 	IBC 1022 KG 
Thermic FGP	247	100776	102009



## QUENCHING BOOSTER **THERMIC BOOST**

**APPLICATION**

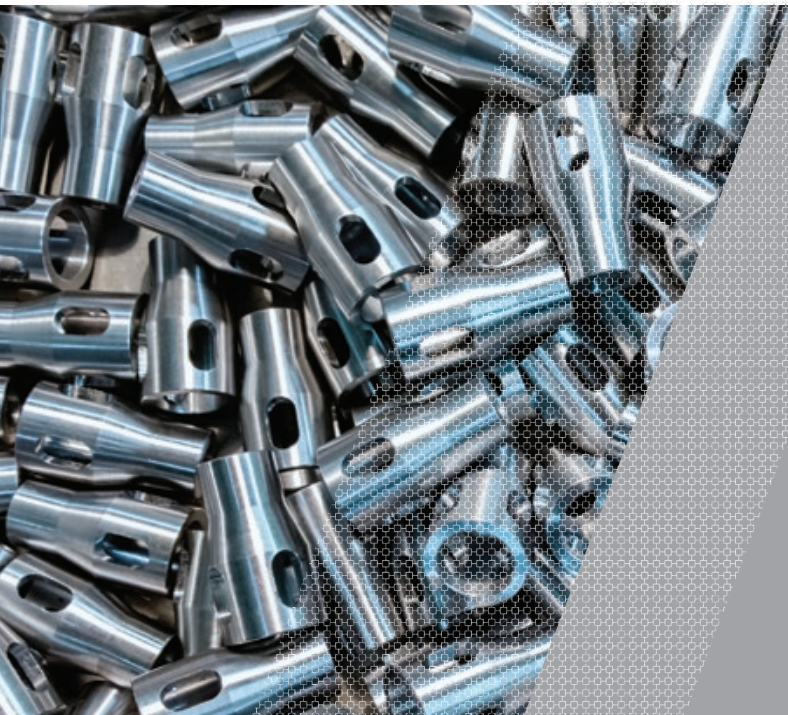
Quenching performance enhancer for heat treatment applications, compatible with all neat quenching lubricants from THERMIC range. Developed to keep the quenching oil properties stable.

**ADVANTAGES**

- Compatible with our THERMIC range.
- Keep the physico-chemical properties of the quenching oil.
- Very high thermal shock resistance.
- Lower the consumption.
- No labelling.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	AVAILABLE PACKAGING
		DRUM 208 L 
Thermic Boost	176	110562





# CLEANERS

Crucial and common place in all the workshops, cleaning products have to offer optimal cleaning performance while presenting the least possible risks for the industrials and the users. They have to meet stringent requirements such as strong degreasing power, compatibility with the materials to clean and low health & safety risks. The new formulas of cleaners allow the industrials to find the balance between these seemingly contradictory requirements. The MotulTech range offers solutions that cover most of the needs of industrials, in full conformity with the current legislation.



## SOLVENT CLEANER **SAFCO KLEEN 21**

**APPLICATION**

Degreasing solvent for mechanical and plastic parts, the removal of glue and resin, preparation of surfaces prior to bonding or painting, cleaning of electrical equipment. It is also suitable for the maintenance in food processing environments.

**ADVANTAGES**

- Fast evaporation.
- High purity index.
- Excellent degreasing solvent suitable for considerable levels of pollution.
- Large field of applications.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING	
					JERRYCAN 25 L 	DRUM 200 L 
Safco Kleen 21	90	1a	23	9 min	104542	106130



## SOLVENT CLEANER **SAFCO KLEEN 53**



**APPLICATION**

Degreasing solvent for metallic parts cleaning in food processing environment.

**ADVANTAGES**

- NSF approval.
- Odourless.
- Operator friendly.
- Advanced solvency properties facilitating the good decantation of pollutants.



PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING	
					JERRYCAN 25 L 	DRUM 200 L 
Safco Kleen 53	45	1a	30	15 min	110118	110119



## SOLVENT CLEANER SAFCO KLEEN 60

**APPLICATION**

Degreaser suitable for the cleaning of mechanical parts, metal and plastics. It is efficient for the removal of metalworking oils, fats, soap greases or rust preventatives. It is suitable for polluted substrates, organic, inorganic compounds as well as electrical equipment.

**ADVANTAGES**

- Compatible with all metals, including coated or precious metals.
- Compatible with most thermoplastics and plastics.
- Can be used on most composites.
- High flash point.
- Can be used for A3 machines.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING		
					JERRYCAN 25 L 	DRUM 200 L 	IBC 1000 L 
Safco Kleen 60	33	1a	56	42 min	104540	106180	104637



## SOLVENT CLEANER SAFCO KLEEN 92

**APPLICATION**

Multi-purpose degreaser particularly recommended for heavily soiled surfaces cleaning. SAFCO KLEEN 92 is especially well-suited to curative maintenance operations. It can be used to remove oil, grease, or wax, including products with added dryers. It is also efficient for removing burned residues.

**ADVANTAGES**

- Multi-purpose.
- Product without flash point.
- Fast evaporation.
- Compatible with metals, some plastics and elastomers.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING	
					JERRYCAN 25 L 	DRUM 200 L 
Safco Kleen 92	113	1a	na	15 min	110094	110095




## SOLVENT CLEANER SAFCO KLEEN VF 150

**APPLICATION**

Fountain degreasing fluid. Removal of all used lubricants, metalworking fluids (soluble and neat), protection fluids, tars, etc.

**ADVANTAGES**

- VOC free.
- Odourless.
- Vegetable oil base.
- Non-flammable.
- Good dermatological behaviour.
- Good compatibility with all materials.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING
					DRUM 200 L 
Safco Kleen VF 150	50	1a	103	Does not evaporate	102521




## SOLVENT CLEANER **SAFCO KLEEN VF 200**

**APPLICATION**

Technical fluid specifically developed to replace petroleum and chlorinated solvents in their applications to cold or hot surface. Suitable for sensitive materials and confined environments. Cleaning or degreasing of mechanical parts or machining fluid residues.

**ADVANTAGES**

- Vegetable ester based.
- VOC free.
- Non-flammable. Flash point over 170°C, avoiding any ATEX risks.
- Compatible with most materials, metals, plastics, elastomers, rubber, painted surfaces.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	COPPER CORROSION	FLASH POINT °C	EVAPORATING RATE	AVAILABLE PACKAGING
					DRUM 200 L 
Safco Kleen VF 200	> 100	1a	> 170	Does not evaporate	103126




## SOLVENT CLEANER **SAFCO KLEEN V**

**APPLICATION**

Cleaning solvent based on aliphatic hydrocarbons with a high flash point. Adapted for cleaning in vacuum machines in replacement of chlorinated solvents.

**ADVANTAGES**

- Alternative to chlorinated solvents.
- Compatible with all metals, alloys, glass and ceramic.
- Efficient cleaning thanks to its formulation based on aliphatic hydrocarbons.
- A3 class solvent with a high flash point.
- Compatible with most plastics, elastomers and painted surfaces.

PRODUCT NAME	VISCOSITY AT 40°C	FLASH POINT °C	BOILING TEMPERATURE AREA °C	AVAILABLE PACKAGING
				DRUM 200 L 
Safco Kleen V	1.1	> 55	171 - 191	108196



## SOLVENT CLEANER **SAFCO KLEEN INO 230**

**APPLICATION**

High-performance degreasing agent specifically developed to replace petroleum and chlorinated solvents in their applications to cold or hot surface.

**ADVANTAGES**

- Strong degreasing power.
- Biodegradable: 100% vegetable origin formula.
- Non-flammable, with a flash point of 120°C, it avoids any ATEX risks.
- Compatible with most materials, metals, plastics, elastomers, rubber, painted surfaces.

PRODUCT NAME	SOLVENT POWER (KB INDEX)	FLASH POINT °C	EVAPORATING RATE	BIODEGRADABILITY	AVAILABLE PACKAGING	
					JERRYCAN 20 L 	DRUM 208 L 
Safco Kleen INO 230	> 200	120	Does not evaporate	> 80%	109789	111609





## AQUEOUS CLEANER **SAFKLEEN 1112**

**APPLICATION**

Water-based cleaner used as a brightener deoxidizer for steels and ferrous materials.

**ADVANTAGES**

- Remarkable brightening properties.
- Easy to rinse.
- Use at low temperature.
- Can be used with any type of water.
- Boron free.
- Very good biostability.

PRODUCT NAME	PH PURE	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 21.5 L 	DRUM 172 L 
Safkleen 1112	< 2	20 - 60	5 - 30	Ferrous & Aluminum	110343	110355



## AQUEOUS CLEANER **SAFKLEEN 221**

**APPLICATION**

Alkaline water-based cleaner used by dipping or spraying for interoperational degreasing of ferrous metals.

**ADVANTAGES**

- Protects parts effectively.
- Easy to rinse.
- Low foaming.
- Can be used with any type of water.
- Boron and phosphate free.
- Very good biostability.

PRODUCT NAME	PH PURE	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 24 L 	DRUM 202 L 
Safkleen 221	11.2	40 - 70	1 - 10	Ferrous	110361	110360





## AQUEOUS CLEANER **SAFKLEEN 224**

**APPLICATION**

Non-nitrite, water-based degreaser that can be used by spraying or up to a pressure of 5 bar. Used in the automotive and mechanical industries. Suitable for removing all types of oil.

**ADVANTAGES**

- Protects parts effectively.
- Easy to rinse.
- Low foaming.
- Can be used with any type of water.
- Boron and phosphate free.
- Very good biostability.
- Biodegradable.

PRODUCT NAME	PH PURE	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 24.5 L 	DRUM 206 L 
Safkleen 224	9.7	20 - 60	0.5 - 3	All metals	110541	111077



## AQUEOUS CLEANER **SAFKLEEN 234**

**APPLICATION**

Water-based cleaner that can be used, either by spraying or by ultrasonic immersion, for the degreasing and the temporary passivation of all types of metals.

**ADVANTAGES**

- Corrosion protection.
- Easy to rinse.
- Low foaming.
- Can be used with any type of water.
- Boron and phosphate free.
- Very good biostability.

PRODUCT NAME	PH PURE	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 24 L 	DRUM 192 L 
Safkleen 234	10.5	30 - 60	1 - 5	All metals	110359	110358





## AQUEOUS CLEANER **SAFKLEEN 334**

**APPLICATION**

Caustic free water-based cleaner used for degreasing by spraying on aluminum, iron, cast iron, zinc, copper and its alloys, contaminated by greases and mineral oils.

**ADVANTAGES**

- Protection against oxidation.
- Easy to rinse.
- Fully organic.
- Use at low temperature.
- Can be used with any type of water.
- Boron and phosphate free.
- Very good biostability.

PRODUCT NAME	PH AT 5%	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 24 L 	DRUM 192 L 
Safkleen 334	8.9	30 - 50	1 - 4 (Al and Zn) 5 - 15 (Ferrous)	All metals	110363	110362



## AQUEOUS CLEANER **SAFKLEEN 334 F**

**APPLICATION**

Water-based cleaner that can be used, either by spraying or by ultrasonic immersion, for the degreasing and the temporary passivation of ferrous metals and yellow alloys.

**ADVANTAGES**

- Protection against oxidation.
- Easy to rinse.
- Fully organic.
- Boron and phosphate free.
- Very good biostability.
- Biodegradable.

PRODUCT NAME	PH AT 4%	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 24.5 L 	DRUM 206 L 
Safkleen 334 F	8	50 - 70	1 - 8	All metals	110365	110364





## AQUEOUS CLEANER **SAFKLEEN 421**

**APPLICATION**

Alkaline water-based cleaner used by spraying for degreasing and removal of oils, greases, stearates and crystalline phosphate layers on ferrous materials and steels.

**ADVANTAGES**

- Adapted to the fasteners market.
- Powerful degreasing.
- Easy to rinse.
- Boron free.
- Very good biostability.
- Biodegradable.

PRODUCT NAME	PH AT 1%	TEMPERATURE °C	CONCENTRATION %	MATERIALS	AVAILABLE PACKAGING	
					JERRYCAN 18,5 L 	DRUM 155 L 
Safkleen 421	12.4	50 - 70	3 - 10	Ferrous	110374	110373




## LABEL-FREE DEGREASER **BIOCLEAN 234**

**APPLICATION**

Low foaming alkaline water-based cleaner used for degreasing of washable surfaces soiled highly polluted with oil, grease, bitumen and rubber residues.

**ADVANTAGES**

- No label.
- Strong degreasing power.
- Ready to use.
- VOC-free.
- Low foaming.
- Protect aluminum and non-ferrous metals.
- Efficient at room temperature.

PRODUCT NAME	COLOR	pH	VOC CONTENT %	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	
Bioclean 234	Transparent	8.6	0	111128	



## LABEL-FREE DEGREASER **BIOCLEAN 244**

**APPLICATION**

Fast-drying alkaline water-based cleaner, phosphate-free, used for degreasing metalworking fluids, rust preventatives, light waxes and dust from the grinding of bearings.

**ADVANTAGES**

- No label.
- Ready to use.
- Low foaming.
- Phosphate-free.
- Can be applied prior to coating.
- Fast drying.

PRODUCT NAME	COLOR	pH	VOC CONTENT %	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	
Bioclean 244	Transparent	11.4	11	111129	



## **LABEL-FREE DEGREASER** **BIOCLEAN PARTS WASHER**

**APPLICATION**

Equipment containing a control box which regulates the temperature of the cleaner to ensure the maximum cleaning efficiency at the lowest temperature.

**ADVANTAGES**

- Easy to start up.
- Energy savings.
- Easy maintenance.

PRODUCT NAME	VOLUME (L)	TEMPERATURE OF USE (°C)	AVAILABLE PACKAGING
			EQUIPMENT
<i>Bioclean Parts Washer</i>	100	41	352702



## **LABEL-FREE DEGREASER** **BIOCLEAN LIQUID**



**APPLICATION**

Universal ready-to-use biodegradable parts washer cleaner and degreaser for all types of mechanical components, machine parts, tools, etc. Instead of using solvents, BIOCLEAN LIQUID degrades the removed oil via the microorganisms to guarantee a long service life. For types of applications where a biodegradable product is required.

**ADVANTAGES**

- Solves medium to heavy cleaning and degreasing tasks.
- Strong and versatile for virtually all materials, for medium to heavy soiling.
- Versatile in use in parts washers, parts washing machines and high-pressure parts washers.
- Environmentally friendly and safe, label free, VOC-reduced.
- Compatible with oil separators.
- Easy disposal with other aqueous oil-water mixtures.

PRODUCT NAME	COLOR	pH	VOC CONTENT %	AVAILABLE PACKAGING
				JERRYCAN 20 L 
<i>Bioclean liquid</i>	<i>Transparent</i>	8	0	110903







# RUST PREVENTATIVES

Formulated with the latest generation of anti-corrosion additives and deodorized solvents, MotulTech's MT Protect range meets the performance, durability and health & safety requirements of operators.

The MotulTech range of rust preventatives, formulated with barium-free additives, offers a range of high-performance solutions for industrial metal protection. All the solvent-based protection products of the range have, first and foremost, a water-repellent action. It enables the application of anti-corrosion compounds on a perfectly dry surface, the first step for an effective protection against corrosion. The choice of the product will then be made according to the duration of protection sought, the storage and transport conditions of the part, the drying speed of the rust preventative.





