

Our lubricant services:

- ♥ Lubrication technology consulting
- ♥ LubCheck oil and machine diagnostics
- ♥ Lubrication assessment
- ♥ On-site lubricant maintenance
- ♥ Lubrication technology audit
- ♥ Fluid management
- ♥ Training courses

YOUR PARTNER:



MOL INDUSTRIAL LUBRICANTS

MOL INDUSTRIAL LUBRICANTS

MORE RELIABLE OPERATIONS – MAXIMUM PERFORMANCE

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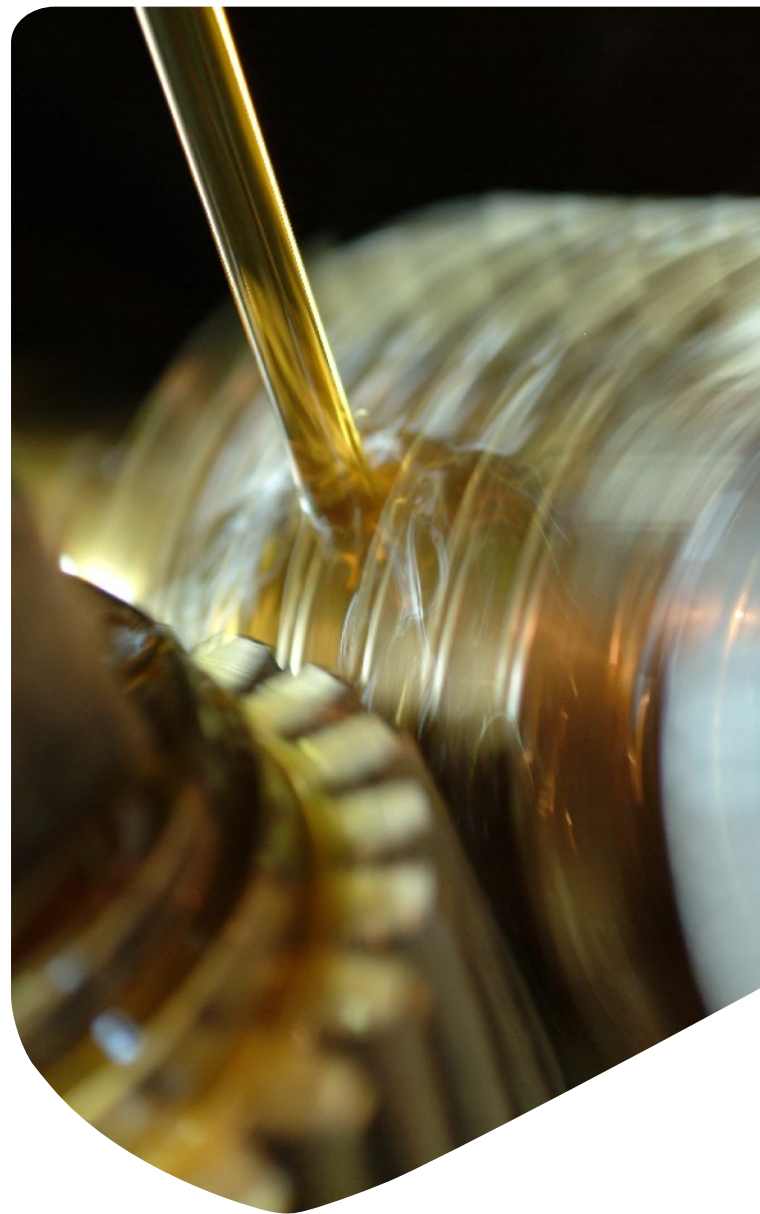
MOL INDUSTRIAL LUBRICANTS

Quality and Reliability

Lubricants of the right quality are indispensable to the efficient and reliable operation of industrial equipment. This publication offers industrial companies a broad selection of MOL industrial lubricants, industrial oils for non-lubrication purposes and other industrial products.

The impact of lubricants on manufacturing processes and their profitability is far greater than many people think. They affect the quality of manufactured products, the reliability of production equipment as well as maintenance costs and equipment life spans. Correctly selected lubricants can also reduce manufacturing processes' energy demands. High quality lubricants, used in a sound professional manner, can therefore contribute significantly to a company's bottom line.

MOL-LUB Ltd. 's over 100 years' experience in lubrication technology and our ongoing innovation certainly ensure your company's more efficient operations with greater reliability. After all, MOL's industrial lubricants meet the latest technological requirements and deliver reliable high quality. Our customer-focused approach and sophisticated development team enable us to offer solutions precisely tailored to your needs.



OUR SERVICES

Expertise and experience are both needed in using lubricants and for fully leveraging the opportunities they afford. This is exactly how our highly qualified team of engineers, which keeps a constant eye on trends, can support your industrial company specialists. Our associates assist you with professional technical services aligned to specific applications:

LUBRICATION TECHNOLOGY CONSULTING

With experience gained over many years, our team of experts assists in resolving any issue concerning lubrication be it the selection of the right lubricant, a technical problem or general issues concerning lubricants and lubricant management.



LUBCHECK OIL AND MACHINERY DIAGNOSTICS

Through regular LubCheck inspections of your lubricants, the status of your machinery and equipment are monitored so that damage costly to repair can be averted.

ON-SITE LUBRICANT MAINTENANCE

We are able to test your lubricant fills, to identify any major problems and then correct them without shutting down your production! Using lubricant analysis, even the initial state of your lube fills can be restored.



OUR SERVICES

LUBRICATION ASSESSMENT

Much more efficient and economic lubricant consumption can be achieved by reviewing your lubrication activities in general.

LUBRICATION TECHNOLOGY AUDIT

The goal of our lubrication technology audit is to reduce the number of lubricants you use to a minimum in such a way that each machine is filled with the perfect lubricant from an engineering point of view and to maintain costs at minimum levels achievable.



TRAINING COURSES

The world of lubricants is complex. Successful lubricant management requires the significant level of professional knowledge that we offer and share with you.



FLUID MANAGEMENT

Our full-scale fluid management system involves comprehensive lubrication management comprising complex handling and maintenance of all fluids used in production or manufacturing processes to ensure your machinery and lubricants' lifetimes are extended. We particularly recommend this system to companies primarily engaged in metalworking operations.



HYDRAULIC FLUIDS

MOL Hydro HM AL ashless hydraulic oils

Superior quality, zinc- and calcium-free ashless antiwear hydraulic oils. They have excellent water separation and air release ability, outstanding oxidation and thermal stability. They provide superior filterability and extended drain interval with advanced reliability and equipment protection. Due to its high performance additive system, it has an excellent wear reducing performance, is close to that of gear oils. Applicable for hydraulic systems of state-of-the-art machine-tools, injection moulding machines, agricultural and off-highway machines.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HM 22 AL	22.5	-33	200	0.866
MOL Hydro HM 32 AL	32.8	-30	225	0.873
MOL Hydro HM 46 AL	47.0	-30	225	0.878
MOL Hydro HM 68 AL	68.8	-27	240	0.880

Performance levels, approvals:

ISO 11158 HM, ISO-L-HM, DIN 51524-2 (HLP), DIN 51506 VDL, Eaton (Vickers) I-286-S, Eaton (Vickers) M-2950-S, Cincinnati Lamb P-68, Cincinnati Lamb P-69, Cincinnati Lamb P-70, Bosch-Rexroth RE 07075, Bosch-Rexroth RE 90220, ENGEL, AIST (US Steel) 127, AIST (US Steel) 126, SEB 181222 (HLP), AFNOR NF-E-48603 (HM), Parker Denison HF-0, Parker Denison HF-1/HF-2

MOL Hydro HME premium hydraulic oils

Hydraulic oils with high performance level and excellent anti-ageing properties. They provide increased drain interval with outstanding reliability. They meet the requirements of hydraulic systems operating under severe, heavy-duty conditions. Applicable in hydraulic systems of machine-tools, injection moulding machines, industrial equipment, vehicles, agricultural and off-highway equipment.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HME 10	10.1	-33	170	0.855
MOL Hydro HME 15	15.5	-30	185	0.853
MOL Hydro HME 22	22.5	-36	200	0.863
MOL Hydro HME 32	32.8	-30	210	0.866
MOL Hydro HME 46	46.4	-30	225	0.877
MOL Hydro HME 68	68.5	-27	235	0.882
MOL Hydro HME 100	101.5	-18	245	0.884
MOL Hydro HME 150	152	-15	250	0.890

