

A close-up, high-action photograph of a metalworking process. A large, powerful spray of water is directed at a metal surface, creating a dense mist and splashing. The water is a vibrant blue color. In the background, industrial machinery is visible, including a black flexible hose and various metal components. The overall scene conveys a sense of precision and industrial power.

METAL WORKING

KALON R&D

The company's R&D activity is the driving force behind it and focuses on the development of innovative products, prioritising efficiency in the consumption of resources and the reduction of impacts on the environment throughout the entire life cycle of the product.

Our Research Centre is composed of:

- Research and Development Laboratory.
- Technical Support Laboratory.
- Quality Control Laboratory.
- Water Physical-Chemical Analysis Laboratory.

These facilities are supervised by a specialised technical team, which translates into offering chemical technology solutions for the industry, adapted to an increasingly demanding environment.

Kalon has a wide range of more than 600 products developed by our R&D department, aimed to the maintenance of industrial facilities, equipment, and machinery.

The effort of a highly professional team and the dedication in R&D lead to obtaining the seal that certifies Kalon as an Innovative SME, issued by the Ministry of Science, Innovation, and Universities.

TECHNICAL SERVICE



Complete assessment of the facility



Make-up water analysis



Materials to be mechanised and mechanising operations



Microbiological study of the system



Development of tailor-made solutions



Collaboration with technology centres



Sampling for follow-up



Personalised technical support



Drill lubricant



Cutting oils



Anti-corrosion



Degreasing of parts



Maintenance



Dosing and ancillary products



SEMI-SYNTHETIC DRILL LUBRICANTS WITH MINERAL OIL



SUPER COOLANT

High protection cutting fluid, emulsifiable in water.

- ▶ Cools, lubricates, and protects in a single operation. High oil content.
- ▶ Suitable for large quantities of materials, steel, cast iron and specially aluminium and other non-ferrous materials.
- Refractometric factor: 1.3



SUPER COOLANT EP

Cutting fluid for extreme pressure, emulsifiable in water.

- ▶ High mineral oil content, providing excellent lubricity in highly complex operations.
- ▶ Cools, lubricates, and protects a large quantity of materials, steel, cast iron,...
- Refractometric factor: 1.3



SUPER COOLANT F

Cutting fluid for EP, emulsifiable in water, for ferrous alloys.

- ▶ No formaldehyde releaser.
- ▶ Cools, lubricates, and protects large quantities of materials, steel, cast iron, aluminium and other non-ferrous materials.
- Refractometric factor: 1.3



SUPER COOLANT CP

High-performance, water-soluble cutting fluid with superior corrosion protection.

- ▶ Easily emulsifiable in water, with high mineral oil content.
- ▶ Cools, lubricates, and protects in a single operation.
- ▶ Very suitable for coastal environments and waters with high chloride content.
- Refractometric factor: 1.2



SUPER COOLANT EP 2

Emulsifiable fluid for hard metal machining.

- ▶ No formaldehyde release, with high mineral oil content and Extreme Pressure additives, providing excellent lubricity in highly complex operations.
- ▶ Cools, lubricates, and protects large quantities of materials, steel, cast iron, aluminium and other non-ferrous materials.
- Refractometric factor: 1.4



SUPER COOLANT COBRE 2

Emulsifiable fluid for machining of copper, aluminium, bronze and brass.

- ▶ High mineral oil content, no amine, boron or formaldehyde releaser.
- ▶ Cools, lubricates and protects a large quantity of materials.
- ▶ Specially formulated to work with copper alloys, without chemically attacking the metal surface.
- Refractometric factor: 1.1



SUPER COOLANT MULTIMETAL

Multifunctional emulsion for machining of a wide range of metals.

- ▶ No formaldehyde release or boron.
- ▶ Particularly suited to difficult operations.
- ▶ Excellent cooling effect and detergents with optimum lubricating properties.
- ▶ Suitable for any type of hardness.
- ▶ Suitable for a wide range of materials such as steel, cast iron, aluminium alloys and other non-ferrous materials.
- Refractometric factor: 1.7





SEMI-SYNTHETIC DRILL LUBRICANTS FREE OF MINERAL OIL



SM COOLANT SS

Multifunctional cutting fluid emulsifiable in water.