## SHORT-TERM PROTECTION MT SOLV PROTECT

**APPLICATION**

Highly water repellent fluid for corrosion protection of metal parts or assemblies. Recommended for interoperation or short-term corrosion prevention of metallic parts or components.

**ADVANTAGES**

- Prevents corrosion of metal parts by hand contact.
- Repels water from parts very quickly.
- Fast evaporation rate.
- Well adapted for interoperation protection.
- Without barium or hazardous components.
- Based on low odor raw materials.

PRODUCT NAME	FILM THICKNESS (MICROMETER)	FLASH POINT °C	EVAPORATION SPEED	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
MT Solv Protect	0.5	> 70	Fast	105806	105807





## MEDIUM-TERM PROTECTION MT OIL PROTECT

**APPLICATION**

Oily fluid, water repellent, for short to medium-term protection of metal parts.

**ADVANTAGES**

- Repels water from parts very quickly.
- Prevents corrosion of parts by hand contact.
- Good demulsification.
- Well suited to the interoperation protection.
- Without barium or hazardous components.
- Based on low odour materials.

PRODUCT NAME	FILM THICKNESS (MICROMETER)	FLASH POINT °C	EVAPORATION SPEED	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
MT Oil Protect	7	> 204	Moderate	105573	105574





## MEDIUM-TERM PROTECTION MT LIGHT OIL PROTECT

**APPLICATION**

Oily fluid, water repellent, for short to medium-term protection of metal parts.

**ADVANTAGES**

- Thin oily film allowing the control of protected parts.
- Easily sprayable.
- Repels water from parts quickly.
- Prevents corrosion of parts by handling with bare hands.
- Good desemulsification.
- Well suited to the interoperation protection.

PRODUCT NAME	FILM THICKNESS (MICROMETER)	FLASH POINT °C	VISCOSITY AT 40°C (CST)	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
MT Light Oil Protect	7	> 115	4.2	108751	108752





## LONG-TERM PROTECTION MT STORE PROTECT

**APPLICATION**

Waxy rust preventative fluid, for medium to long-term protection of metallic parts and assemblies stored indoor or outdoor under shelter.

**ADVANTAGES**

- Medium to long-term protection.
- Repels water from parts very quickly.
- Slow evaporation rate.
- Fast desemulsification.
- Without barium or hazardous components.
- Based on low odour raw materials.

PRODUCT NAME	FILM THICKNESS (MICROMETER)	FLASH POINT °C	EVAPORATION SPEED	AVAILABLE PACKAGING	
				JERRYCAN 20 L 	DRUM 200 L 
MT Store Protect	2	> 114	Moderate	105798	105799



## LONG-TERM PROTECTION MT SHIP PROTECT

**APPLICATION**

Waxy fluid, highly water repellent, for long-term protection in difficult conditions of metals parts and assemblies. Recommended for long-term protection of metal parts, for storage or shipping.

**ADVANTAGES**

- Long-term protection in difficult conditions.
- Prevents corrosion of metal parts for storage or shipping.
- Repels water from parts very quickly.
- Fast evaporation rate.
- Fast desemulsification from water.
- Without barium or hazardous components.

PRODUCT NAME	FILM THICKNESS (MICROMETER)	FLASH POINT °C	EVAPORATION SPEED	AVAILABLE PACKAGING		
				JERRYCAN 20 L 	DRUM 200 L 	IBC 1000 L 
MT Ship Protect	4.5	> 74	Fast	105805	105804	106671



**PART 2**

**MAINTENANCE LUBRICANTS**

# 03

## GENERAL LUBRICATION - MAINTENANCE FLUIDS

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*As for all pieces of industrial equipment, lubrication plays a key role in optimising performance and minimizing downtime. Furthermore today's equipment are more sophisticated and environmental regulations are more demanding. That is why MotulTech offers a complete line of complementary lubrication products which have all been thoroughly designed to satisfy all specific needs of modern industry. Each product is the result of a long collaboration with industrial specialists. We listen to their demands and our experts develop lubricants that help to improve our customer's industrial equipment in terms of maximized performance, reduced operating costs and increased production efficiency.*



# HYDRAULIC FLUIDS

Our first-class hydraulic oils meet all demands towards a modern oil. Whether it is about high viscosity index, perfect wear protection properties, optimum protection against corrosion or maintaining steady system hydraulic pressure, you will always find the right lubricant in our wide range.



## HL MINERAL RUBRIC HL

### APPLICATION




Anti-corrosive and anti-oxidative hydraulic and circulating oil.


### ADVANTAGES



- Excellent anti-wear, anti-oxidation and anti-corrosion properties.
- Excellent anti-foam properties.
- Very good stability against hydrolysis.
- High thermal stability.
- Higher system efficiency, less service down-time.
- Extended equipment's life.

### PERFORMANCES

ISO 11158 category HL; ISO 6743-4 category HL  
DIN 51524 part 1, HL  
NF E 48603 HL

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						BOTTLE 4x5 L 	JERRYCAN 20 L 	DRUM 208 L 
Rubric AW 22	22	4	120	-30	210	108162	104628	108460

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING
						DRUM 208 L 
Rubric B 46	46	6.7	100	-33	218	108462

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 208 L 
Rubric EE 150	150	14.4	98	-15	198	104629	108465



## HM-HLP MINERAL RUBRIC HM

### APPLICATION




Anti-wear, anti-corrosion and anti-oxidation, high performance hydraulic oil for hydraulic systems working under severe conditions.

### ADVANTAGES

- Less downtime, higher productivity.
- Excellent anti-wear quality.
- Excellent resistance to oxidation.
- Excellent protection against corrosion.
- Excellent thermal and hydrolysis stability.
- Excellent demulsification and filterability.

### PERFORMANCES

DENISON HF-0  
ISO 11158 category HM; ISO 6743-4 category HM  
DIN 51524 part 2, HLP  
NF E 48603 HM

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Rubric HM 32	32	5.4	106	≤ -24	≥ 210	108832	108838	108841
Rubric HM 46	46	6.9	110	≤ -24	≥ 215	108794	108795	108835
Rubric HM 68	68	8.8	104	≤ -21	≥ 225	108776	108789	108791
Rubric HM 100	100	11	94	-18	276	104269	101780	101781



## HM-HLP MINERAL RUBRIC HLPD

### APPLICATION




Hydraulic fluid based on mineral oil with detergent and dispersant qualities. Delivers reliable performance and ultimate cleanliness in applications contaminated by aqueous products such as metalworking fluids.

### ADVANTAGES

- Very good anti-wear properties.
- Excellent oxidation resistance.
- Excellent protection against corrosion.
- Very good cleaning and dispersing power.
- Zinc-free.
- Excellent thermal stability.
- Excellent filterability.

### PERFORMANCES

DIN 51524 part 2 (HLP)  
Daimler Chrysler DBL 6721  
Ortlinghaus test for wet running clutch-brake-units according to ON 9.2.19

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Rubric HLPD 32	32	5.7	118	-33	216	107307	107308	110356
Rubric HLPD 46	46	7.2	115	-33	238	107309	107310	107333
Rubric HLPD 68	68	9.1	111	-33	238	107311	107312	-



## HM ZINC-FREE MINERAL RUBRIC LX

### APPLICATION




Ash less (zinc-free) high performance hydraulic oil suitable for the lubrication of hydraulic systems working under severe conditions.

### ADVANTAGES

- Excellent anti-wear properties.
- Excellent oxidation resistance.
- Excellent corrosion protection.
- Excellent thermal and hydrolysis stability.
- Excellent demulsion and filterability.

### PERFORMANCES

DENISON HF-0  
ISO 11158 category HM; ISO 6743-4 category HM  
DIN 51524 part 2, HLP  
NF E 48603 HM

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Rubric LX 32	32	5.5	103	-15	182	104281	107801	-
Rubric LX 46	46	6.7	109	-30	228	104280	107802	101791
Rubric LX 68	68	8.3	91	-33	258	104276	101792	101793



HYDRAULIC CLEAN PACKAGE  
**MINERAL**  
**RUBRIC R-CLEAN**

**APPLICATION**

Hydraulic system cleaner designed for use in mineral based hydraulic oils. Helps removing varnish and sludge from the hydraulic system in preparation for the introduction of RUBRIC CLEAN. First part of a Hydraulic Clean Package consisting in the cleaner RUBRIC R-CLEAN and RUBRIC CLEAN hydraulic oils.

**ADVANTAGES**

- Varnish build-up and sludge removing.
- Reduced equipment downtime when compared to manual cleaning.
- Compatible with mineral based lubricants.
- Reduced health and safety concerns in comparison to solvent based cleaners.
- Compatible with all common seal materials.

PRODUCT NAME	AVAILABLE PACKAGING	
	BOTTLE 5 L	JERRYCAN 20 L
Rubric R-Clean	104566	111350



HYDRAULIC CLEAN PACKAGE  
**MINERAL**  
**RUBRIC CLEAN HM**

**APPLICATION**

Premium zinc-free anti-wear hydraulic oil designed to prevent varnish from depositing on internal system components in hydraulic systems. Second part of a Hydraulic Clean Package.

**ADVANTAGES**

- Prevents formation of varnish and sludge deposits.
- Extended pump protection.
- Lowers maintenance and downtime costs.
- Excellent wear, rust and corrosion protection.
- Excellent oxidation and thermal stability.
- Excellent filtration properties.
- Maintains cycle times with clean equipment.

**PERFORMANCES**

Parker Denison HF-0  
MAG IAS (ex Cincinnati Machine) P-68, P-69, P-70  
DIN 51524 part 1 (HL), part 2 (HLP)  
Eaton Brochure 03-401-2010

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L	DRUM 208 L	IBC 1000 L
Rubric Clean HM 32	32	5.6	117	-33	230	-	106748	-
Rubric Clean HM 46	46	6.7	103	-24	240	104484	104485	107163
Rubric Clean HM 68	68	9.3	110	-34	238	107017	107018	-



HM ZINC-FREE  
**MINERAL**  
**RUBRIC HV**

**APPLICATION**

Lubrication of hydraulic systems working under severe conditions and at low and high temperature.

**ADVANTAGES**

- Excellent anti-wear & anti-corrosion properties.
- Excellent oxidation resistance.
- Excellent desemulsion and filterability.
- Excellent thermal and hydrolysis stability.
- High viscosity index & very low pour point.

**PERFORMANCES**

DENISON HF-0  
ISO 11158 category HV  
DIN 51524 part 3, HVLP

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L	DRUM 208 L	IBC 1000 L
Rubric HV 22	22	5	158	-42	≥190	104286	101784	-
Rubric HV 32	32	6.3	≥150	≤-36	≥200	108760	108870	108764
Rubric HV 46	46	7.9	≥145	≤-36	≥210	108767	108761	108768
Rubric HV 68	68	10.7	≥143	≤-30	≥210	108769	108796	108798



## BIO SYNTHETIC RUBRIC BIO 46



### APPLICATION




High performance hydraulic fluid based on synthetic esters with a high level of biodegradability (> 90% in 21 days). Recommended for all hydraulic systems.

### ADVANTAGES

- Excellent thermal stability.
- Excellent anti-wear performance and oxidation resistance.
- Good filterability.
- Excellent desemulsion.
- High viscosity index.

### PERFORMANCES

European Ecolabel  
Blue Angel approval  
Bosch Rexroth RE 90221-01

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 50 KG 	DRUM 190 KG 
Rubric BIO 46	46	7.9	186	-36	310	104418	100435	100436



## BIO SYNTHETIC RUBRIC BIO 46 S



### APPLICATION


High performance hydraulic fluid based on synthetic esters with a high level of biodegradability (> 90% in 21 days). Recommended for all hydraulic systems.

### ADVANTAGES

- Excellent thermal stability.
- Excellent anti-wear performance and oxidation resistance.
- Good filterability.
- Excellent desemulsion.
- High viscosity index.
- High temperature stable.
- Behaves neutrally in conjunction with elastomers.

### PERFORMANCES

European Ecolabel  
Blue Angel approval  
Bosch Rexroth RE 90221-01

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						DRUM 208 L 	
Rubric BIO 46 S	46	7.9	146	-36	310	103108	





## HVI SYNTHETIC RUBRIC HVI 22

### APPLICATION

High-performance hydraulic fluid with a very high viscosity index for all year use in hydraulic equipment operating over a wide temperature range.

### ADVANTAGES

- Allows for very good start up performance of hydraulic equipment at very low temperatures.
- Good rust and corrosion protection.
- Very low pour point.
- Zinc-free anti-wear additives for high equipment performances.
- Excellent oxidation stability.
- Outstanding viscosity control over a wide temperature range.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						DRUM 208 L 	IBC 1000 L 
Rubric HVI 22	22.8	8	365	-51	120	110000	110001






HVI  
**SYNTHETIC**  
**RUBRIC ARCTIC 26**

**APPLICATION**

High performance hydraulic fluid with a very high viscosity index for all year use in hydraulic equipments operating over a wide temperature range.

**ADVANTAGES**

- Allows very good start up performance of hydraulic equipment at very low temperatures.
- Good rust and corrosion protection.
- Very low pour point.
- Zinc-free anti-wear additives for exceptional equipment performance.
- Excellent oxidation stability.
- Outstanding viscosity control over a wide temperature range.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Rubric Arctic 26	26.4	8.2	310	-56	242	108216	108215	108296





HFC  
**SYNTHETIC**  
**RUBRIC HFC 40**

**APPLICATION**

HFC fire-resistant hydraulic fluid for all areas where the risk of a fire hazard exists (steel industry, heat treatment shops, etc.) and/or when a good biodegradability is important. Fulfills all requirements of the 7<sup>th</sup> Luxemburg Report.

**ADVANTAGES**

- Excellent fire resistance properties.
- High lubricity and anti-wear characteristics.
- Excellent corrosion protection.
- Long term stability.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						DRUM 208 L 	IBC 1000 L 
Rubric HFC 40	38	9	>150	-48	none	104505	104516



HFDU  
**SYNTHETIC**  
**RUBRIC HFDU 46 FM**

**APPLICATION**



Fire-resistant, biodegradable high quality synthetic hydraulic fluid for all hydraulic systems, lubrication and circulating system where Extreme-Pressure characteristics are not required and/or where there are potential risks of fire and/or water contamination. Fulfills all requirements of the 7<sup>th</sup> Luxemburg Report.