Performance levels, approvals:

ISO 11158 HM, ISO-L-HM, DIN 51524-2 (HLP), DIN 51506 VDL, Eaton (Vickers) I-286-S, Eaton (Vickers) M-2950-S, Bosch-Rexroth RE 07075, Bosch-Rexroth RE 90220, ENGEL, SAE MS1004 Type HM, AIST (US Steel) 127, AIST (US Steel) 126, SEB 181222 (HLP), AFNOR NF-E-48603 (HM), Parker Denison HF-0, Parker Denison HF-1/HF-2, Cincinnati Lamb P-68 (Fives Cincinnati), Cincinnati Lamb P-69 (Fives Cincinnati), Cincinnati Lamb P-70 (Fives Cincinnati)

MOL Hydro HM hydraulic oils

Hydraulic oils for use in hydrostatic transmission systems under normal thermal and mechanical load. They provide good oxidation stability and wear protection, reduce deposit formation and protect hydraulic systems against rust and corrosion. Applicable for machine-tools, industrial, agricultural and off-highway equipment and vehicles.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HM 22/45	23.3	-45	190	0.875
MOL Hydro HM 32	32.5	-27	210	0.870
MOL Hydro HM 46	44.5	-30	225	0.875
MOL Hydro HM 68	66.5	-27	240	0.885

Performance levels, approvals:

ISO 11158 HM, ISO-L-HM, DIN 51524-2 (HLP), Cincinnati Lamb P-68, Cincinnati Lamb P-69, Cincinnati Lamb P-70, Bosch-Rexroth RE 90220, AFNOR NF-E-48603 (HM)

HYDRAULIC FLUIDS

MOL Hydro HM 46 AL Extra
ashless hydraulic oil

High quality hydraulic oil having a controlled purity (max. 17/15/12), containing an ash-free antiwear additive and carefully selected quality mineral base oils. It ensures consistently high performance in hydraulic system working under heavy load conditions. Due to its high performance additive system, it has an excellent wear reducing performance, is close to that of gear oils (FZG 12, DIN 51354-2). Its balanced additive system does not contain zinc, calcium, silicon or other metallic compounds. It has excellent water separation and air release ability, outstanding oxidation and thermal stability. It provides superior filterability and extended drain interval with advanced reliability and equipment protection. Applicable for hydraulic systems of state-of-the-art machine-tools (e.g. injection moulding machines), agricultural and off-highway machines.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HM 46 AL Extra	46	-27	220	0.880

Performance levels, approvals:

ISO 11158 HM, ISO-L-HM, DIN 51524-2 (HLP), Bosch-Rexroth RE 90220, AIST (US Steel) 127, AIST (US Steel) 126, SEB 181222 (HLP), AFNOR NF-E-48603 (HM)

MOL Hydro HME 46 HP
premium hydraulic oil

Hydraulic oil with outstanding ISO cleanliness (max. 17/15/12), high performance level and excellent anti-ageing properties. Provides increased drain interval with outstanding reliability. Meets the requirements of hydraulic systems operating under severe, heavy-duty conditions. Applicable in hydraulic systems of machine-tools, industrial equipment, vehicles, agricultural and off-highway equipment.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HME 46 HP	46.2	-27	225	0.880

Performance levels, approvals:

ISO 11158 HM, ISO-L-HM, DIN 51524-2 (HLP), DIN 51506 VDL, Eaton (Vickers) I-286-S, Eaton (Vickers) M-2950-S, Cincinnati Lamb P-70, Bosch-Rexroth RE 07075, Bosch-Rexroth RE 90220, ENGEL, AIST (US Steel) 127, AIST (US Steel) 126, SEB 181222 (HLP), AFNOR NF-E-48603 (HM), Parker Denison HF-0, Parker Denison HF-1/HF-2

MOL Hydro HLPD
detergent hydraulic oils

High performance hydraulic oils with detergent properties. Due to their special detergent effect they improve filterability and provide appropriate protection to critical parts (e.g. valves) of hydraulic systems exposed to contamination (entry of water, dust). They offer excellent thermal and oxidation stability and reduce sludge and deposit formation.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HLPD 32	33.0	-24	220	0.872
MOL Hydro HLPD 46	47.0	-24	225	0.873
MOL Hydro HLPD 68	69.8	-21	235	0.877

Performance levels, approvals:

MAN N 698, DIN HLP-D, Bosch-Rexroth RE 90220

HYDRAULIC FLUIDS

MOL Hydro HLPD 46 AL
ashless detergent hydraulic oil

High performance hydraulic oil produced from high quality high purity (ISO cleanliness max. 17/15/12), detergent and ash-free antiwear additives and carefully selected quality mineral base oils. It provides consistently high performance even in an environment affected by water and dust in industrial and mobile hydraulic systems working under heavy load conditions. It has an outstanding load carrying capacity and provides excellent protection against wear even at light loads / low speeds (Brugger value >50 N/mm² DIN 51347-2). Due to its high performance additive system, it has an excellent wear reducing performance, close to that of gear oils (FZG 12, DIN 51354-2).

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HLPD 46 AL	47.3	-21	230	0.873

Typical applications include machine-tools in the automotive industry, hydraulic systems in metallurgical plants, foundries, cement factories and agriculture.

Performance levels, approvals:

ISO 11158 HM, DIN 51524-2 (HLP), DIN HLP-D, Mueller Weingarten

MOL Hydro HV
multigrade hydraulic oils

Multigrade, high performance hydraulic oils. They provide good shear stability and unique temperature-viscosity characteristics to enable reliable operation at both low and high temperatures. Applicable for outdoor hydraulic equipment operated under high thermal and mechanical loads and for industrial and automotive hydraulic systems operated under wide temperature ranges where they ensure superior wear protection and good filterability along with long equipment lifetime.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HV 15	15.5	-54	170	0.860
MOL Hydro HV 22	21.6	-48	185	0.870
MOL Hydro HV 32	32.7	-42	205	0.860
MOL Hydro HV 46	45.1	-42	220	0.870
MOL Hydro HV 68	68.4	-33	230	0.880
MOL Hydro HV 100	103	-33	230	0.885

Performance levels, approvals:

ZETOR, ISO 11158 HV, ISO-L-HV, DIN 51524-3 (HVLP), Parker Hannifin (Denison) HF-0/HF-1/HF-2, Bosch-Rexroth RE 07075, Bosch-Rexroth RE 90220, SAE MS1004 Type HV, AFNOR NF-E-48603 (HV)

MOL Hydro HVLP 46
hydraulic oil

Multigrade hydraulic oil. Applicable for outdoor hydraulic equipment operated under high thermal and mechanical loads and for industrial and automotive hydraulic systems operated under wide temperature ranges where it ensures wear protection and good filterability along with long equipment lifetime.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HVLP 46	45	-39	220	0.870

Performance levels, approvals:

ISO 11158 HV, ISO-L-HV, DIN 51524-3 (HVLP)

HYDRAULIC FLUIDS

MOL Hydro Arctic 32
hydraulic oil

Hydraulic oil with high performance level and excellent low temperature characteristics. Applicable for hydraulic systems of machine-tools, industrial equipment, automotives, agricultural and off-highway equipment.

Performance levels, approvals:
ISO-L-HV, DIN 51524-3 (HVLP)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro Arctic 32	31.0	-60	135	0.867

MOL Hydro HVD 46
multigrade detergent hydraulic oil

Multigrade, high performance hydraulic oil with detergent property. Due to the special detergent effect it improves filterability and protects critical parts (e.g. valves) of hydraulic systems exposed to contamination such as entry of water and dust. It provides excellent thermal and oxidation stability and reduces sludge and deposit formation. Owing to the high viscosity index it can be used within a wide temperature range.

Performance levels, approvals:
MAN N 698, ISO 11158 HV, DIN 51524-3 (HVLP), DIN HLP-D

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HVD 46	46.4	-36	210	0.876

MOL Hydro POC
multigrade hydraulic oil

Multigrade, high performance hydraulic oil, especially designed for Case-Poclair equipment. Due to its high viscosity index it provides reliable operation at both low and high temperatures. Owing to its excellent oxidation stability and wear protection it is applicable for hydraulic equipment operated under severe conditions (off-highway, road construction, earthmoving machines, loaders, cranes and other agricultural equipment).