- Excellent cooling effect and detergents with optimum lubricating properties.
- Suitable for a large number of materials such as steel, cast iron and occasionally aluminium alloys and other non-ferrous materials.
- Refractometric factor: 2.0



SM COOLANT ST

EP cutting fluid emulsifiable in water.

- Formulated with synthetic esters of high lubricity.
- Excellent cooling effect and detergents with optimum lubricating properties.
- Suitable for a wide range of materials such as steel, cast iron, etc.
- Refractometric factor: 2.0



SM COOLANT

Synthetic coolant for grinding.

- No nitrites, secondary amines, chlorine or mineral oils.
- Any low harshness grinding and machining operation.
- Refractometric factor: 2.0



SM COOLANT AD

Synthetic coolant for grinding and machining metals in hard water.

- No nitrites, secondary amines, chlorine or mineral oils.
- Suitable for situations where high hardness waters are used, responsible for emulsions destabilization, formation of incrustations, and corrosion generation on metal surfaces.
- Refractometric factor: 2.0



SM COOLANT CT

Synthetic coolant for the rectification and machining of metals with tungsten carbide.

- Also suitable for grinding cobalt- containing material.
- No nitrites, secondary amines, chlorine or mineral oils.
- No foaming, even under high pressure.
- Refractometric factor: 2.0



SM COOLANT MM

Multifunctional microemulsion for a wide range of metals.

- Synthetic cutting fluid indicated for machining operations on steel, cast iron, soft metals such as aluminium and copper.
- No nitrites, secondary amines, chlorine or mineral oils.
- Formulated with synthetic components of high lubricity.
- Excellent cooling effect and detergents with optimum lubricating properties.
- Refractometric factor: 2.0





HARDNESS MATERIALS

EXTREME HARDNESS

MEDIUM HARDNESS

SOFT

Tempered
Steel

Stainless
Steel

Cast

Carbon
Steel

Widia
Steel

Copper/bronze/brass

Aluminium

HARSHNESS PROCESSES MECHANINING

HIGH HARSHNESS

AVERAGE HARSHNESS

LOW HARSHNESS

Broaching

Threading

Gear
profiling

Deep
drill

Automatic
lathe

Drill

Milling

Turnin

Sawing

Saw
cutting

Grinding

WATER HARDNESS

EXTREMELY HARD

VERY HARD

HARD

AVERAGE

SOFT

>30°d

30°d - 18°d

18°d - 12°d

12°d - 8°d

8°d - 4°d

Very hard water
Precipitated with salts,
lime, corrosion, deposits

Optimum value: >10° <25°

Soft water
Foams

MATERIALS

PROCESSES

DRILL LUBRICANT SELECTION




	Cast Iron	Steel	Stainless Steel	Aluminium Alloys	Copper Alloys	Tungsten Cobalt	Drilling Threading	Threading Threading	Threading Turning	Grinding Lapping
SUPER COOLANT	●	●	--	●	--	--	●	●	●	●
SUPER COOLANT EP	●	●	●	--	--	--	●	●	●	●
SUPER COOLANT F	●	●	●	●	--	--	●	●	●	●
SUPER COOLANT CP	●	●	●	●	--	--	●	●	●	--
SUPER COOLANT EP 2	●	●	●	●	●	--	●	●	●	--
SUPER COOLANT COBRE 2	--	--	--	●	●	--	●	●	●	●
SUPER COOLANT MULTIMETAL	●	●	--	●	●	--	●	●	●	●
SM COOLANT SS	●	●	--	●	●	--	●	●	●	●
SM COOLANT ST	●	●	●	●	--	--	●	●	●	●
SM COOLANT	●	●	--	--	--	--	●	●	●	●
SM COOLANT AD	●	●	--	--	--	--	●	●	●	●
SM COOLANT CT	●	●	--	●	--	●	●	●	●	●
SM COOLANT MM	●	●	--	●	●	--	●	●	●	●