**ADVANTAGES**

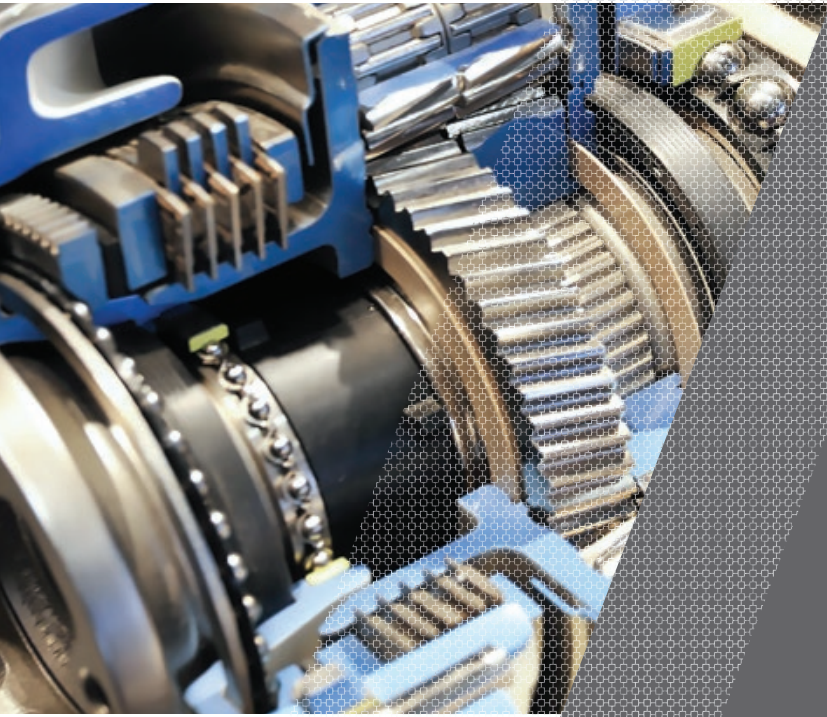
- Excellent resistance to combustion.
- Readily biodegradable.
- Zinc-free.
- Excellent demulsibility.
- Very good anti-rust and anti-corrosive properties.
- Excellent oxidation stability.

**PERFORMANCES**

ISO-HFD-U; ISO 6743/4 HM-HV; ISO 15 380, part 4  
VDMA 24568  
DIN 51524, part 3  
Vickers M-2952-S ; I-286-S  
FM approved

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	FLASH POINT °C	FIRE POINT °C	AVAILABLE PACKAGING	
						DRUM 200 L 	IBC 1000 L 
Rubric HFDU 46 FM	46	9.1	185	300	348	109618	109608





# MULTIFUNCTIONAL OILS

All-in-one lubricants for slideways, hydraulics and gears which were especially developed for machine owners that like to keep their lubricants stock easy to manage.



## MINERAL RUBRIC RU

### APPLICATION

Premium multifunctional oil for machine tools. Suitable for slideways, hydraulics and centralized lubrication systems.

### ADVANTAGES

- High demulsifiability with water soluble metalworking fluids.
- Corrosion resistant.
- Compatible with plastic coated ways (SKC).
- Low friction coefficient.
- Avoids Stick-Slip.
- Excellent adhesiveness.
- Anti-wear and Extreme-Pressure.
- Zinc-free.

### PERFORMANCES

#### SLIDEWAYS




ISO 11158 category HG;  
6743-4 category HG ;  
6743-13 category G  
CINCINNATI MILACRON P-47, P-50, P-53

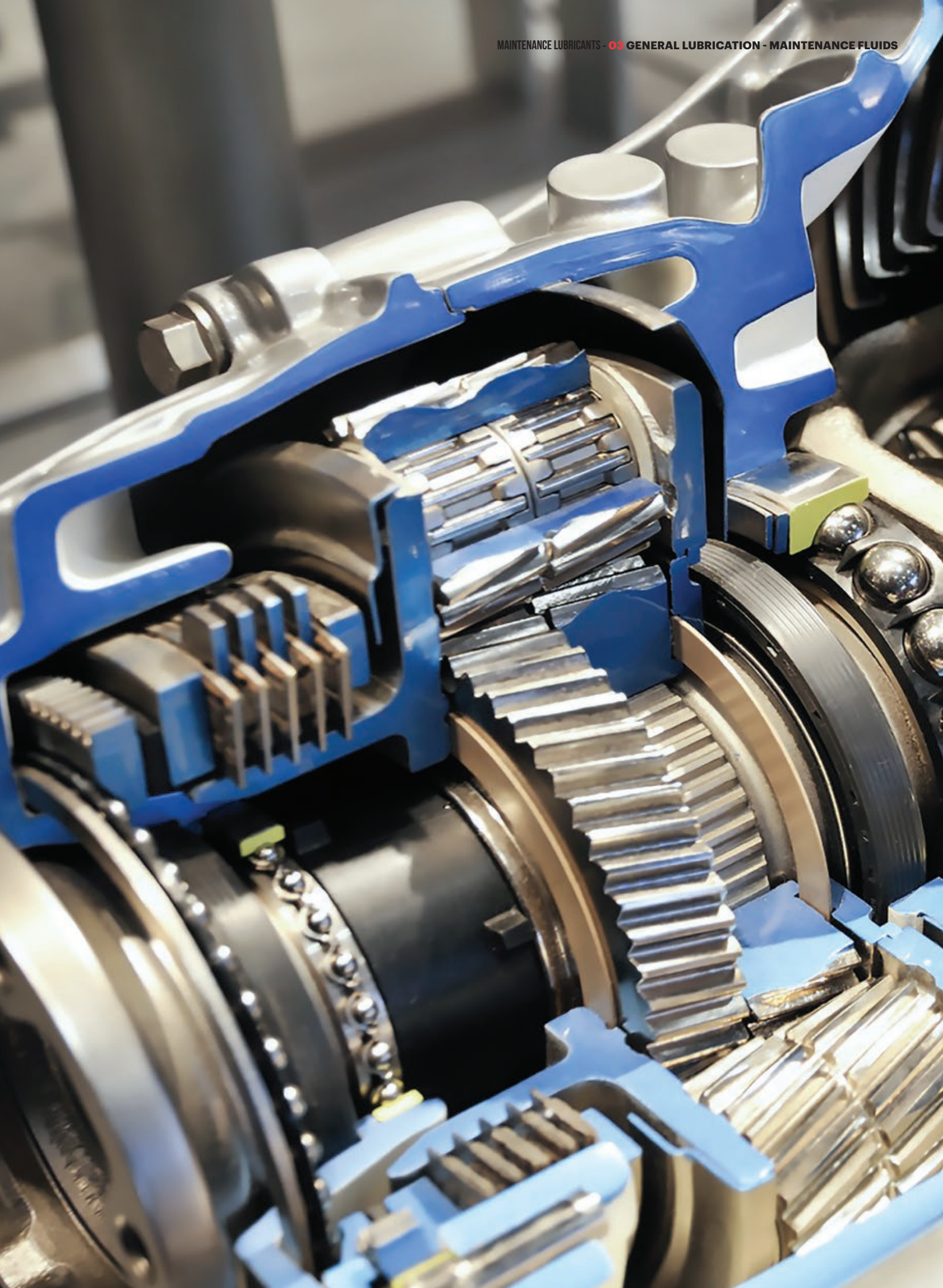
#### HYDRAULICS

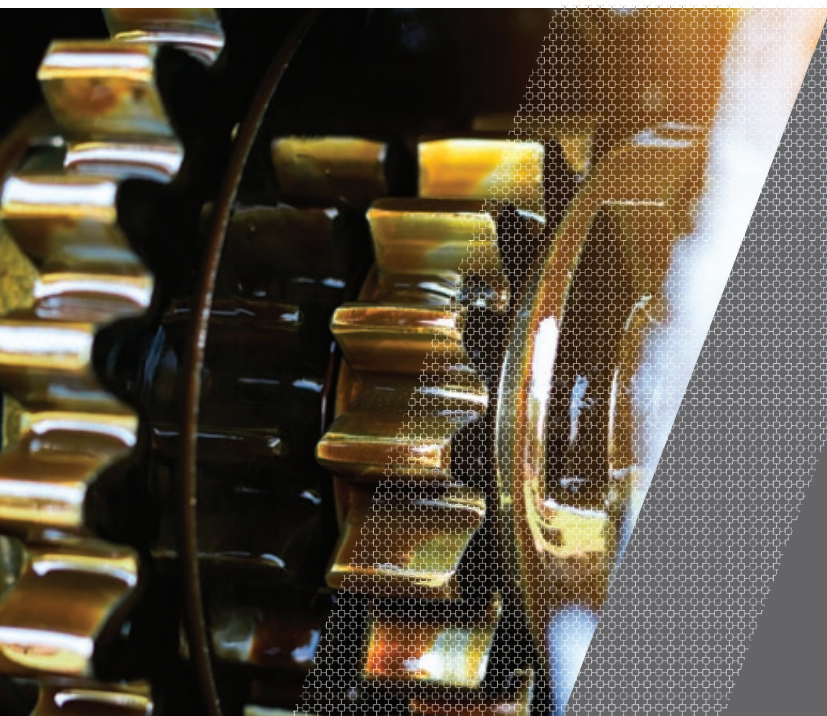
ISO 11158 category HM  
ISO 6743-4 category HG  
ISO 6743-13 category G  
DIN 51524 part 2, HLP

#### GEARS

DIN 51517 part 3, CLP  
AGMA 9005 - E02

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Rubric RU 32	32	5.6	110	-36	≥230	104232	108486	110827
Rubric RU 46	46	6.3	98	-30	≥230	104249	108487	-





# GEAR OILS

Oils specifically made for transmissions, transfer cases and differentials in all types of industrial machinery. Our large selection of mineral and synthetic transmission lubricants has been developed for a wide variety of gear types. They meet all requirements - from standard applications to the most difficult operating conditions.



## MINERAL SUPRACO MPL

### APPLICATION




Extreme-Pressure lubricant for all types of highly stressed gear drives. Lubrication of gear drives, reducers (except hypoid gears), worm gears, bearings and heavy loaded parts of machinery.

### ADVANTAGES

- Very high Extreme-Pressure and anti-wear properties.
- Very high resistance to oxidation.
- Non-corrosive lubricant for non-ferrous metals, particularly bronze alloys.
- Excellent water demulsibility.
- Zinc-free.

### PERFORMANCES

ISO 6743-6 and ISO 12925-1, catégorie CKC, CKD  
 DIN 51517 Part 3: 2004-01  
 AIST 224  
 AGMA 9005-E02  
 David Brown S1.53.101(E)  
 Strong FAG FE-8 performance

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supraco MPL 68	68	8.8	101	-24	242	108172	108173	-
Supraco MPL 100	104	11.9	103	-24	242	104268	108470	-
Supraco MPL 150	160	15.6	99	-21	242	104250	108472	108519
Supraco MPL 220	224	19.1	95	-12	224	104236	108473	108474
Supraco MPL 320	317	24	96	-12	240	104252	108476	110919
Supraco MPL 460	475	31.9	99	-12	234	104354	108477	107803
Supraco MPL 680	680	35.2	87	-9	234	104323	108478	-



## SYNTHETIC GEAR SY

### APPLICATION




High performance synthetic oil with Extreme-Pressure properties for the lubrication of reduction gears operating under heavy loads and high temperatures.

### ADVANTAGES

- Excellent Extreme-Pressure and anti-wear properties.
- Excellent oxidation stability.
- Excellent rust and corrosion protection.
- Very high demulsibility with water.
- High viscosity index.

### PERFORMANCES

ISO 6743-6 and ISO 12925-1, category CKC, CKD  
DIN 51517 Part 3: 2004-01  
AIST 224  
AGMA 9005-E02  
David Brown S1.53.101(E)  
Strong FAG FE-8 performance

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Gear SY 68	69	8.6	142	-24	260	104320	100517	-
Gear SY 100	100	14.5	149	-24	240	108300	108301	-
Gear SY 150	154	21.4	163	-45	226	104322	108479	111581
Gear SY 220	231	28.9	163	-12	246	104321	108480	-
Gear SY 320	324	38.2	168	-24	232	104294	108481	-
Gear SY 460	487	54.4	177	-30	234	104295	108515	-



## SYNTHETIC SUPRA GEAR GL

### APPLICATION



Long-life or permanent lubrication of worm gear reduction drives, or gearboxes operating in a wide temperature range. Lubrication of all types of machines exposed to high temperatures or heavy loads in an oil circulation system. Not miscible with mineral or other synthetic lubricants.

### ADVANTAGES

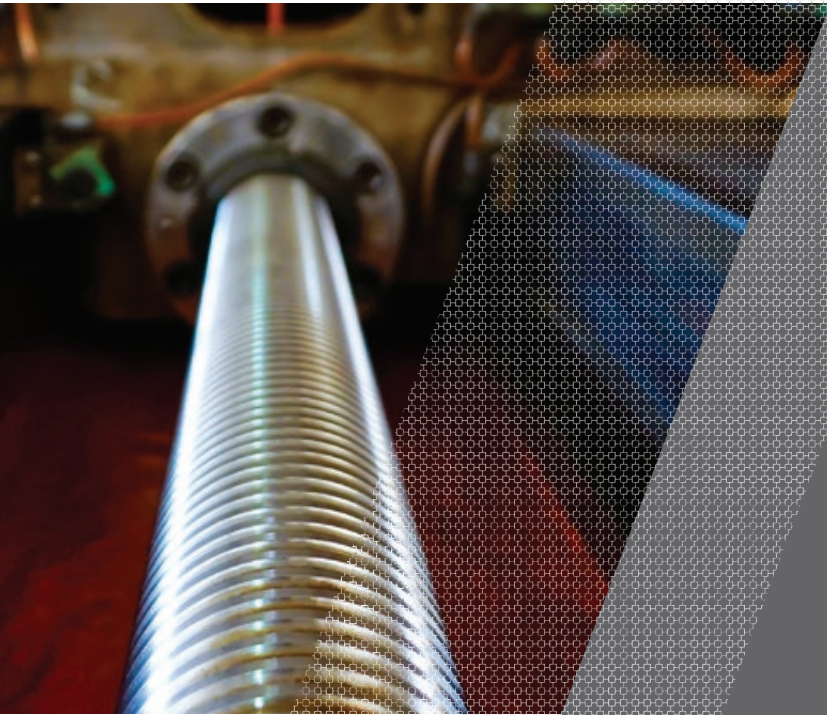
- Outstanding load carrying properties.
- Excellent thermal stability.
- Excellent corrosion protection (ASTM D665, procedure B pass).
- Outstanding demulsibility characteristics.
- Allows thermally stable operation at temperatures in excess of 200 °C.
- Free of chlorine, sulphur and metal-based additives including lead.

### PERFORMANCES

DIN 51517 Part 3, CLP  
David Brown Type G

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 
Supra Gear GL 150	150	25	195	-30	191	-	206 L - 106314
Supra Gear GL 220	237	32	177	-30	231	106315	205 L - 106316
Supra Gear GL 320	325	45	196	-30	225	106319	207 L - 106320





# SLIDEWAY OILS

Premium quality lubricants specially designed for the lubrication of high production machine tools. Our slideway lubricants guarantee slip stick properties, which significantly reduces the wear on the guides as well as excellent lubricity to prevent stick-slip phenomena. Due to the outstanding demulsifying ability and compatibility with our soluble cutting fluids, they are the first choice for machine owners who prefer to get all lubricants from only one source.



## MINERAL SLID FILM

### APPLICATION

High performances lubricating oil for slideways, hydraulics and centralized lubrication systems.

### ADVANTAGES

- High demulsifiability with water soluble metalworking fluids.
- Corrosion resistant.
- Compatible with plastic coated ways (SKC).
- Low friction coefficient.
- Avoids Stick-Slip.
- Excellent adhesiveness.
- Anti-wear and Extreme-Pressure.
- Zinc-free.

### PERFORMANCES

#### SLIDEWAYS




ISO 11158 category HG; 6743-4 category HG; 6743-13 category G  
CINCINNATI MILACRON P-47 and P-50.