Performance levels, approvals:
ISO 11158 HV, ISO-L-HV, DIN 51524-3 (HVLP), Case Poclair P110 32-03J

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro POC	48.9	-39	230	0.871

MOL Hydro HL
hydraulic oils

Working fluids for hydraulic power transmission systems operating under low system pressure and equipped mainly with piston pumps. They have excellent thermal and oxidation stability. Owing to their good water separation and air release ability they provide long lasting, reliable operation and long term rust and corrosion protection.

Performance levels, approvals:
ISO 11158 HL, ISO-L-HL, DIN 51524-1 (HL), DIN 51517-2 (CL)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Hydro HL 32	33.2	-27	210	0.870
MOL Hydro HL 46	46.4	-24	220	0.875
MOL Hydro HL 68	69.4	-21	230	0.885

HYDRAULIC FLUIDS

MOL Pirohyd DU
synthetic fire-resistant hydraulic oils

Fire resistant hydraulic fluids based on synthetic polyol esters. Recommended for use in high pressure equipment in steel and aluminium industry. They provide excellent anti-wear characteristics and ready biodegradability. They are compatible with usual seals and paintings.

Performance levels, approvals:
ISO 12922 HFDU, ISO-L-HFDU, 7th Luxemburg Report

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Pirohyd DU 46	48.5	-36	310	0.920
MOL Pirohyd DU 68	70.8	-30	310	0.920

MOL Pirohyd C
water/glycol fire-resistant hydraulic fluid

Water-glycol based fire resistant fluid. Applicable primarily as working fluid in hydraulic equipment operated in metal casting processes. Favourably applicable under heavy operating conditions (e.g. extrusion, continuous metal casting) due to its excellent anti-wear properties. By its excellent thermal stability and anticorrosion properties it helps to extend life time of the equipment. Maximum application temperature: 60 °C.

Performance levels, approvals:
ISO 12922 HFC, ISO-L-HFC, 7th Luxemburg Report, VDMA 24317 HFC

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Pirohyd C	50	-42		1.08

MOL Pirohyd HFC
water/glycol fire-resistant hydraulic fluid

Water-glycol based fire resistant fluid. Applicable primarily as working fluid in hydraulic equipment operated in metal casting processes. Favourably applicable under heavy operating conditions (e.g. extrusion, continuous metal casting) due to its good anti-wear properties. By its excellent thermal stability and anticorrosion properties it helps to extend life time of the equipment. Maximum application temperature: 55 °C.

Performance levels, approvals:
ISO 12922 HFC, ISO-L-HFC, 7th Luxemburg Report, VDMA 24317 HFC

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Pirohyd HFC	42	-50		1.08

HYDRAULIC FLUIDS

MOL Pirohyd HFC 38

water/glycol fire-resistant hydraulic fluid

Water-glycol based fire resistant fluid. Applicable primarily as working fluid in hydraulic equipment operated in metal casting processes. Favourably applicable under heavy operating conditions (e.g. extrusion, continuous metal casting) due to its good anti-wear properties. It is especially recommended for equipments where the refreshment of the filling can be done only by fresh product but not softened water.

Maximum application temperature: 55 °C.

Performance levels, approvals:

ISO 12922 HFC, ISO-L-HFC, 7th Luxemburg Report

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Pirohyd HFC 38	38	-50		1.065

MOL Biohyd 46S

synthetic biodegradable hydraulic oil

Biodegradable hydraulic oil based on synthetic ester. Favourably applicable for all stationary and mobile hydraulic systems subject to the risk of leaking hydraulic fluid entering soil, live water courses, ground water or wastewater systems. Readily biodegradable, and provides excellent anti-wear and low temperature characteristics. Usable in a wide temperature range: -35 to 70 °C.

Performance levels, approvals:

ISO 15380 HEES, ISO-L-HEES, VDMA 24568 HEES, SS 155434

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Biohyd 46S	48	-42	320	0.920

MOL Biohyd 46

biodegradable hydraulic oil

Biodegradable hydraulic fluid based on vegetable oil for seasonal use. Favourably applicable in hydraulic systems where the risk of leakage is high and the fluid can enter into the soil or natural water in case of equipment failure. Recommended temperature range: -20 to +45 °C.

Performance levels, approvals:

ISO 15380 HETG, ISO-L-HETG, VDMA 24568 HETG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Biohyd 46	45.1	-27	290	0.918

CIRCULATING OILS, MACHINE-TOOL OILS

MOL TCL M

circulating and bearing oils

Circulating oils for industrial equipment exposed to dynamic water flow. The rapid water separation results in long term reliable operation. They provide long-lasting protection against corrosion and owing to their good oxidation and thermal stability they prevent deposit formation and clogging of filters. Their enhanced antiwear properties extend equipment lifetime. Particularly recommended for Morgoil and similar bearing systems.

Performance levels, approvals:

ISO 12925-1 CKB, ISO-L-CKB, DIN 51517-2 (CL), Morgoil Lubricant Spec. Rev. 1.1, SMS SIEMAG-Morgoil Lubricant, Spec. SN 180 Part 3, SEB 181225 (CL)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TCL 150 M	150	-12	250	0.894
MOL TCL 320 M	310	-12	260	0.899
MOL TCL 460 M	454	-9	275	0.902

MOL TCL

circulating and machine-tool oils

General purpose circulating oils for the lubrication of machine-tools and other industrial equipment. Provide long term protection against corrosion and rust and due to their thermal and oxidation stability they prevent deposit formation and clogging of filters ensuring longer equipment life.

MOL TCL 10-15 oils are suitable for the lubrication of bearings and spindles in machine-tools and other industrial equipment.

MOL TCL 22-68 oils are suitable for the lubrication of bearings and mechanical drives operating under low and medium loads in machine-tools and other industrial equipment as well as working fluid in hydraulic systems under low loads.

MOL TCL 100-460 oils are suitable for the lubrication of bearings and mechanical drives operating under low and medium loads in machine-tools and other industrial equipment. Suitable for low and medium duty reciprocating air compressors.

Performance levels, approvals:

ISO 11158 HL, ISO 12925-1 CKB, ISO-L-CKB, ISO-L-DAA, ISO-L-DAB, ISO-L-FC, ISO-L-HL, DIN 51524-1 (HL), DIN 51506 VBL, DIN 51506 VCL, DIN 51517-2 (CL), Morgoil Lubricant Spec. Rev. 1.1

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TCL 10	10.1	-39	160	0.857
MOL TCL 15	15.2	-42	195	0.855
MOL TCL 22	22	-27	205	0.872
MOL TCL 32	32.6	-30	215	0.870
MOL TCL 46	46.4	-24	220	0.875
MOL TCL 68	69.3	-24	240	0.890
MOL TCL 100	103.5	-24	255	0.896
MOL TCL 150	155	-21	265	0.890
MOL TCL 220	225	-21	270	0.895
MOL TCL 320	322	-18	275	0.904
MOL TCL 460	460	-15	280	0.907

MOL Spinol

spindle oils

Spindle oils for oil bath and mist lubrication of all types of sliding and rolling bearing supported shafts. Suitable also for the lubrication of textile spooling equipment, metal and wood machining tools (grinders, cutting, sanding and drilling machines).

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Spinol 2	2.3	-15	82	0.825
MOL Spinol 3	3.2	-15	100	0.845
MOL Spinol 5	4.6	-15	140	0.860
MOL Spinol 10	10.4	-15	160	0.850
MOL Spinol 15	15.1	-15	180	0.857

Performance levels, approvals:

ISO-L-FC, ISO-L-FD

CIRCULATING OILS, MACHINE-TOOL OILS

MOL Multi SW slideway-hydraulic oils

Slideway oils for horizontal and vertical slideways of precision machine tools (drilling, milling, grinding, planing machines, etc.). They prevent slideways from stick-slip and offer economical oil consumption.

MOL Multi SW 32-68: Suitable for use as hydraulic fluid and lubrication of other parts (bearings, drives) in machine-tool circulating systems as well.