SEMI-SYNTHETIC

SYNTHETIC





● OPTIMAL
● COMPATIBLE



	Iron Steel Cast	Inox	Copper Brass	Aluminium			
SUPER OIL A Severe operations on steels, cast iron and stainless steel. Threading, milling, drilling and sawing. ▶ Viscosity at 40°C, cSt = 46	●	●			10/25L		
SUPER OIL C General machining, multi-metal. Does not stain yellow metals. ▶ Viscosity at 40°C, cSt = 35	●	●	●	●	10/25L	50/210L	
KL40 SUPER OIL AL 1 Polishing of aluminium profiles. Cold cutting of aluminium profile. ▶ Viscosity at 40°C, cSt = 4			●	●	10/25L	210L	
KL40 SUPER OIL AL 2 Cutting of aluminium billet and steel girder. High speed cutting, threading, drilling. ▶ Viscosity at 40°C, cSt = 22	●	●		●	10/25L	50/210L	
KL40 SUPER OIL AL 3 100% synthetic, hot cutting of aluminium. ▶ Viscosity at 40°C, cSt = 22	●		●	●	10/25L		
KL40 SUPER OIL AL 4 General machining, operations of medium harshness. Light alloys. Punching on aluminium sheet, galvanised and brass. ▶ Viscosity at 40°C, cSt = 22	●		●	●	25L	210L	
SM 25 Cutting of aluminium profile, tinplate, galvanised sheet. Low smoke formation. ▶ Viscosity at 40°C, cSt = 3			●	●	10/25L	210L	
SM 26 Aluminium profile cutting. Aluminium locksmithing and carpentry. Fog-free in the cutting process. ▶ Viscosity at 40°C, cSt = 1				●	10/25L	210L	
SM 27 Sharpening of cobalt and tungsten carbide tools. Colourless product, facilitates the visualisation of the process. ▶ Viscosity at 40°C, cSt = 6	●				25L		
KL40 SUPER OIL F (ISO 15) Deep drilling, threading. High resistance steel. ▶ Viscosity at 40°C, cSt = 15	●	●			10/25L	210L	1000L
KL40 SUPER OIL F (ISO 32) Deep drilling, threading. High resistance steel. ▶ Viscosity at 40°C, cSt = 32	●	●			25L	50L	
KL40 SUPER OIL LP Lapping and honing processes. Light coloured product, facilitates the visualisation of the process. ▶ Viscosity at 40°C, cSt = 6	●	●			25L	210L	



CUTTING OILS

	Iron Steel Cast	Inox	Cooper Brass	Aluminium				
RAPID PLUS Severe operations on steel, manual or automatic lathe. Threading fluid for hard metals. ▶ Viscosity at 40°C, cSt = 5	●	●			0,5L 10/25L			AE
ROSCAN Manual threading, drilling. ▶ Viscosity at 40°C, cSt = 150	●	●			0,5L 10/25L			
SM 9 Threading, drilling, stamping, embossing,... High lubricity, facilitates threading on aluminium. ▶ Viscosity at 40°C, cSt = 46			●	●	10L			AE

STAMPING - EMBOSSING - DIE-CUTTING

KL40 TAPP Severe operations on steel and hard metals, manual or automatic lathe. ▶ Gel	●	●			0,5Kg 21Kg			
KL40 STAMP 10 Evaporable, stamping, die-cut, steel and aluminium up to 1mm. ▶ Viscosity at 40°C, cSt = 1	●		●	●	25L			
KL40 STAMP 15 Stamping, die-cut, steel up to 1.5mm and aluminium up to 2.5mm. ▶ Viscosity at 40°C, cSt = 2,5	●		●	●	25L			
KL40 STAMP 15 EP Semi-evaporable, residue 3%. Stamping, stamped steel up to 3mm. ▶ Viscosity at 40°C, cSt = 3	●				25L			
KL40 STAMP F Extreme pressure lubricant for deep embossing operations, sheet steel forming, pipe bending, threading, blind holes, deep holes. Excellent surface finishes, high protection of tools, moulds, die-cuts, punches, ▶ Viscosity at 40°C, cSt = 150	●	●	●	●	25L			

ELECTROEROSION

ELEC 100 Electroerosion Process. Dielectric fluid. ▶ Viscosity at 40°C, cSt = 2	●				10/25L	210L		
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LUBRICATION MICRO-SPRAYING

MK CUT F Machining on steel with application of product by means of micro-spraying (MQL) ▶ Viscosity at 40°C, cSt = 46	●	●			10/25L			
MK CUT MM Machining on aluminium and soft metals by micro-spraying (MQL) ▶ Viscosity at 40°C, cSt = 22			●	●	25L			

ACCESSORIES

SUPER AF Accessory for severe machining, additive on the oil used at that time. High capacity EP, facilitates machining operations. ▶ Viscosity at 40°C, cSt = 220	●	●			0,5/10L	50L		
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ANTI-CORROSIVE



SM 50

Multifunctional product, formulated to provide functions in lubrication, cleaning, protection of machinery and metal elements. Offers anti-corrosion protection, damp-proofing and even a 'loosening' effect. Interior protection or packaging (6 months).