#### HYDRAULICS

ISO 11158 category HM;  
6743-4 category HM  
DIN 51524 part 2, HLP

#### GEARS

DIN 51517 part 3  
AGMA 9005 - E02  
US STEEL 224

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Slid Film 68	68	9.3	105	-24	242	104231	108758	108484
Slid Film 100	100	11.3	100	-18	254	104277	107190	-
Slid Film 150	150	14.6	98	-15	266	104279	107189	-
Slid Film 220	220	18.6	97	-12	266	104278	108759	108485



## MINERAL SUPRA SLIDE

**APPLICATION**




High performance oil for the lubrication of machine tool slideways.

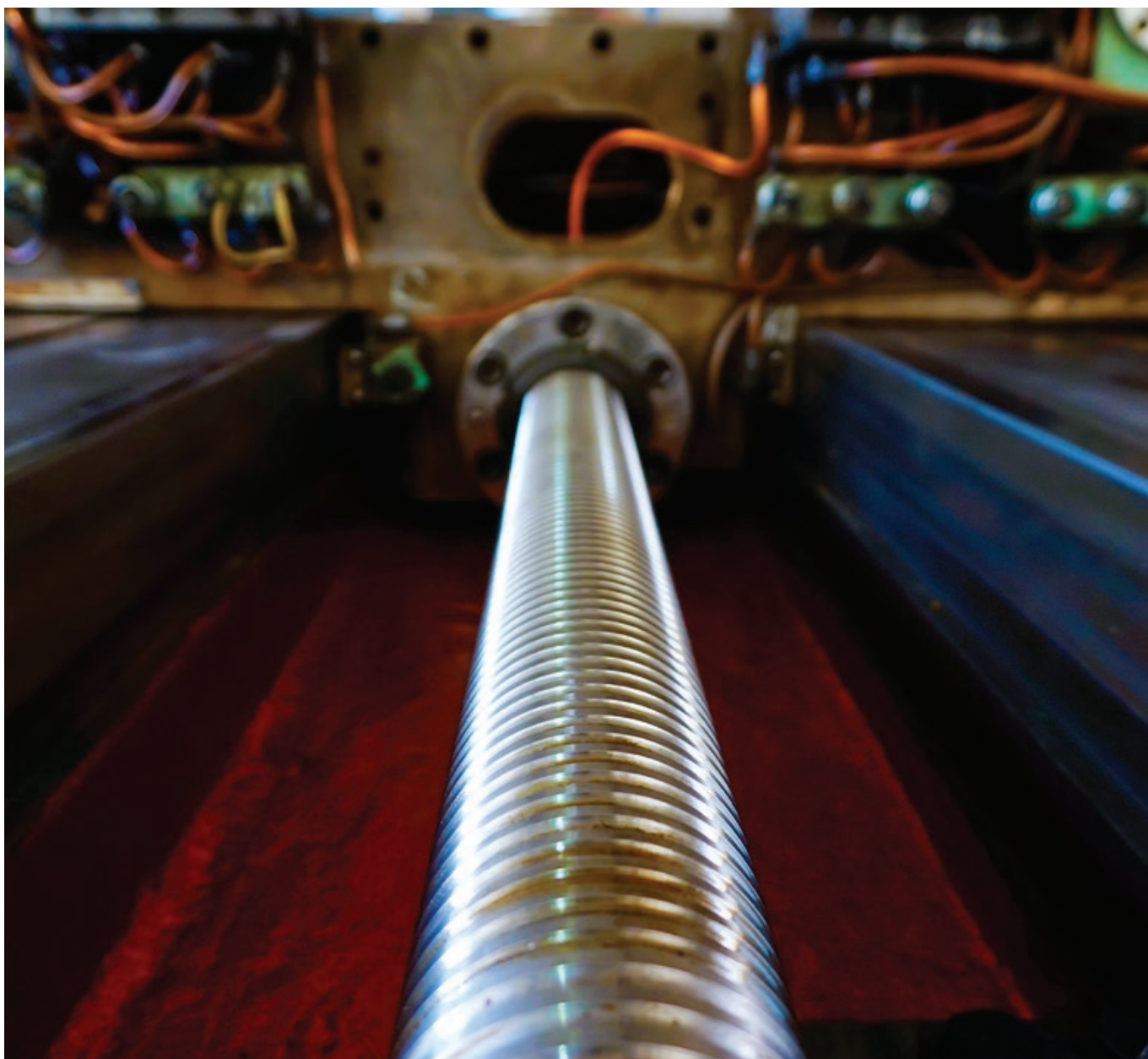
**ADVANTAGES**

- Exceptional demulsibility properties, particularly with MotulTech soluble fluids.
- Excellent lubricity and load carrying performance.
- Avoids Stick-Slip.
- Non-corrosive to ferrous and non-ferrous alloys.
- Anti-wear and Extreme-Pressure performance.

**PERFORMANCES**

Cincinnati Lamb P-47 / P-50  
SH/T0361-94 Chinese ntl. specification  
DIN 51524-2 HLP; DIN 51517-3 CLP

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supra Slide 68	68	8.6	97	-15	222	104513	104515	105863
Supra Slide 220	219	19	96	-12	286	104514	104517	-





# SPINDLE OILS

High quality oils specifically made for high-speed spindles bearings in all types of industrial machinery. These lubricants do not only prevent machine failures due to premature wear, but also cool and protect the spindle against corrosion.



## MINERAL SPEED A

### APPLICATION




Lubrication of high-speed spindles bearings, airline oilers, hydraulic systems requiring low-viscosity lubricants in grinders and other machine tools.

### ADVANTAGES

- Reduced sludge, varnish and deposit formation.
- Corrosion resistance.
- Excellent anti-wear protection.
- Enhanced thermal and oxidative stability.
- Zinc-free.

### PERFORMANCES

ISO TR 3498: L-FD and L-HM  
ISO 6743-2: L-FD

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Speed AA 2	2.4	1	148	-54	108	104419	-	-
Speed A 5	5.1	1.8	124	-54	130	108222	111804	-
Speed A 10	10.1	2.8	118	-54	141	104420	108482	108483





# CHAIN OILS

A complete range for maximization of service life of a chain drive or conveyor. MotulTech's high-performance chain and conveyor lubricants are suitable for many difficult operating conditions such as high temperature, stable, wet or corrosive environments. These products are based on synthetic base oils. They have extremely low volatility and will not form carbon deposits.






## SYNTHETIC SUPRA CHAIN HT

**APPLICATION**

High temperature chain oil specifically adapted to the lubrication of chains and bearings of installations with a continuous temperature between 150 and 250 °C.

**ADVANTAGES**

- Very good oxidation stability.
- Excellent adhesion and penetration properties.
- Very low evaporation rate and smoke formation.
- Good corrosion protection.
- Excellent lubricity and wear protection.
- High temperature resistance.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 208 L 	IBC 1000 L 
Supra Chain 120 HT	101	12	105	-48	278	110288	110289	-
Supra Chain 250 HT	250	19	80	-33	270	110290	110291	110831





# COMPRESSOR OILS

A range of special lubricants to lubricate both the working parts and the pressurized spaces in a compressor. MotulTech offers high-performance products for almost any piston and screw compressors, from small single-stage units to multi-stage versions with very high output. Depending on the application, you can find products on a mineral or synthetic basis, from 3,000 to 10,000 hrs service life.



## MINERAL VIS

**APPLICATION**

Lubrication of screw air compressors as well as vacuum pumps.

**ADVANTAGES**

- Excellent anti-wear performance.
- Excellent corrosion protection.
- Excellent oxidation resistance and thermal stability at high temperatures.
- Low ash and carbon formation.
- Zinc-free.

**PERFORMANCES**

DIN 51506 – VBL, VCL, VDL  
ISO / DP 6521 (DAA, DAB, DAH, DAG)

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING			
						BOTTLE 12 x 1 L	JERRYCAN 20 L	DRUM 208 L	IBC1000 L
Vis 32	32	5.5	108	-15	226	-	104282	108467	-
Vis 46	45	7	110	-39	253	111349	104267	108468	109785



## MINERAL ALTERNA

**APPLICATION**

Lubrication of reciprocating compressors as well as vacuum pumps.

**ADVANTAGES**

- Excellent anti-wear performances.
- Excellent corrosion protection.
- Excellent oxidation resistance and thermal stability at high temperatures.
- Low ash and carbon formation.
- Zinc-free.

**PERFORMANCES**

DIN 51506 – VBL, VCL, VDL  
ISO / DP 6521 (DAA, DAB, DAH, DAG)

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						BOTTLE 12 x 1 L	JERRYCAN 20 L	DRUM 208 L
Alterna 68	68	9.1	109	-15	230	-	107799	107800
Alterna 100	101	11.7	105	-15	230	111348	104251	108469
Alterna 150	150	15.4	103	-15	232	-	104283	111271



## SEMI-SYNTHETIC BAR SY

**APPLICATION**



High performance semi-synthetic lubricants for rotary and reciprocating compressors.

**ADVANTAGES**

- Excellent wear and corrosion protection.
- Very long drain intervals for reduced compressor maintenance.
- Reduces varnish and lacquer deposits.
- High viscosity index.
- Very low volatility for lower oil consumption.
- High oxidation resistance.
- Excellent separation from air and water.

**PERFORMANCES**

DIN 51506 – VCL, VDL

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 208 L 
Bar SY 46	46	7.5	128	-36	238	104688	104707
Bar SY 68	68	10	124	-33	250	104690	104761
Bar SY 100	101	12.5	117	-27	252	104691	104689



## SYNTHETIC SUPRABAR SY

**APPLICATION**



High performance lubricant for modern reciprocating or rotary air compressors operating under extreme climatic conditions, harsh environments and other severe operating environments and requiring extended oil change intervals.

**ADVANTAGES**

- Excellent anti-wear performance.
- High viscosity index, can be used in a large temperature range.
- Very severe operating conditions.
- Optimum efficiency.
- Excellent protection against corrosion, varnish and lacquer deposits.
- Increased draining intervals, up to 10,000 hrs for reduced maintenance costs.

**PERFORMANCES**

DIN 51506 (VBL, VCL, VDL)  
ISO / DP 6521 (DAA, DAB, DAH, DAG)

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 208 L 
Suprabar SY 32	32	6.2	146	-42	260	110229	110230
Suprabar SY 46	46	7.7	148	-36	272	110175	110176
Suprabar SY 68	68	11.1	155	-42	280	110177	110231





# FOOD GRADE OILS

The MotulTech's Food Grade oils range is especially suitable for the food industry. Typical applications are mechanisms in machines for meat processing, production of dairy and bakery products, beverages, the processing of sugar and cereals, as well as the production of pharmaceutical products, animal feed and food packaging.



## HYDRAULIC MEDICINAL WHITE OIL HYDRAULIC FG






### APPLICATION

Lubrication of hydraulic systems, in the food and beverage, cosmetic and pharmaceutical industries.  
Made from elements that are part of the Food and Drug Administration. NSF H1 certified.

### ADVANTAGES

- Oxidation stability.
- Extreme-Pressure and anti-wear performance.
- Excellent corrosion protection.
- Excellent anti-foam properties.
- Excellent water demulsibility.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING		
						JERRYCAN 20 L 	DRUM 215 L 	IBC 1000 L 
Hydraulic FG 46	46	9	>140	-10	>190	108463	108464	109097
Hydraulic FG 100	100	15	155	-10	>190	102018	-	-



## HYDRAULIC SYNTHETIC HYDRAULIC FG-F





### APPLICATION

Lubrication of plain bearings, conveyor chains, hydraulic circuits particularly at low temperatures. Lubricant of choice in cold industries. NSF H1 certified.

### ADVANTAGES

- Reinforced anti-wear and anti-corrosion performance.
- Excellent anti-foam properties.
- Excellent water demulsibility.
- High viscosity index.
- Low pour point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 215 L 
Hydraulic FG-F 32	32	6	>140	-50	>210	104449	104451



**HYDRAULIC  
SYNTHETIC  
HYDRAULIC FG-V**




**APPLICATION**

Lubrication of plain bearings, conveyor chains, hydraulic circuits particularly at low temperatures. Lubricant of choice in cold industries. NSF H1 certified.

**ADVANTAGES**

- Reinforced anti-wear and anti-corrosion performance.
- Excellent anti-foam properties.
- Excellent water demulsibility.
- High viscosity index.
- Low pour point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L	DRUM 215 L
Hydraulic FG-V 46	46	8.5	130	-50	250		108505 



**GEAR  
SEMI-SYNTHETIC  
GEAR FG**



**APPLICATION**

Lubrication of plain bearings and loaded enclosed gears in the food and beverage industry. Made from elements that are part of the Food and Drug Administration list. NSF H1 certified.

**ADVANTAGES**

- Oxidation stability.
- Extreme-Pressure and anti-wear performance.
- Excellent corrosion protection.
- High viscosity index.
- Excellent anti-foam properties.
- Low pour point.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 215 L 
Gear FG 150	150	20	>140	-18	>220	102098	108507
Gear FG 220	220	24	>140	-22	>220	108502	108503
Gear FG 320	320	40	>140	-25	>220	102132	108504
Gear FG 460	460	55	>140	-25	>220	102520	108508
Gear FG 680	680	65	>140	-25	>220	106184	-



**COMPRESSOR  
SYNTHETIC  
COMPRESSOR FG**





**APPLICATION**

Lubrication of CO<sub>2</sub>, air and inert gas compressors in the food and beverage industry. Made from elements that are part of the Food and Drug Administration list. NSF H1 certified.

**ADVANTAGES**

- Low volatility.
- High Extreme-Pressure and anti-wear performance.
- Excellent corrosion protection.
- Excellent demulsibility.
- Low residue tendency.
- Excellent anti-foam properties.
- Excellent deaeration properties.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 215 L 
Compressor FG 46	46	8.5	>130	<-30	>240	-	108506
Compressor FG 68	68	11.7	>130	<-30	>240	102131	-



CHAIN  
**SYNTHETIC  
CHAIN FG**





**APPLICATION**

Lubrication of drive and transport chains in the food industry and equipment manufacturing food packaging industry.  
Made from elements that are part of the Food and Drug Administration list.  
NSF H1 certified.

**ADVANTAGES**

- High resistance to water.
- Excellent oxidation stability.
- High anti-wear performances.
- Excellent corrosion protection.
- Very good adherence.
- No coking deposits.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 215 L 
Chain FG 320	320	34.1	150	-45	280	104486	104487





# HEAT TRANSFER OILS

A range of temperature and oxidation-resistant mineral fluids, low viscous and chemically inert, with high thermal potential for cooling systems. These oils guarantee best corrosion protection and improved oxidation stability in enclosed heating circuits.