MOL Multi SW 100-220: Suitable for use as gear oil in mechanical drives of machine-tool circulating systems as well.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Multi SW 32	32.8	-27	210	0.874
MOL Multi SW 46	46	-27	225	0.879
MOL Multi SW 68	68	-24	240	0.883
MOL Multi SW 100	103	-21	250	0.887
MOL Multi SW 150	152	-21	260	0.890
MOL Multi SW 220	220	-18	270	0.894

Performance levels, approvals:

ISO 11158 HM, ISO 11158 HG, ISO-L-CKE, ISO-L-G, ISO-L-HG, ISO-L-HM, DIN 51502 CGLP, DIN 51524-2 (HLP), DIN 51517-3 (CLP), Eaton (Vickers) M-2950-S, Cincinnati Lamb P-74, Cincinnati Lamb P-76, Cincinnati Lamb P-77, General Motors LS2 LW-03-1-00, General Motors LS2 LW-06-1-00, General Motors LS2 LW-22-1-00, AGMA 250.04, Cincinnati Lamb P-47 (Fives Cincinnati), Cincinnati Lamb P-50 (Fives Cincinnati)

MOL Textile 32 Plus textile machine oil

Textile machine oil for the needle mechanism of knitting machines (circular, hose and sock knitting machines of underwear and overwear manufacturing). It is easily washed out and applicable for all types of yarn (wool, cotton or synthetic fibre).

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Textile 32 Plus	32			

Performance levels, approvals:

ISO-L-Y

MOL Pneol pneumatic tool oils

Pneumatic oils for machine tools operated by compressed air and for pneumatically controlled industrial systems. Owing to their excellent lubricity, tackiness and outstanding wear protection they protect critical parts against corrosion, rust and wear even in presence of water. Applicable for percussion or rotary pneumatic machine tools (rock drills, jack hammers, sinkers, etc.) or other air operated tools applied primarily in the mining and building industries.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Pneol 32	35	-36	220	0.876
MOL Pneol 68	68	-30	230	0.889
MOL Pneol 100	100	-30	240	0.897

Performance levels, approvals:

ISO-L-PAB, ISO-L-PAC

FRAME SAW OILS

MOL Gatter EP 320 frame saw oil

Slideway lubricant with increased adhesive power. The product has strong protection against corrosion, good anti-wear/EP performance and outstanding tackiness to the surface; consequently it has an ability to form highly adhesive and solid lubricating film.

It is primarily offered as good tackiness and EP lubricant for frame-saws/gatters in wood processing industry.

Product is mainly recommended for winter usage.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Gatter EP 320	320	-24	260	0.900

MOL Gatter EP 460 frame saw oil

Slideway lubricant with increased adhesive power. The product has strong protection against corrosion, good anti-wear/EP performance and outstanding tackiness to the surface; consequently it has an ability to form highly adhesive and solid lubricating film.

It is primarily offered as good tackiness and EP lubricant for frame-saws/gatters in wood processing industry.

Product is mainly recommended for summer usage.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Gatter EP 460	460	-21	280	0.905

TURBINE OILS

MOL Turbine Longlife high-performance turbine oils

Supreme performance turbine oils based on high quality hydro-treated basestocks with a high technology additive system designed especially for the most severe stationary gas turbine applications where extreme long service intervals are provided. Suitable for the lubrication of turbocompressors and for other circulating applications as well, where the requirements for thermal and oxidation stability do not allow the use of conventional oils.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Turbine Longlife 32	33.4	-30	230	0.851
MOL Turbine Longlife 46	45	-30	245	0.854

Performance levels, approvals:

ISO 8068 Type AR, ISO-L-TGA, ISO-L-TSA, DIN 51515-1 L-TD, DIN 51515-2 L-TG, AIST (US Steel) 125, AIST (US Steel) 120, Siemens TLV 901304/01, Alstom (ABB) HTGD 90117, Solar Turbines ES 9-224 Class II, SKODA POWER, GEK 101941A, GEK 28143A, GEK 32568A/C/E, GEK 46506D

MOL Turbine K turbine oils

Premium performance circulating oils based on highly refined mineral oil for a wide variety of industrial applications, especially for stationary steam and gas turbines. Beneficial for lubrication in the circulating system and operation of control, switching and safety equipment. Suitable for turbocompressors and other applications where excellent oxidation stability, rust protection and surface properties (e.g. water release, low foaming tendency, rapid air separation) are required.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Turbine 32 K	32	-21	220	0.872
MOL Turbine 46 K	46	-21	225	0.877
MOL Turbine 68 K	68.2	-18	240	0.881

Performance levels, approvals:

ISO 8068 Type AR, ISO-L-TGA, ISO-L-TSA, DIN 51515-1 L-TD, DIN 51524-1 (HL), DIN 51517-2 (CL), Cincinnati Lamb P-38, Cincinnati Lamb P-54, Cincinnati Lamb P-55, AIST (US Steel) 125, AIST (US Steel) 120, Siemens TLV 901304/01, Alstom (ABB) HTGD 90117, Solar Turbines ES 9-224 Class II, SKODA POWER, GEK 101941A, GEK 32568F, GEK 32568A/C/E, GEK 46506D, BS 489

GAS ENGINE OILS

MOL GMO Longlife 40 gas engine oil

Premium quality low ash gas engine oil used for the most advanced, high performance turbocharged stationary gas engines. Especially recommended for natural gas-, methane-, biogas- and LPG-fuelled engines with catalytic converter. Provides long oil change interval. Meets the requirements of the following OEMs: Caterpillar, Waukesha, Deutz, Jenbacher, Wärtsilä, Perkins, Cummins.

Product	Kinematic viscosity at 100 °C mm ² /s	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Density at 15 °C g/cm ³
MOL GMO Longlife 40	13.5	118.5	-30	0.871

Performance levels, approvals:

API CF, GE Jenbacher: Series 4, 6 Fuel Class B and C, Wärtsilä 34SG, 32DF, 50DF, 25SG, 28SG, 175SG, 220SG (natural gas)

MOL GMO L-KAT gas engine oil

Low ash gas engine oil used for modern, high performance, turbocharged stationary gas engines. Recommended for natural gas-, methane-, biogas- and LPG fuelled engines with catalytic converter. Meets the requirements of the following OEMs: Caterpillar, Waukesha, Deutz, Jenbacher, Wärtsilä, Perkins, Cummins.

Product	Kinematic viscosity at 100 °C mm ² /s	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Density at 15 °C g/cm ³
MOL GMO L-KAT	14.8	152.5	-21	0.891

Performance levels, approvals:

API CF, Jenbacher TA1000-1107

MOL GMO MA 40 gas engine oil

High performance gas engine oil primarily intended for the lubrication of modern medium and high speed four-cycle engines operating on fuel that contains corrosive materials such as hydrogen sulphide or halogens (compounds containing chlorine, fluorine etc.) Its use is recommended in particular in natural gas, methane, biogas, landfill fuelled engines.

Product	Kinematic viscosity at 100 °C mm ² /s	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Density at 15 °C g/cm ³
MOL GMO MA 40	15.0	140.6	-18	0.891

Performance levels, approvals:

API CF, GE Jenbacher for TA 1000-1109 (class B fuel gas, Series 2 & 3)

COMPRESSOR OILS

MOL Compressol RS synthetic compressor oils

High performance synthetic compressor oils for lubrication of oil-flooded rotary screw and vane compressors as well as reciprocating compressors operating under severe conditions. Due to their excellent wear protection and outstanding resistance to oxidation and thermal degradation extra long service interval can be achieved.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Compressol RS 32	33	-45	225	0.845
MOL Compressol RS 46	45.5	-39	225	0.846
MOL Compressol RS 68	63	-33	225	0.852

Performance levels, approvals:

ISO-L-DAB, ISO-L-DAJ, DIN 51506 VDL, GM LJ-04-3-00, GM LJ-06-3-00, SAE MS1003-2 Type DPJ

MOL Compressol R 46 AL ashless rotary compressor oil

Premium performance mineral oil base compressor oil with a combination of special ashless additives for lubrication of rotary screw and vane compressors with oil injection system as well as for reciprocating compressors. Due to its excellent wear protection and outstanding resistance to oxidation and thermal degradation long service interval can be achieved.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Compressol R 46 AL	47.2	-21	220	0.870

Performance levels, approvals:

ISO-L-DAH, DIN 51524-2 (HLP), DIN 51506 VDL, SEB 181222 (HLP)

MOL Compressol R rotary compressor oils

Highly refined mineral oil based compressor oils for lubrication of rotary screw and vane compressors with oil injection cooling. Due to their excellent wear protection, highly effective detergency and outstanding resistance to oxidation and thermal degradation long service interval can be achieved.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Compressol R 46	47.8	-27	230	0.878
MOL Compressol R 68	70.2	-27	245	0.887

Performance levels, approvals:

ISO-L-DAH, DIN 51506 VCL

MOL Compressol compressor oils

Premium performance mineral oil based compressor oils with superior thermal and oxidation stability and low coke forming tendency. Suitable especially for lubrication of heavy-duty reciprocating compressors delivering and compressing air or other inert gases (e.g. nitrogen). Recommended also for the lubrication of bearings operating at high temperatures.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Compressol 68	69.3	-24	255	0.882
MOL Compressol 100	104	-24	260	0.885
MOL Compressol 150	156	-24	280	0.889
MOL Compressol 220	224	-21	290	0.893

Performance levels, approvals:

ISO-L-DAB, DIN 51506 VDL, DIN 51517-2 (CL)

COMPRESSOR OILS

MOL Compressol V vacuum compressor oil

Special compressor oil formulated from highly refined mineral oils without additives. Provides natural resistance to ageing. Suitable for rotary and sliding vane vacuum pumps.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Compressol V	102	-15	240	0.885

Performance levels, approvals:

ISO-L-DVC, DIN 51506 VCL

MOL Frigoil refrigeration compressor oils

Naphthenic based mineral oils generally applicable for refrigeration compressor systems (both reciprocating and rotary compressors) operating with ammonia refrigerant. In addition, they can be used for applications with low ambient temperatures.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Frigoil 46	44.2	-39	220	0.885
MOL Frigoil 68	65.6	-37	220	0.890

Performance levels, approvals:

ISO-L-DRA, DIN 51503-1 KA

INDUSTRIAL GEAR OILS

MOL Ultrans Synt WS
synthetic industrial gear oils

Water-soluble, PAG (polyalkylene-glycol) based synthetic industrial gear oils. The high thermal stability allows their use at temperatures exceeding 200 °C. Particularly well suited for the lubrication of calenders, gear drives and worm drives with extended service life. They offer excellent protection against wear and micropitting. Not compatible with mineral oils and hydrocarbon based synthetic oils!

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Ultrans Synt 220 WS	227	-42	284	1.057
MOL Ultrans Synt 320 WS	339	-39	282	1.062
MOL Ultrans Synt 460 WS	477	-36	284	1.067

Performance levels, approvals:

DIN 51502 PG-CLP, DIN 51517-3: CLP-PG, David Brown Type G

MOL Ultrans Synt HC
synthetic industrial gear oils

Premium quality PAO (polyalphaolefin) based synthetic industrial gear oils for almost all types of enclosed industrial gearboxes, especially those running continuously at temperature up to 120 °C or exposed to very cold temperatures as low as -30 °C, or under severe conditions such as heavy loads or low speeds. Superior quality EP gear oils for the lubrications of any type of industrial drives, even those containing non-ferrous metals. Particularly well suited for equipment under operating conditions such as high load, high relative sliding velocity (slip rates) and high operating temperature. They offers outstanding wear protection and extended lifetime, minimize corrosion and prevent micropitting.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Ultrans Synt HC 150	150	-42	230	0.865
MOL Ultrans Synt HC 220	218	-39	240	0.870

Performance levels, approvals:

ISO 12925-1 CKD, DIN 51517-3 (CLP) PAO, AGMA 9005-D94

MOL Ultrans EP
premium industrial gear oils

Superior quality EP gear oils for the lubrication of any type of industrial drives, even those containing non-ferrous metals. Particularly well suited for equipment under operating conditions such as high load, high relative sliding velocity (slip rates) and high operating temperature. Applicable in circulating, spray and mist oil systems. They offer outstanding wear protection and extended lifetime, minimize corrosion and prevent micropitting.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Ultrans EP 68	69.5	-24	240	0.884
MOL Ultrans EP 100	99.0	-24	255	0.887
MOL Ultrans EP 150	152	-18	265	0.890
MOL Ultrans EP 220	222	-15	280	0.894
MOL Ultrans EP 320	324	-15	285	0.899
MOL Ultrans EP 460	466	-12	290	0.903
MOL Ultrans EP 680	650	-12	290	0.902
MOL Ultrans EP 1000	1000	-12	290	0.910

Performance levels, approvals:

ISO 12925-1 CKD, ISO-L-CKD, DIN 51517-3 (CLP), Cincinnati Lamb P-35, Cincinnati Lamb P-59, Cincinnati Lamb P-63, Cincinnati Lamb P-76, Cincinnati Lamb P-77, AGMA 9005-E02 EP, AGMA 251.02 EP, AGMA 250.04 EP, AIST (US Steel) 224, David Brown S1.53.101 Type E, Flender (Siemens), Cincinnati Lamb P-74 (Fives Cincinnati)

INDUSTRIAL GEAR OILS

MOL Transol
industrial gear oils

General purpose lubricants for mechanical gears of industrial equipment. They provide outstanding wear protection for industrial gears with medium to high load, prevent corrosion and pitting formation.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Transol 68	67	-21	230	0.890
MOL Transol 100	101.2	-21	230	0.889
MOL Transol 150	149.8	-18	230	0.893
MOL Transol 220	221.8	-15	235	0.897
MOL Transol 320	322	-12	240	0.901
MOL Transol 460	460	-12	250	0.903

Performance levels, approvals:

ISO 12925-1 CKC, ISO-L-CKC, DIN 51517-3 (CLP)

HEAT TRANSFER OILS

MOL Thermol heat transfer oils

Highly refined heat-transfer oils with high viscosity index and narrow boiling range. They provide excellent heat transfer due to their good thermal properties. They provide outstanding thermal stability and therefore an extended oil service life. The oils prevent rust and corrosion and do not require special seals. They are non-toxic and can be disposed of as used oil after application.

Applicable as heat transfer fluids for enclosed, indirectly heated, circulated heat transfer systems.

The maximum film temperature on the heater surface is:
MOL Thermol 32 and 46: 330 °C
MOL Thermol 68: 350 °C

Performance levels, approvals:
ISO-L-QB, ISO-L-QC, DIN 51522 Q

MOL Thermoclean 12 CC heat transfer system cleaning concentrate

Cleaning and flushing concentrate for heat transfer systems. Due to its strong detergent and dispersant effect the product removes the deposits and contaminants from the inner walls of the heat-transfer system, disperses them and prevents their further settling.

Suitable for removing deposits, loose coke layers and gummy sediments formed and precipitated in hot oil systems.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Thermol 32	33.2	-12	230	0.872
MOL Thermol 46	43.6	-15	232	0.876
MOL Thermol 68	70.2	-12	260	0.881

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Thermoclean 12 CC			225	0.910

MOULD RELEASE OILS

MOL Formoil HP mould release oil

Mould release oil containing special release improver. Especially suitable for lubrication of steel and aluminium forms used in the production of concrete tiles but usable for concrete elements as well. Ensures easy separation of moulds and product, clean and non-staining surfaces. Provides corrosion protection and very good self-cleaning of forms. Removal of forms is easy and quick even after some days. It has very good spreading ability, providing economical use.

Performance levels, approvals:
ISO-L-B

MOL Formoil FL 28 mould release oil

Mould release oil containing special release improver. Suitable for lubrication of steel and aluminium forms used in the production of concrete tiles. Ensures easy separation of moulds and product, clean and non-staining surface. It has very good spreading ability, providing economical use. Application by spraying is the most economic.

Performance levels, approvals:
ISO-L-B

MOL Formoil FL 21 mould release oil

Mould release oil containing special release improver. Suitable for lubricating forms and moulds used in the production of concrete elements and fireproof products. Ensures easy separation of moulds and product even in case of rectangular forms. It has very good spreading ability, providing economical use. Application by spraying is the most economic.

Performance levels, approvals:
ISO-L-B

MOL Formoil FL H2 mould release oil

Mould release agent. Suitable for lubricating steel forms used in the production of concrete products. Prevents sticking of concrete elements to moulds, facilitating easy removal and form cleaning.

Performance levels, approvals:
ISO-L-B

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil HP	8.2	-27	130	0.880

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil FL 28	7	-48	120	0.870

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil FL 21	6.8	-42	120	0.860

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil FL H2	20.9	-12	195	0.860

MOULD RELEASE OILS

MOL Formoil EV 1 mould release oil

Mould release oil for producing concrete elements with excellent surface without any other aftertreatment. After application most of the solvent evaporates and the remaining oily layer has excellent separating characteristics, prevents sticking, provides easy separation.

The product becomes especially smooth without bug-holes, oil-stains and any other irregularities. Due to its good corrosion properties it protects the forms from rust.

During application the mould temperature must not exceed 50 °C.