SMYGARD

Moisture displacing product, suitable for removing water/cutting fluid residue after machining processes. Medium corrosion protection, ideal for temporary protection prior to other machining, welding or surface treatment processes.

AQUABAN

Water-repellent and anti-corrosion oil. Excellent ability to displace moisture after wet machining processes. Provides a long-lasting anti-corrosion film. Ideal for indoor storage or packaging (12 - 18 months).

CORROBAR

Anti-corrosion protector in a waxy film. High-quality product for long-term protection, humid climates and saline environments. Protection of parts, tools and machinery in indoor storage (24 months), outdoor storage (12 months) and marine environments (6 months).

10/25L

50/210L

AE

25L

AE

10/25L

50/210L

AE

10/25L

AE



DEGREASING OF PARTS

Appearance

Base

Use

Rear
anticorrosion
protection

DEPOL

Powder detergent for cleaning and degreasing metal surfaces. Controlled foam product, which provides temporary anti-corrosion protection after washing. Ideal for hot alkaline degreasing baths, spray cleaning or parts washing machines. Compatible with steel and aluminium.

POWDER

ALKALINE

2-6%

YES

25Kg

DESENGRASANTE US

Liquid detergent for cleaning and degreasing metal surfaces. Ideal for parts washing machines powered by ultrasound and temperature systems. Provides long-lasting baths and finishes in parts with high gloss, and temporary anticorrosion protection. It is recommended that it be combined with ADITIVO-US to enhance the cleansing effect and prolong the life of the bath. Compatible with steel and aluminium.

LIQUID

WATER

3-10%

YES

12Kg
25Kg

NET FORTE

Alkaline liquid cleaner with high degreasing capacity. Recommended for spray cleaning. Easily removes traces of grease from previous steps. Compatible with steel and aluminium.

LIQUID

WATER

5-25%

NO

10/25L

210L

1000L

NEUTRAGRAS

Non-corrosive, water-based, pH-controlled liquid cleaner, with high degreasing capacity. Easily removes traces of vegetable, animal, and mineral greases. Compatible with steel, and suitable for aluminium working with diluted product.

LIQUID

WATER

5-20%

NO

1/25L

210L

1000L

METAL CLEANER

Non-corrosive, water-based, pH-controlled liquid cleaner with high capacity to provide an anti-corrosion film. Ideal for cleaning processes where the part must wait for further treatment and it is not desirable to work with a solvent based product. Compatible with steel and aluminium.

LIQUID

WATER

6-10%

SI

25L

ECOSOL

Fast evaporating, powerful solvent-based degreaser. Easily removes traces of grease and oil, providing a dry and stain-free surface. Free of chlorinated compounds and aromatic hydrocarbons. Pleasant citrus scent.

LIQUID

SOLVENT

UNDILUTED

NO

10/25L

210L

AE

FAST ECO

Medium evaporation solvent-based vigorous degreaser. Easily removes grease and oil residues. Provides a dry surface after heat treatment (> 50°C), waiting 2- 3 hours at room temperature or blowing with pressurised air. Free of chlorinated compounds and aromatic hydrocarbons. Pleasant citrus scent.

LIQUID

SOLVENT

UNDILUTED

NO

1L
10/25L

210L



MAINTENANCE MACHINING CENTRES

GUIDES AND SLIDING RAILS OILS



SM GUIAS

Lubricants with high lubrication and adhesion capacity, formulated with specific additives to facilitate travel with smooth, continuous, and precise movements. They provide excellent demulsifying capability on machining centres that operate with emulsified fluid for the machining process, facilitating their removal from the surface. Available Viscosity: ISO VG 32, ISO VG 68, ISO VG 100, ISO VG 150 and ISO VG 220. Shown in general packaging. For specific packaging, depending on viscosity, consult price list.