## MINERAL SUPRACAL

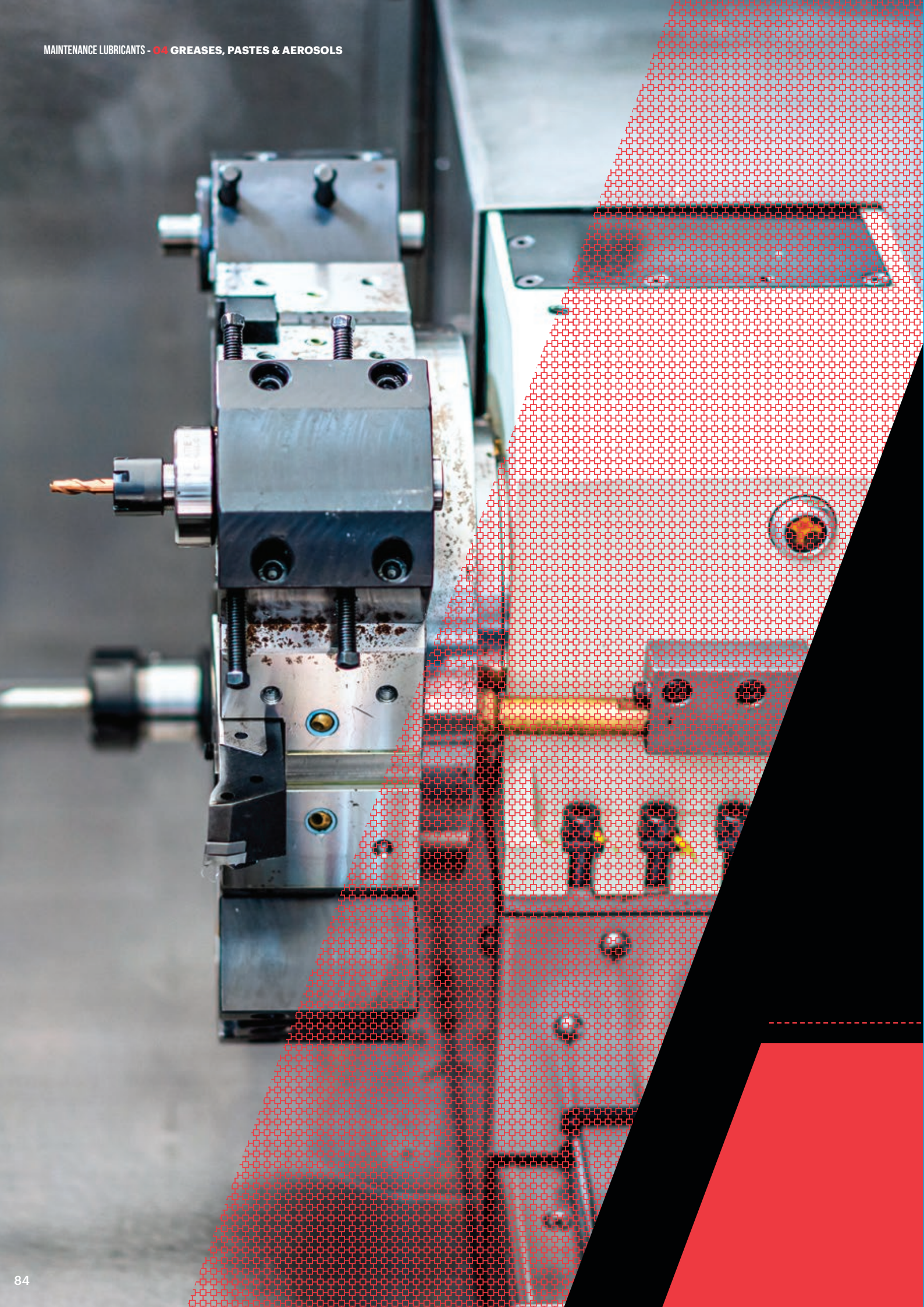
### APPLICATION

Highly refined mineral oil with paraffinic tendencies for heat transfer and thermal controls operating at temperatures up to 280°C. Can be used for dynamic circulation as well as static applications.

### ADVANTAGES

- Perfect stability at high temperatures.
- High resistance to oxidation.
- Excellent anti-rust, anti-corrosion and anti-foam properties.
- Low viscosity for excellent thermodynamic characteristics.
- Very low vapour pressure.
- Non-toxic, zinc-free.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	VISCOSITY AT 100°C (CST)	VI	POUR POINT °C	FLASH POINT °C	AVAILABLE PACKAGING	
						JERRYCAN 20 L 	DRUM 208 L 
Supracal 22	22	4.4	110	-33	210	104497	104504
Supracal 32	30.4	5.3	104	-21	216	104500	104503
Supracal 105	101.5	11.3	97	-17	272	104496	109786



## PART 2

## MAINTENANCE LUBRICANTS

## 04

GREASES, PASTES  
& AEROSOLS

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*Capitalizing on its expertise to meet the constant demand for improved mechanical performance, Motul has developed an high performance range of greases which meets and exceeds the standards demanded by industry OEMs and our customers. This comprehensive range of greases can be used in numerous automotive, Heavy Duty and industrial applications from general purpose to more specialized high & low temperature, or food grades. These greases will provide performance, reliability and protection to all equipment and vehicles, in all conditions, day after day.*



# GENERAL PURPOSE GREASES

Today's production facilities have a variety of grease-lubricated equipment, varying significantly in speed and load, and operating in wet or dusty environments. To maximize grease lubrication effectiveness, minimize cost and minimize risks of application-induced failure, Motul offers greases that cover a variety of applications. These greases range from slow to high speeds and from low to high loads. Single products to meet a multitude of requirements.



## CALCIUM / CALCIUM EP GREASES MINERAL **IRIX C 120-2**

### APPLICATION

Multi-purpose grease for machines working under mild loads and temperatures. Suitable for bearings and plain bearings, slideways, sliding blocks, lubrication of various machine movements. Also intended for the temporary protection of metal parts and the protection of spray booths.

### ADVANTAGES

- Insoluble in cold or tempered water.
- Very easy to inject.
- Good anti-corrosion performances.
- Remains stable at work and when temperature changes.
- Very adhesive to metal surfaces.

### CLASSIFICATION

ISO 12924: L-XCCIB2  
DIN 51502: KP2G-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING			
								24 x 0.4 KG CART.	PAIL 19 KG	DRUM 50 KG	DRUM 180 KG
Irix C 120-2	120	Calcium	2	-30 to 110 (max 120°C)	> 140	280	Amber	108243	108244	108245	106780



## CALCIUM / CALCIUM EP GREASES MINERAL **IRIX C 310-2**

### APPLICATION

Calcium thickened multi-purpose extreme-pressure grease based on mineral oil. Recommended for lubrication of bearings, bushings and plain bearings at low to medium speed, medium temperatures and high loads in wet environments. Mainly for agricultural machinery, heavy-duty and automotive applications. This grease is compatible with multi-purpose greases based on lithium and lithium/calcium.

### ADVANTAGES

- Good protection against corrosion.
- Good adhesiveness.
- Good resistance to shock loads.
- Good water resistance.

### CLASSIFICATION

ISO 12924: L-XCCHB2  
DIN 51502: KP2G-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix C 310-2	310	Calcium	2	-30 to 120 (max 130°C)	> 140	320	Green	110411	110412	110413



CALCIUM / CALCIUM EP GREASES  
**MINERAL**  
**IRIX C 1370-0**

APPLICATION

Semi-fluid grease with corrosion inhibitors and extreme-pressure/anti-wear additives. Suitable for the lubrication of heavily loaded bearings in wet and corrosive environments. Ideal for chassis or marine applications and as an universal grease for forestry, agricultural and construction vehicles. Easily pumpable even at low temperature in most high pressure centralized lubrication systems even with a high base oil viscosity.

ADVANTAGES

- Excellent adhesion.
- Excellent water resistance.
- Very good (shock) load carrying capacity.
- Good corrosion protection, perfectly suited for wet and corrosive environments.
- Excellent at low temperature for extra good winter performance.

CLASSIFICATION

ISO 12924: L-XD(F)CHB0  
DIN 51502: KPOK-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG	DRUM 180 KG
Irix C 1370-0	1370	Calcium	0	-40 to 120 (max 130 °C)	>120	300	Yellow	108246	108247



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 50-00**

APPLICATION

Multi-purpose, extreme-pressure grease formulated from premium mineral base oils and a lithium thickener. Can be used to lubricate bearings, gears and all mechanical units operating under medium loads, especially enclosed gears and bearings in poorly sealed gearcases. Also perfectly suitable for low pressure centralized systems.

ADVANTAGES

- Excellent protection against corrosion.
- Excellent extreme-pressure performance.
- Excellent wear protection.
- Very good adhesion.
- Very good stability in service and storage.
- Insoluble in water.

CLASSIFICATION

ISO 12924: L-XCCIB00  
DIN 51502: KP00K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								4 X 5 KG	PAIL 19 KG	DRUM 50 KG
Irix L 50-00	60	Lithium	00	-30 to 130	>160	250	Amber	106788	106874	106875



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 80-0**

APPLICATION

Multi-purpose, extreme-pressure grease formulated from premium mineral base oils and a lithium thickener. Can be used to lubricate bearings, gears and all mechanical units operating under medium loads. NLGI grade 0: reducers, centralized greasing, gears in crankcases, various parts working in a cold atmosphere, all soft extreme-pressure grease applications.

ADVANTAGES

- Excellent protection against corrosion.
- Excellent extreme-pressure performance.
- Excellent wear protection.
- Very good adhesion.
- Very good stability in service and storage.
- Insoluble in water.

CLASSIFICATION

ISO 12924: L-XCCIB0  
DIN 51502: KPOK-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING			
								12 X 1 KG	4 X 5 KG	PAIL 19 KG	DRUM 50 KG
Irix L 80-0	65	Lithium	0	-30 to 130	>160	250	Amber	111324	106785	106871	106872



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 130-1**

APPLICATION

Multi-purpose, extreme-pressure grease formulated from premium mineral base oils and a lithium thickener. Can be used to lubricate bearings, gears and all mechanical units operating under high loads. NLGI grade 1: centralized greasing with high pressure.

ADVANTAGES

- Excellent protection against corrosion.
- Excellent extreme-pressure performance.
- Excellent wear protection.
- Very good adhesion.
- Very good stability in service and storage.
- Insoluble in water.

CLASSIFICATION

ISO 12924: L-XBCIB1  
DIN 51502: KP1K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING				
								24 x 0.4 KG CART.	12 x 1 KG	4 x 5 KG	DRUM 50 KG	DRUM 180 KG
Irix L 130-1	130	Lithium	1	-20 to 140	>180	250	Amber	106789	110424	106781	106876	106784



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 130-2**

APPLICATION

Multi-purpose, extreme-pressure grease formulated from premium mineral base oils and a lithium thickener. Can be used to lubricate bearings, gears and all mechanical units operating under medium loads. NLGI grade 2: suitable for a wide range of general-purpose lubrication applications ranging from bearings to cables, chains and other linkages. Also suitable as a multi-purpose chassis, pin and bushing grease.

ADVANTAGES

- Excellent protection against corrosion.
- Excellent extreme-pressure performance.
- Excellent wear protection.
- Very good adhesion.
- Very good stability in service and storage.
- Insoluble in water.

CLASSIFICATION

ISO 12924: L-XBCHB2  
DIN 51502: KP2K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING					
								24 x 0.4 KG CART.	12 x 1 KG	4 x 5 KG	PAIL 19 KG	DRUM 50 KG	DRUM 180 KG
Irix L 130-2	130	Lithium	2	-20 to 140	>180	315	Amber	104717	110425	106840	106878	106879	106882



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 130-3**

APPLICATION

Multi-purpose, extreme-pressure grease formulated from premium mineral base oils and a lithium thickener. Can be used to lubricate bearings with vertical shaft, gears and all mechanical units operating under high loads. NLGI grade 3: truck hubs, very loaded sleeves.

ADVANTAGES

- Excellent protection against corrosion.
- Excellent extreme-pressure performance.
- Excellent wear protection.
- Very good adhesion.
- Very good stability in service and storage.
- Insoluble in water.

CLASSIFICATION

ISO 12924: L-XBCIB3  
DIN 51502: KP3K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	12 x 1 KG	DRUM 50 KG
Irix L 130-3	130	Lithium	3	-20 to 140	>190	285	Amber	106783	110426	106842



LITHIUM EP GREASES  
**MINERAL**  
**IRIX L 150-2 MO**

**APPLICATION**

Lithium thickened lubricating grease based on mineral oil, antioxidants, corrosion inhibitors, extreme-pressure / anti-wear additives and MoS<sub>2</sub>. Suitable for general industrial applications such as lubrication of gears, rolling contact bearings, plain bearings, splined shafts, etc. under heavy conditions (load, shock, presence of water).

**ADVANTAGES**

- Good mechanical stability.
- High load carrying capacity.
- Good corrosion protection.

**CLASSIFICATION**

ISO 12924: L-XBCHB2  
 DIN 51502: KPF2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING					
								24 x 0.4 KG CART.	24 x 0.4 KG LS CART.	12 x 1 KG	4 x 5 KG	DRUM 50 KG	DRUM 180 KG
Irix L 150-2 MO	150	Lithium	2	-30 to 120 (max 130°C)	> 185	> 325	Black	106893	108656	110474	106895	108659	108660





# HIGH & LOW TEMPERATURE GREASES

Suitable greases with good sealing properties are essential, especially when it comes to the lubrication of components, that are exposed to high or low temperatures and extreme environmental conditions such as humidity or pollution. The selection of this specific grease must include consideration of oil type and viscosity, oil viscosity index, thickener type, etc.



## LITHIUM COMPLEX GREASES

### MINERAL

### **IRIX EVO LX 200-2**

#### APPLICATION

Heavy-duty grease specifically developed for the long-term lubrication of all mechanisms subjected to very harsh working conditions. Perfectly suited for the lubrication of plain and anti-friction bearings, small reduction gears, joints and other mechanisms subjected to high temperatures and loads including car and truck wheel bearings.

#### ADVANTAGES

- Excellent wear resistant and extreme-pressure properties.
- Very good resistance to water.
- Excellent adhesiveness.
- Resistance to corrosion.

#### CLASSIFICATION

ISO 12924: L-XBDHB2  
DIN 51502: KPX2N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING									
								24 x 0.4 KG CART.	12 x 1 KG	PAIL 19 KG	DRUM 50 KG	DRUM 180 KG					
Irix EVO LX 200-2	220	Lithium Complex	2	-20 to 150 (max 160°C)	>240	400	Green						106790	110427	106869	106870	110435



## LITHIUM COMPLEX GREASES

### MINERAL

### **IRIX EVO LX 200-2 B**

#### APPLICATION

Heavy-duty grease specifically developed for the long-term lubrication of all mechanisms subjected to very harsh working conditions. Perfectly suited for the lubrication of plain and anti-friction bearings, small reduction gears, joints and other mechanisms subjected to high temperatures and loads including car and truck wheel bearings.

#### ADVANTAGES

- Excellent wear resistant and extreme-pressure properties.
- Very good resistance to water.
- Excellent adhesiveness.
- Resistance to corrosion.

#### CLASSIFICATION

ISO 12924: L-XBDHB2  
DIN 51502: KPX2N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								DRUM 180 KG	
Irix EVO LX 200-2 B	220	Lithium Complex	2	-20 to 150 (max 160°C)	>240	400	Blue	111222	



LITHIUM COMPLEX GREASES  
**SYNTHETIC**  
**IRIX INO LX 40-2**

**APPLICATION**

Universal grease for wide range of temperature applications particularly at high speed and low temperature and where a lubricant with low frictional resistance even at low temperatures is required.