Performance levels, approvals:
ISO-L-B

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil EV 1	2.2	< -50	42 (PM)	0.785

MOL Formoil Bio biodegradable mould release oil

Suitable for the production of clay, ceramic and concrete elements for mould separation. Provides easy dismantling and smooth surface. It has very good spreading ability, providing economical use. Offers satisfactory separation even in the case of minimum film thickness. Use in confined spaces is recommended only with proper ventilation. Mould temperature must not exceed 50 °C.

Performance levels, approvals:
ISO-L-B

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Formoil Bio	3.5	-48	70 (PM)	0.820

INSULATING OILS

MOL TO X-TRA high oxidation stability transformer oil

Inhibited insulating oil with excellent electrical properties. It offers high breakdown voltage, low dielectric loss and excellent resistance to oxidation to achieve long-term, reliable electrical service. Suitable for insulation and cooling purposes in high power transformers, circuit breakers, oil-filled switches. Compatible with the materials generally applied in transformers. It meets both the established and the new industry copper corrosion tests. It does not contain PCB, PCT or furanoic compounds.

Performance levels, approvals:
ISO-L-N, IEC 60296 Ed.4.0 (2012)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TO X-TRA	9.2	-65	141 (PM)	0.878

MOL TO 40A Extra inhibited insulating oil

Inhibited insulating oil with excellent electrical properties. Due to its special process the product has excellent electrical and surface properties. The product offers high breakdown voltage, low dielectric loss and excellent resistance to oxidation to provide long-term electrical service. It offers high interfacial tension for improved water resistance.

Suitable for insulation and cooling purposes in high power transformers, circuit breakers, oil-filled switches. It meets both the established and the new industry copper corrosion tests. It does not contain PCB, PCT or furanoic compounds.

Performance levels, approvals:
ISO-L-N, IEC 60296 (2003), IEC 296 Class IA, BS 148 Class IA

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TO 40A Extra	9.3	-45	140 (PM)	0.870

MOL TO 40A inhibited insulating oil

Inhibited insulating oil with excellent electrical properties. It offers high breakdown voltage, low dielectric loss and excellent resistance to oxidation to achieve long-term, reliable electrical service. Suitable for insulation and cooling purposes in high power transformers, circuit breakers, oil-filled switches. Compatible with the materials generally applied in transformers. It meets both the established and the new industry copper corrosion tests. It does not contain PCB, PCT or furanoic compounds.

Performance levels, approvals:
ISO-L-N, IEC 60296 (2003), IEC 296 Class IA, BS 148 Class IA

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TO 40A	9.3	-45	140 (PM)	0.867

INSULATING OILS

MOL TO 35K non-inhibited insulating oil

Non-inhibited transformer oil with excellent electrical insulation and heat dissipation properties. It provides normal oxidation stability, low cold viscosity and pour point. The product offers high breakdown voltage, low dielectric loss and excellent characteristics for electrical service. Compatible with the materials generally applied in transformers, non-corrosive. Favourably applicable in low and medium power transformers for insulating and cooling purposes.

It meets both the established and the new industry copper corrosion tests. It does not contain PCB, PCT or furanoic compounds.

Performance levels, approvals:

ISO-L-N, IEC 60296 (2003), IEC 296 Class I, BS 148 Class I, ÖVE-W50-1/(1)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL TO 35K	9.3	-45	140 (PM)	0.867

PROCESS OILS, WHITE OILS

MOL Process DK process oils

Paraffinic processing oil, containing no additives.

Particularly suitable for rubber production as a plastifier.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Process DK 80	540	-12	295	0.908
MOL Process DK 100	21.8	-12	200	0.860
MOL Process DK 150	30.5	-12	215	0.874
MOL Process DK 350	71.9	-12	250	0.885
MOL Process DK 500	100	-12	260	0.884
MOL Process DK 650	205	-9	280	0.893
MOL Process DK 2000	480	-9	310	0.900

MOL Process O 15 process and spindle oil

Low viscosity spindle oil produced without additives from highly refined mineral oil.

Can be used as lubricant for equipment exposed to low loads, and as base materials in various applications in the chemical industry.

Performance levels, approvals:

ISO-L-AN, ISO-L-FC

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Process O 15	15.9	-15	185	0.855

MOL Process M 15 process and spindle oil

Low viscosity spindle oil produced without additives from highly refined mineral oil.

Can be used as lubricant for equipment exposed to low loads, and as base materials in various applications in the chemical industry.

Performance levels, approvals:

ISO-L-AN, ISO-L-FC

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Process M 15	15.9	-15	190	0.857

PROCESS OILS, WHITE OILS

MOL WO M 15**medicinal and cosmetic white oil**

High purity, mineral-oil based product, produced by a multiple stage refining of white oil. It does not contain aromatic compounds.

It complies with the provisions about Paraffinum liquidum in the European- and the Hungarian Pharmacopoeia, and it exceeds the requirements for cleanliness by the American Food and Drug Administration (FDA) 172.878 and 178.3620(a) standards.

The product can be used in the cosmetics industry for creams and oils as well as for other special cosmetic preparations.

Performance levels, approvals:

European Pharmacopoeia 6. (Ph.Eur.6.), Ph. Hg. VIII (Pharmacopoeia Hungarica), FDA 172.878, FDA 178.3620(a), OÉTI: 2839-2/1996, HALAL (except products in bulk)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO M 15	16.2	-12	190	0.848

MOL WO M 22**medicinal white oil**

High purity, mineral-oil based product, produced by a multiple stage refining of white oil. It does not contain aromatic compounds.

It complies with the provisions about Paraffinum liquidum in the European- and the Hungarian Pharmacopoeia, and it exceeds the requirements for cleanliness by the American Food and Drug Administration (FDA) 172.878 and 178.3620(a) standards.

The product can be used in the cosmetics industry for creams and oils as well as for other special cosmetic preparations.

Performance levels, approvals:

European Pharmacopoeia 6. (Ph.Eur.6.), Ph. Hg. VIII (Pharmacopoeia Hungarica), FDA 172.878, FDA 178.3620(a), HALAL (except products in bulk)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO M 22	22	-12	200	0.850

MOL WO M 32**medicinal white oil**

High purity, mineral-oil based product, produced by a multiple stage refining of white oil. It does not contain aromatic compounds.

It complies with the provisions about Paraffinum liquidum in the European- and the Hungarian Pharmacopoeia, exceeds the requirements for cleanliness by the American Food and Drug Administration (FDA) 172.878 and 178.3620(a) standards and the regulation No. 10/2011/EC from the European Commission regarding materials being in contact with food.

The product can be used in the cosmetics industry for creams and oils as well as for producing and packaging foodstuff.

Performance levels, approvals:

European Pharmacopoeia 6. (Ph.Eur.6.), Ph. Hg. VIII (Pharmacopoeia Hungarica), FDA 172.878, FDA 178.3620(a), HALAL (except products in bulk)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO M 32	32	-9	195	0,858

PROCESS OILS, WHITE OILS

MOL WO M 46**medicinal white oil**

High purity, mineral-oil based product, produced by a multiple stage refining of white oil. It does not contain aromatic compounds.

It complies with the provisions about Paraffinum liquidum in the European- and the Hungarian Pharmacopoeia, exceeds the requirements for cleanliness by the American Food and Drug Administration (FDA) 172.878 and 178.3620(a) standards and the regulation No. 10/2011/EC from the European Commission regarding materials being in contact with food.

The product can be used in the cosmetics industry for creams and oils as well as for producing and packaging foodstuff.

Performance levels, approvals:

European Pharmacopoeia 6. (Ph.Eur.6.), Ph. Hg. VIII (Pharmacopoeia Hungarica), FDA 172.878, FDA 178.3620(a), OÉTI: 2839-1/1996, HALAL (except products in bulk)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO M 46	47.8	-12	220	0.865

MOL WO M 68**medicinal white oil**

High purity, mineral-oil based product, produced by a multiple stage refining of white oil. It does not contain aromatic compounds.

It complies with the provisions about Paraffinum liquidum in the European- and the Hungarian Pharmacopoeia, exceeds the requirements for cleanliness by the American Food and Drug Administration (FDA) 172.878 and 178.3620(a) standards and the regulation No. 10/2011/EC from the European Commission regarding materials being in contact with food.

The product can be used in the cosmetics industry for creams and oils as well as for producing and packaging foodstuff.

Performance levels, approvals:

European Pharmacopoeia 6. (Ph.Eur.6.), Ph. Hg. VIII (Pharmacopoeia Hungarica), FDA 172.878, FDA 178.3620(a), HALAL (except products in bulk)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO M 68	69.1	-12	250	0.868

MOL WO T**technical white oils**

High purity mineral-oil based product produced by a multiple stage refining of technical white oil. It is a clear, odourless white oil with a very low aromatic content.