TF LUBE

Lubrication of guides in conventional machining centres. Its aerosol format enables its application as a thin layer on the guide, obtaining a long-lasting film with a low coefficient of friction thanks to its high content in PTFE.

LUBE LITUM EP 00

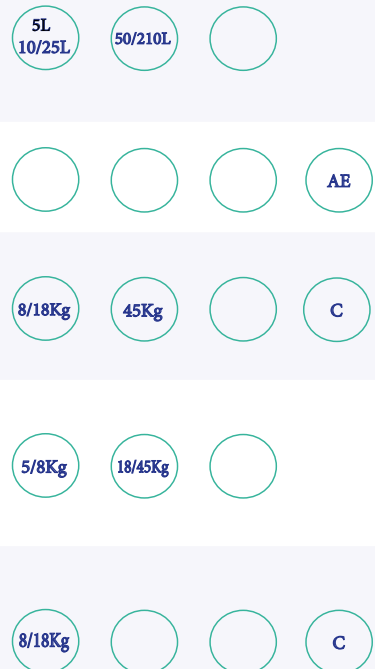
Water resistant lubricating grease with Extreme Pressure (EP) additive. Suitable for lubrication of gearboxes, linear guides with rollers and needle roller bearings. Recommended for temperatures from -30°C to +100°C. Grade NLGI 00

LUBE COMPLEX EP 00 T

Water resistant lubricating grease with Extreme Pressure (EP) additive and antifriction additives system. Performance up to 4 times higher than conventional lithium grease. Suitable for lubrication of gearboxes, linear guides with rollers and needle roller bearings. Recommended for temperatures from -30°C to +140°C. Grade NLGI 00.

KL20 PASTE SX 0

Lubricating grease with extreme resistance to water washing. Formulated with a high PTFE content to ensure a reduced coefficient of friction on highly loaded slides and guides. Ideal product for guides, slides and gear boxes subjected to high loads and vibrations. Recommended for temperatures from -20°C to + 140°C. Grade NLGI 0.



HYDRAULIC SYSTEMS

SM HLPD

Range of hydraulic oils with high capacity to resist high pressures. They provide a high wear-resistant and enhanced detergent/anticorrosive capacity compared to conventional hydraulic oils. They are suitable for working in systems where there is a risk of pollution by humidity, capturing in their structure up to 3% of polluted water, preventing it from reaching the metallic surface, prolonging the life of sensitive elements in the system such as pumps and solenoid valves. Available viscosities: ISO VG 32 and ISO VG 46. Quality DIN 51524 HLP / HLPD. Shown in general packaging. For specific packaging, depending on viscosity, consult price list.

SM HLP

Range of mineral hydraulic oils with wear-resistant capacity. Suitable for high hydraulic pressures. Available viscosities: ISO VG 22, ISO VG 32, ISO VG 46 and ISO VG 68.



GEAR OILS

SM OIL ENGRANAJES CLP

Family of mineral oils formulated with Extreme Pressure (EP) additives specific for high requirement industrial gears. Especially suitable for the lubrication of high torque gears, spur gears, tapered or hypoid gears. General greasing of installations, circulation lubrication, bearings, cylindrical gears, ... Viscosities available: ISO VG 68, ISO VG 100, ISO VG 150, ISO VG 220, ISO VG 320, ISO VG 460 and ISO VG 680. Compliant with DIN 51517 / 3 (CLP) and ISO 6743-6: L-CKC, L-CKD requirements. Shown in general packaging. For specific packaging, depending on viscosity, consult price list.

SM TRANSMISIONES

Multifunctional fluid, suitable for use in hydraulic systems and transmission lubrication, low viscosity, with a high capacity to maintain viscosity when hot while ensuring an excellent cold startup. Multi-grade fluid, which can be used as ISO VG 32 and ISO VG 46 fluid.