**ADVANTAGES**

- Excellent high and low temperature performance.
- Very good mechanical stability.
- Good corrosion protection.
- Suitable for high speed applications.
- Very high load carrying capacity and excellent wear protection.

**CLASSIFICATION**

ISO 12924: L-XEDIB2  
DIN 51502: KPHC2N-55

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.380 KG CART.	DRUM 50 KG
Irix INO LX 40-2	44	Lithium Complex	2	-55 to 140 (max 180°C)	>260	>380	Beige	111418	110436



LITHIUM COMPLEX GREASES  
**SYNTHETIC**  
**IRIX INO LX 100-2**

**APPLICATION**

Universal grease recommended for higher speed applications such as electric motors, where reduced friction, low wear and long service life are required.

**ADVANTAGES**

- Excellent high and low temperature performance.
- Very good mechanical stability.
- Good corrosion protection.
- Suitable for high speed applications.
- Very high load carrying capacity and excellent wear protection.

**CLASSIFICATION**

ISO 12924: L-XD(F)DIB2  
DIN 51502: KPHC2N-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.380 KG CART.	DRUM 180 KG
Irix INO LX 100-2	100	Lithium Complex	2	-40 to 150 (max 220°C)	>260	>360	Beige	111419	110505



LITHIUM COMPLEX GREASES  
**SYNTHETIC**  
**IRIX INO LX 220-2**

**APPLICATION**

Suitable for both industrial and automotive applications. The product's all-round properties and wide temperature range make it the primary choice for various types of bearing applications including in high and low temperature conditions.

**ADVANTAGES**

- Excellent high and low temperature performance.
- Very good mechanical stability.
- Good corrosion protection.
- Suitable for high speed applications.
- Very high load carrying capacity and excellent wear protection.

**CLASSIFICATION**

ISO 12924: L-XD(F)DIB2  
DIN 51502: KPHC2N-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.380 KG CART.	DRUM 180 KG
Irix INO LX 220-2	220	Lithium Complex	2	-40 to 150 (max 220°C)	>260	>360	Beige	111420	110400



LITHIUM COMPLEX GREASES  
**SYNTHETIC**  
**IRIX INO LX 460-2**

APPLICATION



Suitable for heavily loaded bearings in low to medium speed applications, applications at elevated temperatures, and wet and corrosive environments. The grease is perfectly adapted to carry high loads and to resist vibrations and shock loads.

ADVANTAGES

- Excellent high and low temperature performance.
- Very good mechanical stability.
- Good corrosion protection.
- Suitable for high speed applications.
- Very high load carrying capacity and excellent wear protection.

CLASSIFICATION

ISO 12924: L-XD(F)DIB2  
DIN 51502: KPHC2N-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.38 KG CART.	DRUM 180 KG
Irix INO LX 460-2	460	Lithium Complex	2	-40 to 150 (max 220°C)	>260	>360	Beige		
								111421	110410



CALCIUM SULFONATE COMPLEX GREASES  
**MINERAL**  
**IRIX EVO CSX 290-2**

APPLICATION




Suitable for both industrial, marine and off-road applications. The extreme load carrying capacity and excellent water resistance make the product a perfect choice for heavily loaded applications in hot, or wet and corrosive environments.

ADVANTAGES

- Very good corrosion protection.
- Superb mechanical stability.
- Very good water resistance.
- Excellent load carrying capacity.

CLASSIFICATION

ISO 12924: L-XC(F)DIB2  
DIN 51502: KP2N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix EVO CSX 290-2	290	Calcium Sulfonate Complex	2	-30 to 140 (max 180°C)	>280	750	Brown			
								107191	110238	110226



CALCIUM SULFONATE COMPLEX GREASES  
**MINERAL**  
**IRIX EVO CSX 390-2**

APPLICATION


Suitable for both industrial, marine and off-road applications. The extreme load carrying capacity and excellent water resistance make the product a perfect choice for heavily loaded applications in hot, or wet and corrosive environments.

ADVANTAGES

- Very good corrosion protection.
- Superb mechanical stability.
- Very good water resistance.
- Excellent load carrying capacity.

CLASSIFICATION

ISO 12924: L-XB(F)DIB1.5  
DIN 51502: KP1.5N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								24 x 0.4 KG CART.
Irix EVO CSX 390-2	390	Calcium Sulfonate Complex	1.5	-20 to 140 (max 180°C)	>280	650	Brown	
								110907



**CALCIUM SULFONATE COMPLEX GREASES**  
**MINERAL**  
**IRIX EVO CSX 440-2**

**APPLICATION**




Suitable for both industrial, marine and off-road applications. The extreme load carrying capacity and excellent water resistance make the product a perfect choice for heavily loaded applications in hot, or wet and corrosive environments.

**ADVANTAGES**

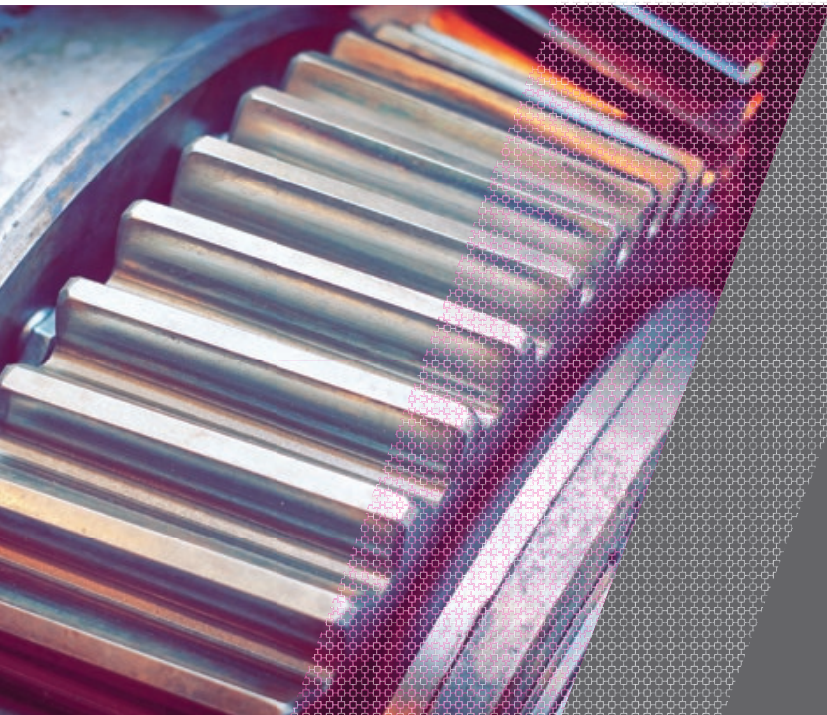
- Very good corrosion protection.
- Superb mechanical stability.
- Very good water resistance.
- Excellent load carrying capacity.

**CLASSIFICATION**

ISO 12924: L-XC(F)DIB2  
 DIN 51502: KP2N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix EVO CSX 440-2	440	Calcium Sulfonate Complex	2	-20 to 140 (max 180°C)	>280	650	Brown			
								110389	110390	110391





# GEAR GREASES

Oils are commonly used for closed gears, but greases with low base oil viscosity can be used for high speed or open gears. The grease characteristics will then be chosen according to speed and load: with decreasing speed or increasing load, grease with correspondingly higher base oil viscosity will be used.



## LITHIUM-CALCIUM COMPLEX GREASES

### MINERAL

## IRIX EVO LCX 920-000

#### APPLICATION


Suitable for industrial and automotive applications with high loads and slow speeds. Particularly developed for high pressure centralized lubrication systems, lubrication of low speed rollers in linear machine tool guides and closed gears. Prime choice for wet, dirty and highly loaded environments with low speeds.

#### ADVANTAGES

- Excellent load carrying capacity.
- Offers lower friction coefficient.
- Very good water resistance.
- Superior corrosion protection and antioxidant properties.

#### CLASSIFICATION

ISO 12924: L-XB(F)CCB000  
DIN 51502: GP000K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								PAIL 19 KG 
<i>Irix EVO LCX 920-000</i>	920	<i>Lithium-Calcium Complex</i>	000	-20 to 120 (max 130°C)	>180	700	<i>Brown</i>	107888



## LITHIUM-CALCIUM COMPLEX GREASES

### MINERAL

## IRIX EVO LCX 850-0

#### APPLICATION


High-performance product suitable for extreme applications in heavy industry. The extreme load carrying capacity and consistency make the product the first choice for heavily loaded open gears and slow-moving applications. The lack of solid lubricants makes gear inspection easier and reduces build-up of solids in gear seats.

#### ADVANTAGES

- Excellent load carrying capacity.
- Excellent resistance to shock loads.
- Good corrosion protection.
- Perfectly suited for wet and corrosive environments.

#### CLASSIFICATION

ISO 12924: L-XB(F)DIB0  
DIN 51502: GP0N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								4 x 5 kg 
<i>Irix EVO LCX 850-0</i>	850	<i>Lithium-Calcium Complex</i>	0	-20 to 140 (max 180°C)	>230	750	<i>Brown</i>	111404



LITHIUM GREASES  
**MINERAL**  
**SOFT GREASE 0**

**APPLICATION**



Multi-purpose, extreme-pressure grease suitable for filling gearbox casings, spur gears and bevel gear drives, worm gear pairs and similar industrial gears. This grease is also suited for central lubricating installations of utility vehicles as well as for outside working units having long tubing.  
 SOFT GREASE 0 meets the requirements of the flow grease specifications of Groeneveld and MAN 283 Li-P0.

**ADVANTAGES**

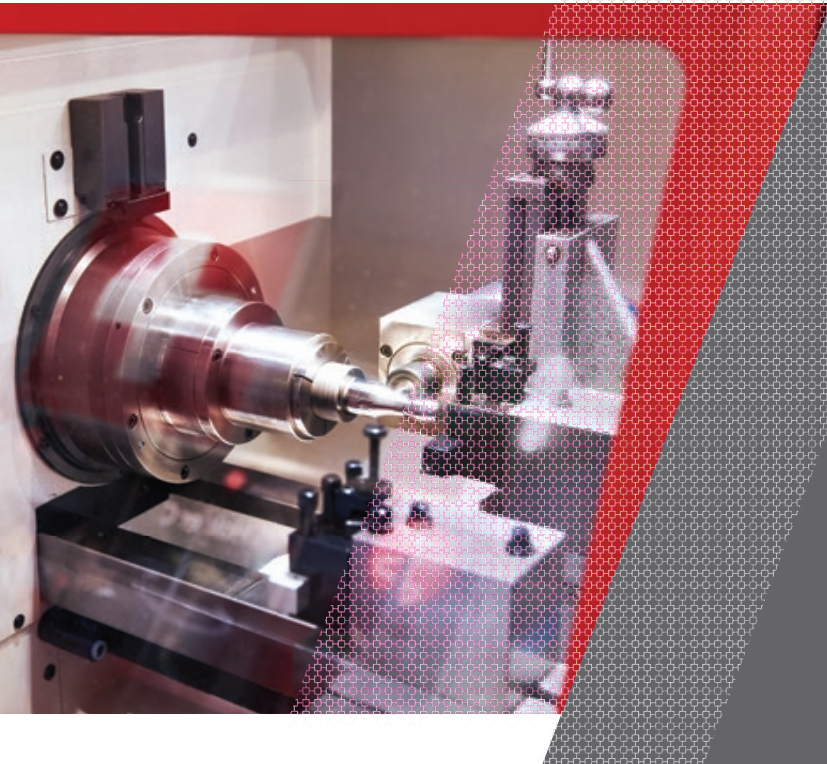
- Extraordinary oxidation stability.
- Water resistant.
- Corrosion resistant.
- High pressure load capacity.
- Good adhesiveness.

**CLASSIFICATION**

ISO 6743-9: ISO-L-XCDEB 0  
 DIN 51502: GP0K-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG	DRUM 50 KG
Soft Grease 0	90	Lithium	0	-40 to 120	180	260	Dark brown	 110432	 100922





# MACHINE TOOL GREASES

Machine tools increasingly run three shifts a day. So, a perfect lubrication of machine components is key to ensure reliability and durable performance whilst reducing wear and maintenance costs. Motul offers a range of lubricating greases dedicated to machine tools and formulated to offer the best performance and compatibility with process lubricants in use.



## LITHIUM-CALCIUM COMPLEX GREASES MINERAL **IRIX EVO LCX 920-000**

### APPLICATION


Suitable for industrial and automotive applications with high loads and slow speeds. Particularly developed for high pressure centralized lubrication systems, lubrication of low speed rollers in linear machine tool guides and closed gears. Prime choice for wet, dirty and highly loaded environments with low speeds.

### ADVANTAGES

- Excellent load carrying capacity.
- Offers lower friction coefficient.
- Very good water resistance.
- Superior corrosion protection and antioxidant properties.

### CLASSIFICATION

ISO 12924: L-XB(F)CCB000  
DIN 51502: GP000K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								PAIL 19 KG 
Irix EVO LCX 920-000	920	Lithium-Calcium Complex	000	-20 to 120 (max 130°C)	>180	700	Brown	107888



## LITHIUM COMPLEX GREASES SYNTHETIC **IRIX INO LX 40-2**

### APPLICATION



Universal grease for wide range of temperature applications particularly at high speed and low temperature and where a lubricant with low frictional resistance even at low temperatures is required.

### ADVANTAGES

- Excellent high and low temperature performance.
- Very good mechanical stability.
- Good corrosion protection.
- Suitable for high speed applications.
- Very high load carrying capacity and excellent wear protection.

### CLASSIFICATION

ISO 12924: L-XEDIB2  
DIN 51502: KPHC2N-55

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.4 KG CART. 	DRUM 50 KG 
Irix INO LX 40-2	44	Lithium Complex	2	-55 to 140 (max 180°C)	>260	>380	Beige	108102	110436



LITHIUM-CALCIUM GREASES  
**MINERAL**  
**IRIX EVO LC 150-2**

**APPLICATION**

Suitable for application in wet conditions, extends the relubrication intervals and performance due to its high degree of mechanical stability even when mixed with water. Recommended for lubrication of roller and plain bearings, manual lubrication of linear guide at low to medium speed in wet environments (machine tools, paper machines, etc.).

**ADVANTAGES**

- Good corrosion protection.
- Excellent adhesion.
- Good resistance to shock loads.
- Very good water resistance.

**CLASSIFICATION**

ISO 12924: L-XCCEB2  
 DIN 51502: KP2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix EVO LC 150-2	150	Lithium-Calcium	2	-30 to 120 (max 130°C)	>180	315	Green	110420	110401	110402



LITHIUM-CALCIUM GREASES  
**MINERAL**  
**IRIX EVO LC 1200-2**

**APPLICATION**

Suitable for heavily loaded industrial and heavy-duty applications including extreme outdoor wet and dirty conditions. Perfect choice for the lubrication of slow moving and heavily loaded bearings and tool or workpiece clamping systems in machine tools. This lubricating grease provides excellent adhesion and water resistance for perfect protection of chucks, collets and vices.

**ADVANTAGES**

- Excellent load carrying capacity.
- Very good water resistance.
- Excellent adhesion.
- Very good resistance to shock loads.
- Good corrosion protection.