Its degree of purity meets the internationally recognised provisions for white oils of technical quality by the American Food and Drug Administration (FDA) 178.3620 (b) standard.

The oil can be used as a component or auxiliary material in the textile, chemical, plastics or other special industries.

Performance levels, approvals:

FDA 178.3620(b)

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL WO T 15	15.7	-9	190	0.850
MOL WO T 22	22	-12	200	0.856

FOOD-GRADE OILS

MOL Food Hyd food-grade hydraulic oils

Poly-alpha-olefin (PAO) based synthetic food grade hydraulic fluids registered by NSF as H1 lubricants suitable for application with incidental food contact in and around food processing and packaging areas. High performance, anti-wear multipurpose lubricants recommended for use in hydraulic systems, in bearing lubrication, in circulating oil systems and in light duty gearboxes.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Food Hyd 32	31.3	-51	245	0.828
MOL Food Hyd 46	45	-48	270	0.833
MOL Food Hyd 68	67	-48	270	0.836

Performance levels, approvals:

ISO-L-HM, ISO-L-HV, DIN 51517-2 (CL), NSF H1, MOL Food Hyd 32: NSF H1[142128], MOL Food Hyd 46: NSF H1[142129], MOL Food Hyd 68: NSF H1[142130]

MOL Food Gear food-grade gear lubricants

NSF H1 registered food grade synthetic gear oils for incidental food contact. Recommended for all types of gears (spur, straight cogs, spiral bevel gears etc.) operating under normal and severe conditions.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Food Gear 100	98	-45	270	0.841
MOL Food Gear 220	228	-40	270	0.850

Offer superior control in case of mist lubrication and furthermore can be used for gears or chain (sliding chains) lubrication.

Thanks to their synthetic base stocks it can be applicable for extended drains under heavy conditions as well.

Performance levels, approvals:

MOL Food Gear 100: NSF H1[142131], MOL Food Gear 220: NSF H1[142132]

MOL Food Comp food-grade compressor oils

Food grade synthetic (PAO) compressor oils with high anti-wear, anti-oxidation, anti-foam, anti-rust, anti-corrosion and demulsifying properties specific for screw compressors (ISO VG 46) or piston, vane compressors (ISO VG 100) and vacuum pumps employed for food processing and handling. Further applications among others are in inert-gas, carbon dioxide compressors and bearings working at high temperatures. These products are absolutely miscible with mineral lubricants.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Food Comp 46	45	-48	270	0.833
MOL Food Comp 100	98	-45	270	0.841

The compressor oils are NSF registered products according to the H1 Classification:

„The product is acceptable as a lubricant with incidental food contact (H1) for use in and around food processing areas.”

Performance levels, approvals:

MOL Food Comp 46: NSF H1[142133], MOL Food Comp 100: NSF H1[142134]

FOOD-GRADE OILS

MOL Food Chain food-grade chain lubricant spray

Synthetic food grade chain spray for chains in the food industries. It is suitable for lubrication of all types of drive and conveyor chains operating at high temperature. The product has very high adhesiveness, low volatility, excellent wear and corrosion protection and excellent resistance to high loads. It has high resistance to washing operations. The product is NSF registered for incidental food contact (H1 Classification). It can be used from -10 °C to 140 °C.

Performance levels, approvals:

NSF H1[142138]

MOL Food Chain food-grade chain lubricants

Synthetic food grade oils recommended for chains in the food industry. Suitable for lubrication of all types of drive and conveyor chains operating at high temperature. The products have very high adhesiveness, excellent wear and corrosion protection and excellent resistance to high loads providing extended lifetime for chains.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Food Chain 100	98	-45	270	0.841
MOL Food Chain 220	215	-40	270	0.850

They have low volatility to minimize losses at high temperature and excellent resistance to washing operations.

The products are NSF registered for incidental food contact (H1 Classification). They can be used at temperatures up to 350 °C.

Performance levels, approvals:

MOL Food Chain 100: NSF H1[142136], MOL Food Chain 220: NSF H1[142137]

MOL Food Penetrating food-grade lubricant

Fully synthetic food grade lubricating spray with NSF H1 classification for general applications. Recommended for lubrication of all parts wherever accidental contact with food may occur. It has excellent anti-wear and anti-corrosion properties, high penetrating power.

Used for lubrication of joints, levels, chains, threaded rods, pulleys.

Performance levels, approvals:

NSF H1[142139]

FOOD-GRADE OILS

MOL Food Silicon food-grade silicon oil

NSF H1 registered silicon oil-spray, recommended for all applications that demand anti-adhesive, slipping and descaling properties. It has excellent slipping characteristic, removes electrostatic actions.

It is used for lubrication of wetting punch threading screws and mechanical parts in direct contact with sticking materials. During rubber and plastic stripping, the product guarantees excellent descaling properties without stains and opaque surfaces.

Performance levels, approvals:
NSF H1[142140]

OTHER INDUSTRIAL OILS

MOL SC 260 steam cylinder oil

Heavy dewaxed residual oil for lubricating the cylinders of steam engines operated with saturated or slightly superheated steam. Suitable for other applications where heavy loads, low speed and high temperatures, demand high oil viscosity.

Performance levels, approvals:
ISO-L-Z

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL SC 260	750	-6	320	0.925

MOL Axol 100 axle oil

Neat mineral lubricating oil for the lubrication of wheel seats of railway wagons and drive gears of locomotives.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Axol 100	103	-24	260	0.890

MOL Fluid TL 150 HOLZ Extra lubricating oil

Chain and slideway lubricant with increased adhesive power. The product has strong protection against corrosion, good anti-wear performance and outstanding tackiness to the surface; consequently it has an ability to form highly adhesive and solid lubricating film.

It is primarily offered as good tackiness lubricant for chains and conveyors operated in wood processing industry.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fluid TL 150 HOLZ Extra	150	-15	250	0.895

MOL Fluid TL 46 Bio lubricating oil

Biodegradable chain and slideway lubricant, with increased adhesive power. The product has excellent lubricity, forms strong and stable lubricating film provides economical application.

It is suitable for operation for all seasons, primarily in wood processing industry.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fluid TL 46 Bio	43.7	-36	270	0.910

OTHER INDUSTRIAL OILS

MOL M-Guard 101 corrosion preventive oil

It is a solvent-free anti-corrosive-oil with low viscosity for temporary corrosion protection of steel in covered storage. The oil possesses besides a high polarity and affinity to the moistened metal surface a marked spread effect. Therefore good wetting properties are ensured without spots. It can be easily removed - even after the treated material has been stored for some time - with organic solvents or water soluble cleaning agents.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL M-Guard 101	7.2	-24	130	0.860

MOL Lubroll S 46 synthetic roller-table oil

Synthetic oil for lubricating the surface of roller-table rolls which ensure driving of aluminium ingot and strip in aluminium hot-rolling process. It prevents adherence of roll and slab interfaces, does not leave residue on metal surface at high temperature after evaporation. Generation of smoke and vapours is lower than with mineral base oils.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Lubroll S 46	48	-54	160	0.840

MOL Red LEAK Marker lubricant dye

Red coloured dye stock solution consisting of a severely refined mineral base oil and oil-soluble active dye material. It can be used for dyeing of lubricating oils and detection of leakage in lubricating systems.