MAINTENANCE MACHINING CENTRES

HEADS AND TOOL HOLDERS



LUBE 302 A

Synthetic head cooling fluid, microfiltered, wear-resistant additive. ISO VG 2

25L

LUBE 305 A

Synthetic head cooling fluid, microfiltered, wear-resistant additive. ISO VG 5

25L

LUBE 310 A

Synthetic head cooling fluid, microfiltered, wear-resistant additive. ISO VG 10

25L

LUBE PLUS R

Lubricating grease for high speed heads. 100% synthetic, with low viscosity base oil, specific for speed factors up to 1,500,000. Lubrication from -40°C to +140°C. Ideal for elements subjected to high spinning speeds and for mechanical elements where a high precision in movement is required. NLGI 2 Grade.

1L

KL20 PASTE SX2

Synthetic assembling paste, formulated with a thickener that is highly resistant to corrosion, and PTFE to reduce friction coefficient at metal-to-metal contact points. Long-life product, reducing maintenance downtime costs. Recommended for greasing jaws, chucks, guides, turrets and bearings in machining centres (CNC). Lubrication of mechanical elements subjected to the presence of humidity, avoids jamming due to corrosion. Working temperatures from -20°C to +150°C. NLGI 2 Grade.

1L

FACILITY CLEANING

CITRIKEM 25

Ecological and biodegradable detergent with extreme capacity for eliminating greasy residues on metallic surfaces. Highly concentrated product, which provides excellent savings if applying the diluted product. Restores the original condition of metal surfaces, provides an extra degree of cleanliness and avoids contamination of the emulsion bath by dragging adhered grime.

1L

10/25L

210L

1000L

CLEANER 8

Industrial alkaline degreaser, removes grime from floors, walls and machinery. Helps to maintain facilities at an optimum degree of cleanliness, by reducing the risk of contamination of emulsion baths.

25L

KL90 BAC

A powerful preservative with immediate action and residual effect, specially formulated for microbiological control in the conservation of industrial refrigeration circuits and cutting fluids.

Immediate action broad spectrum bactericide, fungicide and algacide.

An ideal product as a shock and preventive treatment, which provides a residual effect on the fluid and guarantees long-lasting preservation.

1/25L

SM CLEAN

Low-foam detergent with sanitising capacity. Offers a high cleaning capacity on grime layers (Biofilm), and a great sanitising power against bacteria, moulds and yeasts.

Product suitable for use in maintenance operations of installations with change of machining fluid.

10L

ANTIESPUMANTE MWF

Specific fluid for the control of foams in machining installations with emulsions.

Quickly removes unwanted foams in the coolant bath and helps control subsequent generation.

10L



ANCILLARY PRODUCTS



PRE SPAN

Barrier cream for hand care. Protects and cares for the skin, and avoids skin conditions. Easy absorption. Acts as an "invisible glove". Reduces roughness, increases hydration and provides the necessary components to protect and preserve skin. Protects the operator's skin against products such as drill lubricants, cutting oils and industrial oils.



THOR

High cleaning power on very embedded grime. Contains components that soften and hydrate skin, and fine-grain vegetable exfoliant. Pleasant citrus scent.



SM 3 MIXER

Equipment to dilute cutting fluids in water.



FILTERING MACHINE

Oil separator type 5404. Oil filtering equipment for guides in drill lubricant baths.



OIL SKIMMER L.200 CARDAN TAPE

Oil separator in drill lubricant baths.



OIL SKIMMER 200 39 PTFE TAPE

Oil separator in drill lubricant baths. High performance.



DOSATRON DOSING PUMP MOD: D25 RE 10AF

Equipment to dilute cutting fluids in water. Dosage between 3% and 10%. Product injection rate from 0.3 l/h to 250 l/h. Working pressure from 0.3 bar to 4 bar.



SHAVINGS AND LIQUIDS EXTRACTOR RI 030

Shavings and liquids extractor.

REFRACTOMETER 0-10 (DRILL LUBRICANTS)

Equipment to control the concentration of drill lubricants in machining baths.



PH AND HARDNESS STRIPS

Reagents for the control of bath and make-up water parameters.





WATER TREATMENT



GLASS TREATMENT



ANCILLARY PRODUCTS



AEROSOLS



INDUSTRIAL PAINTS



CONSTRUCTION



METALWORKING



DISPENSERS AND EQUIPMENT



LUBRICATION



DETERGENCY



SOAPS



FOODSTUFFS



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