**CLASSIFICATION**

ISO 12924: L-XB(F)CHB2  
 DIN 51502: KPF2K-10

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								24 x 0.4 KG CART.
Irix EVO LC 1200-2	1200	Lithium-Calcium	2	-10 to 120 (max 130°C)	>180	>500	Beige	109613





# MINING & HD GREASES

Cars and on-road vehicles are not necessarily exposed to extreme conditions but they still require protection and performance in order to offer a long lasting and worry-free use. Thus the greases in use have to bring lubrication for the moving parts as well as protection against the effects of water and dust for the lifetime of the vehicle.



## LITHIUM GREASES MINERAL **CG GREASE 000**

### APPLICATION


Multi-purpose, extreme-pressure grease suitable for central lubrication systems of commercial vehicles, suits also for outdoor aggregates with long pipes.

### ADVANTAGES

- Good properties under heavy loads.
- Very good cold flow properties for better grease circulation in the pipes at cold temperature.
- Water resistant.
- Anti-corrosion, anti-rust and anti-oxidation.
- Excellent anti-wear properties.

### CLASSIFICATION

ISO 12924: L-XCCIB00  
DIN 51502: KP00K-50

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								PAIL 19 KG 
CG Grease 000	45	Lithium	00/000	-50 to 120	>160	200	Red	108652



## LITHIUM GREASES MINERAL **SOFT GREASE 0**

### APPLICATION

Multi-purpose, extreme-pressure grease suitable for filling gearbox casings, spur gears and bevel gear drives, worm gear pairs and similar industrial gears. This grease is also suited for central lubricating installations of utility vehicles as well as for outside working units having long tubing.



SOFT GREASE 0 meets the requirements of the flow grease specifications of Groeneveld and MAN 283 Li-P0.

### ADVANTAGES

- Extraordinary oxidation stability.
- Water resistant.
- Corrosion resistant.
- High pressure load capacity.
- Good adhesiveness.

### CLASSIFICATION

ISO 6743-9: ISO-L-XCDEB 0  
DIN 51502: GP0K-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG 	DRUM 50 KG 
Soft Grease 0	90	Lithium	0	-40 to 120	180	260	Dark brown	110432	100922



LITHIUM GREASES  
**MINERAL GREASE 100**

APPLICATION

General-purpose grease for the lubrication applications ranging from bearings to cables, chains and other linkages as well as chassis, pins and bushings. Suitable to lubricate bearings, gears and all mechanical units operating under medium loads.

ADVANTAGES

- Good mechanical stability.
- Adequate pumpability at cold temperature.
- Anti-corrosion and anti-rust protection.
- Good adherence.

CLASSIFICATION

DIN 51502: KP2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING					
								24 x 0.4 KG CART.	24 x 0.4 KG LS CART.	DRUM 50 KG			
Grease 100	110	Lithium	2	-30 to 120	180	240	Blue				108653	108654	100916



LITHIUM EP GREASES  
**MINERAL IRIX L 150-2 MO**

APPLICATION

Lithium thickened lubricating grease based on mineral oil, antioxidants, corrosion inhibitors, extreme-pressure / anti-wear additives and MoS<sub>2</sub>. Suitable for general industrial applications such as lubrication of gears, rolling contact bearings, plain bearings, splined shafts, etc. under heavy conditions (load, shock, presence of water).

ADVANTAGES

- Good mechanical stability.
- High load carrying capacity.
- Good corrosion protection.

CLASSIFICATION

ISO 12924: L-XBCHB2  
DIN 51502: KPF2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING											
								24 x 0.4 KG CART.	24 x 0.4 KG LS CART.	12 x 1 KG	4 x 5 KG	DRUM 50 KG	DRUM 180 KG						
Irix L 150-2 MO	150	Lithium	2	-30 to 120 (max 130°C)	>185	>325	Black							106893	108656	110474	106895	108659	108660



LITHIUM COMPLEX GREASES  
**MINERAL IRIX EVO LX 200-2**

APPLICATION

Especially developed for the long-term lubrication of all mechanisms subjected to very harsh working conditions. Perfectly adapted grease for plain bearings, anti-friction bearings, small reduction gears, joints and other mechanisms subjected to high temperatures and loads as well as car and truck wheel bearings.

ADVANTAGES

- Excellent wear resistant and extreme-pressure properties.
- Very good resistance to water.
- Excellent adhesiveness.
- Resistance to corrosion.

CLASSIFICATION

ISO 12924: L-XBDHB2  
DIN 51502: KPX2N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING									
								24 x 0.4 KG CART.	12 x 1 KG	PAIL 19 KG	DRUM 50 KG	DRUM 180 KG					
Irix EVO LX 200-2	220	Lithium Complex	2	-20 to 150 (max 160°C)	>240	400	Green						106790	110427	106869	106870	110435



LITHIUM COMPLEX GREASES  
**MINERAL**  
**IRIX EVO LX 200-2 B**

APPLICATION

Heavy-duty grease specifically developed for the long-term lubrication of all mechanisms subjected to very harsh working conditions. Perfectly suited for the lubrication of plain and antifriction bearings, small reduction gears, joints and other mechanisms subjected to high temperatures and loads including car and truck wheel bearings.

ADVANTAGES

- Excellent wear resistant and extreme-pressure properties.
- Very good resistance to water.
- Excellent adhesiveness.
- Resistance to corrosion.

CLASSIFICATION

ISO 12924: L-XBDHB2  
DIN 51502: KPX2N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG	DRUM 180 KG
<i>Irix EVO LX 200-2 B</i>	220	<i>Lithium Complex</i>	2	-20 to 150 (max 160°C)	>240	400	Blue		111222



CALCIUM / CALCIUM EP GREASES  
**MINERAL**  
**IRIX C 1370-0**

APPLICATION

Semi-fluid grease with corrosion inhibitors and extreme-pressure/anti-wear additives. Suitable for the lubrication of heavily loaded bearings in wet and corrosive environments. Ideal for chassis or marine applications and as an universal grease for forestry, agricultural and construction vehicles. Easily pumpable even at low temperature in most high pressure centralized lubrication systems even with a high base oil viscosity.

ADVANTAGES

- Excellent adhesion.
- Excellent water resistance.
- Very good (shock) load carrying capacity.
- Good corrosion protection, perfectly suited for wet and corrosive environments.
- Excellent at low temperature for extra good winter performance.

CLASSIFICATION

ISO 12924: L-XD(F)CHB0  
DIN 51502: KP0K-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG	DRUM 180 KG
<i>Irix C 1370-0</i>	1370	<i>Calcium</i>	0	-40 to 120 (max 130 °C)	> 120	300	Yellow	108246	108247



LITHIUM GREASES  
**MINERAL**  
**IRIX FIFTH WHEEL GREASE**

APPLICATION

Grease especially formulated for the lubrication of semi-trailer fifth wheel plates. Can be also used for the greasing of cables, open and ring gears, gear-racks and ball joints for civil engineering machinery.

ADVANTAGES

- High adhesiveness.
- Anti-corrosion protection.
- High temperature stability.
- High pressure load capacity.
- Reinforced with graphite.

CLASSIFICATION

DIN 51502 : KPF2N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 19 KG	DRUM 180 KG
<i>Irix Fifth Wheel Grease</i>	800	<i>Lithium</i>	2	-30 to 140	190	320	Black		108655





# AGRICULTURE & FORESTRY GREASES

As agriculture & forestry activities are highly seasonal and weather dependent, the reliability of vehicles and equipment is a must for users. Using a suitable lubricating grease is therefore a key factor for a carefree harvest, ground preparation or forestry. Furthermore, lubricants have to be compatible with an outdoor use where spillage must not create any enduring contamination of natural environment.



## CALCIUM / CALCIUM EP GREASES **MINERAL IRIX C 310-2**

### APPLICATION



Calcium thickened multi-purpose extreme-pressure grease based on mineral oil. Recommended for lubrication of bearings, bushings and plain bearings at low to medium speed, medium temperatures and high loads in wet environments. Mainly for agricultural machinery, heavy-duty and automotive applications. This grease is compatible with multi-purpose greases based on lithium and lithium/calcium.

### ADVANTAGES

- Good protection against corrosion.
- Good adhesiveness.
- Good resistance to shock loads.
- Good water resistance.

### CLASSIFICATION

ISO 12924: L-XCCHB2  
DIN 51502: KP2G-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.4 KG CART.	DRUM 50 KG
Irix C 310-2	310	Calcium	2	-30 to 120 (max 130 °C)	>140	320	Green	 110411	 110412



## LITHIUM GREASES **SEMI-SYNTHETIC HD-AGRI GREASE**

### APPLICATION




Multi-purpose grease especially formulated for applications requiring a good resistance to heavy loads and water. Greasing of roller and plain bearings, articulations, cables of tractors, harvesters, wine machinery and all types of civil engineering machinery.

### ADVANTAGES

- Excellent results in presence of water.
- Good adherence on surfaces.
- Very good anti-wear & anti-corrosion protection.
- Good performance in time.
- Excellent results for heavy loads.

### CLASSIFICATION

DIN 51502: KP2N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	24 x 0.4 KG LS CART.	DRUM 50 KG
HD-Agri Grease	800	Lithium	2	-30 to 140	180	280	Light green	 108676	 108678	 108690



**BENTONITE GREASES**  
**ESTER**  
**IRIX BIO BE 30-000**



**APPLICATION**


Suitable for automatic centralized outdoor lubricating installations in the industrial and Heavy Duty sector, particularly for outdoor utility vehicles. Also appropriate for the onboard lubrication of wheel flanges for underground or aboveground rail vehicles and for the temporary protection of metal parts.

**ADVANTAGES**

- Environmentally acceptable.
- Water resistant.
- Excellent corrosion protection.
- Low temperature stable.

**CLASSIFICATION**

DIN 51502: KPE000K-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								PAIL 18 KG	
Irix BIO BE 30-000	32	Bentonite	000	-40 to 120	none	none	Amber	110422	



**CALCIUM / CALCIUM EP GREASES**  
**ESTER**  
**IRIX BIO C 110-2**

**APPLICATION**


Multifunctional biodegradable grease for machines working under mild conditions of load and temperature. Suitable for bearings and plain bearings, slideways, sliding locks, lubrication of various machines movements. Also intended for the temporary protection of metal parts. This lubricating grease offers a good mechanical stability, a good resistance to shock loads and is easily pumpable in most modern centralized lubrication systems.

**ADVANTAGES**

- Biodegradable.
- Excellent water resistance.
- Good resistance to shock loads.
- Good mechanical stability.

**CLASSIFICATION**

ISO 12924: L-XCBHB2  
 DIN 51502: KPE2E-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.		DRUM 180 KG
Irix BIO C 110-2	110	Calcium	2	-30 to 80 (max 100°C)	>140	280	Amber	110414	110416	



**CALCIUM / CALCIUM EP GREASES**  
**ESTER**  
**IRIX BIO C 210-2 FG**



NSF International

**APPLICATION**


This grease is ideal not only for applications in the food producing sector, but also in marine, forestry, agriculture and construction machinery. It is easily pumpable in most modern high pressure centralized lubrication systems.

**ADVANTAGES**

- Readily biodegradable.
- Excellent water resistance.
- Excellent adhesion.
- Meets NSF H1 requirements.

**CLASSIFICATION**

ISO 12924: L-XD(F)BIB2  
 DIN 51502: KPE2G-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.		DRUM 50 KG
Irix BIO C 210-2 FG	210	Calcium	2	-40 to 120	>140	300	White	110417	110418	110419



MICROGEL GREASES  
**BIODEGRADABLE OIL**  
**IRIX HP - SI 180**

APPLICATION

Year-round grease for railway points and wheel flanges. Suitable for all kind of trackside lubrication spray systems. This product features excellent sprayability even at very low temperatures and extreme climatic conditions.

ADVANTAGES

- Biodegradable.
- Resistance to water.
- Excellent adhesion.

CLASSIFICATION

DIN 51502: KPF2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								JERRYCAN 8.9 KG	DRUM 192 KG
Irix HP - SI 180	20	Microgel	n/a	-30 to 120	none	none	Dark yellow	101877	111253



CALCIUM SULFONATE COMPLEX GREASES  
**MINERAL**  
**IRIX EVO CSX 440-2**

APPLICATION

Suitable for both industrial, marine and off-road applications. The extreme load carrying capacity and excellent water resistance make the product a perfect choice for heavily loaded applications in hot, or wet and corrosive environments.

ADVANTAGES

- Very good corrosion protection.
- Superb mechanical stability.
- Very good water resistance.
- Excellent load carrying capacity.

CLASSIFICATION

ISO 12924: L-XC(F)DIB2  
DIN 51502: KP2N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix EVO CSX 440-2	440	Calcium Sulfonate Complex	2	-20 to 140 (max 180°C)	>280	650	Brown	110389	110390	110391







# FOOD & BEVERAGE GREASES

Like any industry, lubrication is key to reliability and productivity, but it is equally important that the lubricants used in the food industry actively contribute to improving food safety standards too, hence MOTUL has consistently invested in its capability to formulate food grade lubricants that deliver equipment protection whilst ensuring compliance with relevant industry regulations. The Motul range of high performance food grade greases are NSF H1 registered.



## BENTONITE GREASE WHITE OIL **IRIX BE 70-2 FG**



### APPLICATION

Suitable for the lubrication of anti-friction bearings, chains, joints, slides in food processing, cosmetic and pharmaceutical industries. Intended for use in applications where there is only potential for incidental food contact. NSF H1 registered under the registration number 139436. Kosher and Halal certified. Meets the FDA - 21 CFR 187.3570 specifications.

### ADVANTAGES

- Excellent water resistance.
- Permitted for incidental food contact.
- Translucent grease.

### CLASSIFICATION

ISO 12924: L-XBCAA2  
DIN 51502: KPX2K-15

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING			
								24 x 0.4 KG CART.	12 x 0.9 KG CART.	PAIL 25 KG	DRUM 50 KG
<i>Irix BE 70-2 FG</i>	70	Bentonite	2	-15 to 120	none	none	Crystal	103198	101672	102152	110437



## CALCIUM SULFONATE COMPLEX GREASES SEMI-SYNTHETIC **IRIX EVO CSX 100-2 FG**



### APPLICATION

Suitable for food industries where lubricants may have incidental contacts with food stuff. It is recommended for heavy loaded applications with medium to high speed bearings such as pellet presses and compactors used to process pet food and animal feed. Good pumpability in centralized lubrication systems even at low temperature. NSF H1 registered under number 161192.

### ADVANTAGES

- Excellent water resistance.
- Good load carrying capacity.
- Excellent resistance to shock loads.

### CLASSIFICATION

ISO 12924: L-XC(F)DHB1.5  
DIN 51502: KP1.5N-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
<i>Irix EVO CSX 100-2 FG</i>	100	Calcium Sulfonate Complex	1.5	-30 to 140 (max 180°C)	>300	650	Brown	110392	110393	110394



**CALCIUM SULFONATE COMPLEX GREASES**  
**WHITE OIL**  
**IRIX EVO CSX 460-2 FG**



NSF International

**APPLICATION**

Suitable for food industries where lubricants may have incidental contacts with food stuff. Recommended for heavy loaded applications with low to medium speed bearings, such as pellet presses and compactors used to process pet food and animal feed. NSF H1 registered under number 161193.

**ADVANTAGES**

- Excellent water resistance.
- Good load carrying capacity.
- Excellent resistance to shock loads.

**CLASSIFICATION**

ISO 12924: L-XB(F)DHB2  
 DIN 51502: KP2N-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
<i>Irix EVO CSX 460-2 FG</i>	460	Calcium Sulfonate Complex	2	-20 to 140 (max 180°C)	>280	650	Brown			
								110395	110396	110397



**ALUMINIUM COMPLEX GREASES**  
**SYNTHETIC**  
**IRIX INO AX 330-2 FG**



NSF International

**APPLICATION**

Suitable for food industries where lubricants may have incidental contacts with food stuff. It is recommended for lubrication for bearings operating at medium speed, including heavily loaded applications. NSF H1 registered under number 155333.

**ADVANTAGES**

- Excellent water and oxidation resistance.
- Good load carrying capacity.
- Excellent resistance to shock loads.

**CLASSIFICATION**

ISO 12924: L-XDCEB2  
 DIN 51502: KPHC2K-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART.	12 x 1 KG	DRUM 50 KG
<i>Irix INO AX 330-2 FG</i>	330	Aluminium Complex	2	-40 to 120 (max 130°C)	>230	>400	White			
								108105	110438	110448



**PTFE GREASES**  
**SILICONE**  
**IRIX INO TF 1000-3 FG**



NSF International

**APPLICATION**

Suitable for the lubrication of seals and gaskets, plastic parts for tap and valve systems, sealing of glass instruments. Can also be used for very low-load rolling bearings used in food & beverage industry. NSF H1 registered under number 161196.

**ADVANTAGES**

- Excellent resistance to high temperatures, water even if hot and steam.
- Non-physiological effect.
- Good compatibility with EPDM seals.
- Excellent performance even at high temperatures.

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								12 x 1 KG
<i>Irix INO TF 1000-3 FG</i>	1000	PTFE	3	-45 to 180	>300	none	White	
								110431



SILICA PASTE  
**SEMI-SYNTHETIC**  
**IRIX CERAMIC PASTE**




APPLICATION

Suitable for lubricating bushes, sliding surfaces, and small open plastic or metal gears. It is also an anti-seize compound for threaded fasteners. The compound is designed to prevent damages during startup and protects against premature wear during the running in period. Not recommended for the lubrication of anti-friction bearings. NSF H1 registered under number 161195.

ADVANTAGES

- Excellent water resistance.
- Prevents seizure of threaded components.
- Protection against scuffing.

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								12 x 1 KG 
Irix Ceramic Paste	240	Silica	2	-30 to 150	none	600	White	110388



CALCIUM GREASES  
**ESTER**  
**IRIX BIO C 210-2 FG**



APPLICATION




This grease is ideal not only for applications in the food producing sector, but also in marine, forestry, agriculture and construction machinery. It is easily pumpable in most modern high pressure centralized lubrication systems. NSF H1 registered under number 161194.

ADVANTAGES

- Readily biodegradable.
- Excellent water resistance.
- Excellent adhesion.

CLASSIFICATION

ISO 12924: L-XD(F)BIB2  
 DIN 51502: KPE2G-40

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								24 x 0.4 KG CART. 	DRUM 50 KG 	DRUM 180 KG 
Irix BIO C 210-2 FG	210	Calcium	2	-40 to 120	>140	300	White	110417	110418	110419







# SPECIALTY GREASES

From a large variety of additives and base oils, these Motul products offer peak performance and reliability in extreme conditions, for day to day maintenance or lifetime lubrication.



## POLYMER BASED GREASES SYNTHETIC IRIX INO P 260-2

### APPLICATION

Suitable for a wide variety of applications where long life is of critical importance. Improved lubrication of sensitive materials such as aluminum, ceramics, and elastomers. Due to the inert nature of the thickener system, the product is also compatible with most types of conventional lubricating greases.

### ADVANTAGES

- Long life.
- Inert thickener.
- Excellent water resistance.
- Controlled oil separation.
- Excellent pumpability.
- Excellent resistance to water and aggressive chemicals.

### CLASSIFICATION

ISO 12924: L-XC(F)CIB2  
DIN 51502: KPHC2K-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING	
								24 x 0.4 KG CART.	DRUM 180 KG
Irix INO P 260-2	260	Polymer	2	-30 to 120	>140	320	Yellow	110403	110405



## POLYUREA BASED GREASES MINERAL IRIX EVO PU 190-2

### APPLICATION

This grease is extremely temperature stable and covers a wide temperature range. It is extremely suitable for lubricating roller and friction bearings exposed to high temperatures and pressure. It is especially appropriate for lifetime lubrication of roller bearings in maintenance-free devices but also for earthmoving equipments or the crushing industry where longer lubrication intervals are determined.

### ADVANTAGES

- Work stable.
- Oxidation resistant.
- Water resistant.
- Excellent corrosion protection.
- High thermal load bearing capacity, extremely temperature stable.
- High pressure absorption capacity.
- Good adhesiveness.

### CLASSIFICATION

DIN 51502: KP2P-30

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING		
								12 x 0.4 KG CART.	DRUM 50 KG	DRUM 180 KG
Irix EVO PU 190-2	190	Polyurea	2	-30 to 160 (max 180°C)	>300	315	Amber	110423	110429	110430



PTFE  
**PFPE**  
**IRIX INO TF 500-2**


**APPLICATION**

Adapted for the lubrication of bearings and articulations submitted to high temperatures as in corrugator services, ovens, drying and stabilisation tunnels. Typical applications include preconditioner rolls, single facers, and double backers. It is well suited for the lubrication and preservation of electrical contacts. The product is chemically inert, non-flammable, non-toxic and remains unaffected by water and steam, preventing lubricant washout.

\* Special lubricant, please contact Motul before ordering.

**ADVANTAGES**

- Non-flammable.
- Physico-chemical inert to liquids or gases.
- Resistant to thermal and mechanical stresses and to most concentrated chemical agents.
- Compatible with almost all metal, elastomer, seal types and plastics.
- Very wide temperature range.

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
<i>Irix INO TF 500-2</i>	500	PTFE	2	-30 to 300	none	>500	White	10 x 0,8 KG CART.  110445



PTFE GREASES  
**SILICONE**  
**IRIX INO TF 1000-3 FG**

**APPLICATION**


Suitable for the lubrication of seals and gaskets, plastic parts for tap and valve systems, sealing of glass instruments. Can also be used for very low-load rolling bearings used in food & beverage industry. NSF H1 registered under number 161196.

**ADVANTAGES**

- Excellent resistance to high temperatures, water even if hot and steam.
- Non-physiological effect.
- Good compatibility with EPDM seals.
- Excellent performance even at high temperatures.



NSF International

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
<i>Irix INO TF 1000-3 FG</i>	1000	PTFE	3	-45 to 180	>300	none	White	12 x 1 KG  110431



SILICA PASTE  
**SEMI-SYNTHETIC**  
**IRIX CERAMIC PASTE**

**APPLICATION**


Suitable for lubricating bushes, sliding surfaces, and small open plastic or metal gears. It is also an anti-seize compound for threaded fasteners. The compound is designed to prevent damages during startup and protects against premature wear during the running in period. Not recommended for the lubrication of anti-friction bearings. NSF H1 registered under number 161195.

**ADVANTAGES**

- Excellent water resistance.
- Prevents seizure of threaded components.
- Protection against scuffing.



NSF International

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
<i>Irix Ceramic Paste</i>	240	Silica	2	-30 to 150	none	600	White	12 x 1 KG  110388




LITHIUM PASTE  
**MINERAL**  
**IRIX ALUMINIUM PASTE**

**APPLICATION**

Suitable to ease assemblies, static or semi-static (coupling electrical motor/gear boxes, ingot clamps, and any other mechanical parts working at very low speed and high temperatures). This paste considerably reduces contact corrosion effects and eases disassembly even after a long period of exposure at high temperature.

**ADVANTAGES**

- High temperature resistance.
- Excellent adhesion.
- Protection against scuffing.
- Easier assembling and disassembling.

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								12 x 1 KG 
<i>Irix Aluminium Paste</i>	100	<i>Lithium</i>	2	-20 to 140	>190	315	<i>Grey</i>	110387



BENTONITE BASED PASTE  
**MINERAL**  
**IRIX COPPER PASTE**

**APPLICATION**


Suitable to ease assemblies, static or semi-static (coupling electrical motor/gear boxes, ingot clamps, and any other mechanical parts working at very low speed and high temperatures). This paste considerably reduces contact corrosion effects and eases disassembly even after a long period of exposure at high temperature.

**ADVANTAGES**

- Contains 25% copper powder.
- High temperature assembling paste.
- Easier assembling and disassembling.
- Good protection against corrosion.
- Excellent adhesion.

**CLASSIFICATION**

ISO 12924: L-XCGDB2  
 DIN 51502: KF2T-35

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								12 x 1 KG 
<i>Irix Copper Paste</i>	485	<i>Bentonite</i>	2	-35 to 1100	<i>none</i>	400	<i>Copper</i>	110439



LITHIUM COMPLEX PASTE  
**SEMI-SYNTHETIC**  
**IRIX ROCK DRILL PASTE**

**APPLICATION**


Suitable for various types of bearing applications including heavy load conditions and wet environments. The copper and graphite solid additives give extra protection in applications with slow moving or oscillating motions.

**ADVANTAGES**

- Good load carrying capacity.
- Excellent resistance to shock loads.
- Good protection against corrosion.
- Excellent extreme-pressure properties.

**CLASSIFICATION**

ISO 12924: L-XBCHB2  
 DIN 51502: KPF2K-20

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								12 x 1 KG 
<i>Irix Rock Drill Paste</i>	320	<i>Lithium Complex</i>	2	-20 to 180 (max 200°C)	>240	>620	<i>Black</i>	110406



LITHIUM-CALCIUM GREASES  
**MINERAL**  
**IRIX EVO LC 1200-2**

**APPLICATION**


Suitable for heavily loaded industrial and heavy-duty applications including extreme outdoor wet and dirty conditions. Perfect choice for the lubrication of slow moving and heavily loaded bearings and tool or workpiece clamping systems in machine tools. This grease provides excellent adhesion and water resistance for perfect protection of chucks, collets and vices.

**ADVANTAGES**

- Excellent load carrying capacity.
- Very good water resistance.
- Excellent adhesion.
- Very good resistance to shock loads.
- Good corrosion protection.

**CLASSIFICATION**

ISO 12924: L-XB(F)CHB2  
 DIN 51502: KPF2K-10

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								24 x 0.4 KG CART. 
Irix EVO LC 1200-2	1200	Lithium-Calcium	2	-10 to 120 (max 130°C)	>180	>500	Beige	109613




LITHIUM GREASES  
**MINERAL**  
**IRIX ROBOT GREASE 0**

**APPLICATION**

High quality soft grease recommended for filling gearbox casing, spur gears and bevel gear drives, worm gear pairs and similar industrial gears. Recommended for use in industrial robot components. Also suited for central lubricating systems of utility vehicles and meets the requirements of the flow grease specifications of Groeneveld and MAN 283 LiPO.

**ADVANTAGES**

- Extraordinary oxidation stability.
- Water resistant.
- Corrosion resistant.
- High pressure load capacity.
- Good adhesiveness.

PRODUCT NAME	BASE OIL VISCOSITY AT 40°C (CST)	THICKENER	NLGI GRADE	TEMPERATURE RANGE (°C)	DROP POINT (°C)	4-BALL WELD LOAD (KG)	COLOUR	AVAILABLE PACKAGING
								PAIL 25 KG 
Irix Robot Grease	90	Lithium	0	-40 to 120	180	260	Dark brown	110433





# AEROSOLS

Specialty products for a simple, quick and clean form of application for various employments. Due to their precise application - even in difficult to access areas - these aerosols are indispensable for numerous maintenance and assembly applications.



## MULTI-USE SAFCO SPRAY MULTILUBE

**APPLICATION**

Multifunctional lubricant, rust preventative, cleaner for any kind of industrial maintenance and daily workshop usage.

**ADVANTAGES**

- One product for various applications.
- Biodegradable.
- Without silicone, acids or chlorinated solvents.
- Compatible with all plastics, elastomers and paint.

PRODUCT NAME	CONTAINER	NET CONTENT	FLASH POINT °C	AVAILABLE PACKAGING
				6 x AEROSOLS 400 mL 
Safo Spray Multilube	650 mL	400 mL	>100	106139



## CLEANER - DEGREASER SAFCO SPRAY 21

**APPLICATION**

Fast cleaning solvent degreaser for any kind of workshop and industrial usage. Can also be used as a temporary corrosion protection.

**ADVANTAGES**

- Compatible with most plastics and elastomers.
- Quick evaporation time.
- Cleans parts from oil, grease, ink, glue, resins or plastics residues.

PRODUCT NAME	CONTAINER	NET CONTENT	FLASH POINT °C	AVAILABLE PACKAGING
				6 x AEROSOLS 400 mL 
Safo Spray 21	650 mL	400 mL	23	106972



## EJECTOR PIN LUBRICATION

### EJECTOR LUBE

#### APPLICATION

High performance grease for ejector pin lubrication of plastic injection moulds.

#### ADVANTAGES

- High temperature stable, inflammable.
- Excellent anti-wear properties.
- Very good corrosion protection.
- Compatible with any kind of metals, plastics and elastomers.

PRODUCT NAME	CONTAINER	NET CONTENT	AVAILABLE PACKAGING	
			6 x AEROSOLS 400 mL	
Ejector Lube	650 mL	400 mL	107020	



## RELEASE AGENT FOR PLASTIC INJECTION

### DEMOLD SPRAY

#### APPLICATION

Release agent for plastic injection moulds, extrusion, blow moulding, thermoforming and compression. Perfect for the release of materials such as polyamides, ABS, polyurethanes, epoxies, polyesters, rubbers, etc.

#### ADVANTAGES

- High temperature stable, inflammable.
- Excellent anti-wear properties.
- Very good corrosion protection.
- Compatible with any kind of metals, plastics and elastomers.

PRODUCT NAME	CONTAINER	NET CONTENT	AVAILABLE PACKAGING	
			6 x AEROSOLS 500 mL	
Demold Spray	650 mL	500 mL	107019	



## HEAVY-DUTY CLEANING GEL


### INTENSE CLEANER

#### APPLICATION

High power gel cleaner for paints, residues and dirt on metal surfaces. Especially suited for the cleaning of plastic residues on plastic injection moulds.

#### ADVANTAGES

- Without chlorinated solvents.
- Very fast cleaning time.
- Works perfectly even on vertical surfaces.

PRODUCT NAME	CONTAINER	NET CONTENT	FLASH POINT °C	AVAILABLE PACKAGING	
				6 x AEROSOLS 400 mL	
Intense Cleaner	650 mL	400 mL	43	107021	



## METALWORKING NEAT OIL


### SUPRACO SPRAY

#### APPLICATION

For very severe machining on all ferrous metals such as manual thread, comb thread, rolling thread, die thread, drilling, manual and semi-automatic tapping.

#### ADVANTAGES

- Very high lubricating properties and extreme-pressure capacity.
- Good anti-wear properties.
- Increased tool life.

PRODUCT NAME	VISCOSITY AT 40°C (CST)	CORROSION COPPER	FLASH POINT °C	AVAILABLE PACKAGING	
				6 x AEROSOLS 400 mL	
Supraco Spray	53	4c	100	108719	

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