Product	Kinematikai viszkozitás 40 °C-on mm ² /s	Folyáspont °C	Lobbanáspont (Cleveland) °C	Sűrűség 15 °C-on g/cm ³
MOL Red LEAK Marker	32	-12	210	0.870

CUTTING EMULSIONS

MOL Emolin 420 biostable metalworking fluid

Water-miscible semi-synthetic biologically stable cutting fluid. Applicable for machining of steel, light and non-ferrous metals, cast iron in form of 4-10% (V/V) emulsion with water even under heavy circumstances. Increased lubricity, suitable for heavy machining also provides a good surface quality and low tool cost. Based on experience, it is used in very high pressure through-the-tool coolant systems without foaming. Due to its excellent biological resistance long emulsion life can be achieved. Provides outstanding flushing properties and corrosion protection.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emolin 420	9.3	70	red	1.005

Performance levels, approvals:
EMAG

MOL Emolin 400 biostable metalworking fluid

Water-miscible semi-synthetic biologically stable cutting fluid. Due to its excellent biological resistance long emulsion life can be achieved. Suitable for cutting and grinding of cast irons, steels, non-ferrous and light metals, in form of 4-6 vol.% emulsion with water. Based on experience it can also be used with soft water in very high pressure operations without foaming. It has superb filterability and provides long lifetime even under heavy circumstances. It is highly recommended for use in central emulsion systems and in CNC machines.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emolin 400	9.3	66	semi-transparent	1.005

Performance levels, approvals:
EMAG

MOL Emolin 120 biostable metalworking fluid

Water-miscible semi-synthetic biologically stable cutting fluid. Applicable for machining and cold-forming of steel, light and non-ferrous metals, cast iron in form of 4-10% (V/V) emulsion with water even under heavy circumstances. Based on experience, it is used in very high pressure through-the-tool coolant systems without foaming. Provides outstanding flushing properties and long lifetime.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emolin 120	9.1	65	semi-transparent	0.985

Performance levels, approvals:
EMAG

CUTTING EMULSIONS

MOL Makromil 300
universal metalworking fluid

Mineral oil based water-miscible metalworking fluid with excellent miscibility. Suitable for machining (including grinding) of steel, non-ferrous and light metals and cast iron without staining in form of 4-12% (V/V) aqueous emulsion. Resistant to bacterial degradation. Provides low foaming. It is not labeled.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Makromil 300	9.4	26	milky	0.880

Performance levels, approvals:
EMAG

MOL Makromil 200
metalworking fluid

Mineral oil based water-miscible metalworking fluid with excellent miscibility. Suitable for machining of cast iron, steel, non-ferrous and light metals without staining in form of 5-12% (V/V) aqueous emulsion. Resistant to bacterial degradation. Provides low foaming.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Makromil 200	9.3	36	milky	0.900

Performance levels, approvals:
EMAG

MOL Makromil 100 Special
environmentally compatible pressing fluid for brass strips

Mineral oil based water-miscible cutting fluid. Suitable for both cold-forming of fine brass sheets and machining of ferrous, non-ferrous metals without risk of staining in form of 4-6% (V/V) emulsion. It offers excellent wetting property and outstanding temporary corrosion protection for copper parts. Resistant to bacterial degradation.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Makromil 100 Special	8.8	48	milky	0.900

Performance levels, approvals:
EMAG

CUTTING EMULSIONS

MOL Synaxol 250
universal metalworking fluid

Water-miscible synthetic biologically stable cutting fluid. Due to its special composition the product can be used for grinding of steels, cast irons, non-ferrous metals and hard metals in form of 3-7 % (V/V) concentration without dissolving copper and cobalt. It has outstanding washing ability, low foaming ability and does not build adhering residues.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Synaxol 250	9.4	12.1	semi-transparent	1.122

Performance levels, approvals:
EMAG

MOL Synaxol 200
biostable grinding fluid

Water-miscible synthetic biologically stable metalworking fluid. It is applicable for grinding of steel and for machining of cast iron in form of 4-5% (V/V) aqueous emulsion. Suitable pressure testing of tubes, radiators etc., leak detection and cooling of welded workpieces.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Synaxol 200	9.4	16	water-clear	1.160

It is extra easy to prepare the emulsion even with hard water. Resists biological infections. Long life time can be achieved with proper handling (1-2 years). It has excellent corrosion protection and wetting-rinsing properties. It provides temporary corrosion protection.

Performance levels, approvals:
EMAG

MOL Synaxol 240
biostable metalworking fluid

Water-miscible synthetic biologically stable cutting fluid. It has superb washing and anticorrosion properties. Applicable pressure testing of tubes, radiators etc., leak detection and cooling of welded workpieces. The main application of the product is the manufacturing of tubes where it provides outstanding lubrication at the working rollers with 4-5% of concentration.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Synaxol 240	9.7	5	colourless	1.065

Due to its special composition, machined surfaces remain shiny even after heat treatment.

CUTTING EMULSIONS

MOL Synaxol 100 universal metalworking fluid

Synthetic universal metalworking fluid with excellent cooling and washing properties. Suitable for both chip forming and chipless processes of ferrous metals in form of 2-35% aqueous solution with provision of long tool life, excellent surface quality and temporary corrosion protection.

MOL Synaxol 100 is recommended for general machining in small individual machines.

The product does not contain any bactericidal, fungicidal additives therefore consult our Technical Service expert before loading it into circulation system.

Performance levels, approvals:
EMAG

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Synaxol 100	8.5	33.2	semi-transparent	1.050

FORMING EMULSIONS

MOL Emroll AHR 50/125 aluminium hot-rolling fluid

Highly refined mineral oil based water-miscible oil for hot-rolling of sheet aluminium on quarto type reversing mill in form of 3-7% emulsion. Strong lubricating film is provided even in case of high pressure (high Mg alloys). It gives well balanced performance during the hot-rolling process without risk of pick up and slips - in addition to low specific consumption. Economical use and long emulsion lifetime can be achieved by easy handling.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emroll AHR 50/125	8.8	50	milky	0.895

MOL Emroll AHR 32 HT ashless aluminium hot-rolling fluid

Highly refined mineral oil based ashless aluminium hot-rolling fluid. Due to outstanding heat and hydrolytic stability its application is especially advantageous at aluminium wire rolling by Properzi cast-rolling technology, when the emulsion temperature is permanently high (65 °C-75 °C). Emulsion has good filterability, easy maintenance and long lifetime.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emroll AHR 32 HT	8.5	25	milky	0.890

MOL Emcool ADD aluminium cold forming fluid

Highly refined mineral oil based water miscible oil. Designed for cold-forming technologies (e.g. blanking, deep-drawing) of fine sheet aluminium in form of 2.5-6% emulsion. It provides clean stamping die, homogenous faultless surface for parts and long tool life.

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Emcool ADD	8.4	40	milky	0.910

SERVICE ADDITIVES

MOL Netsol SC system cleaner

Mineral oil free concentrated aqueous solution containing surfactants and biocide components. It can be used for cleaning and disinfecting metalworking fluid supply systems. Usable about 24 hours before emulsion changes by blending with the emulsion in 0.5-2% (V/V) concentration.

It can be used for soluble substances (emulsions and synthetic fluids) only!

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Netsol SC	9.5		light yellow	1.03

MOL Netsol AF 2 antifoam additive

Silicone oil free water miscible metalworking fluid additive used in central systems or individual machines. Recommended application concentrations: 0.01-0.1% (V/V).

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
MOL Netsol AF 2		8	white, turbid	1.005

Bodoxin biocide additive

Water miscible metalworking fluid additive, which can be used in central systems or individual machines for treatment of microbiological infections.

We recommend to determine the optimum preservative concentration and compatibility with individual formulations by means of laboratory tests.

Recommended application concentration for the post-treatment of metal-working fluid systems: 0.05-0.15% (V/V).

Product	Emulsion pH value	Kinematic viscosity at 40 °C mm ² /s	Appearance (emulsion)	Density at 15 °C g/cm ³
Bodoxin	4		water-clear	1.270

CUTTING OILS

MOL Acticut ME 8 cutting oil

Highly refined mineral oil based active type cutting oil. It is specially designed for grinding and finishing of bearing steels furthermore it can be used generally for finishing and medium duty cutting operations of ferrous metals. Due to its rheological characteristics it shows good rinsing and cooling properties. Excellent machined surface quality is provided by its use, with low odour and oil mist. It is not recommended for machining copper.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 8	8.8	-12	150	0.854

MOL Acticut ME 10 environmentally compatible cutting oil

Highly refined mineral oil based active type cutting oil. Suitable for machining of steel alloys. It provides a lubricating film with high load-carrying capacity in a wide range of temperatures and pressures. Due to its rheological characteristics it shows good rinsing and cooling properties. Provides long tool life and excellent surface quality.

Not recommended for cutting of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 10	10.2	-24	140	0.870

MOL Acticut ME 15 environmentally compatible deep-hole drilling oil

High performance special cutting oil. Specially designed for deep-hole drilling and all cutting processes of steel alloys where high cutting forces arise (broaching, tooth cutting, thread cutting, etc). Due to its rheological characteristics it shows good rinsing and cooling properties. Provides long tool life and excellent surface quality.

Not recommended for cutting of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 15	15	-18	140	0.910

CUTTING OILS

MOL Acticut ME 20
cutting oil

High performance chlorine free cutting oil. Designed for extreme heavy-duty cutting operations (e.g. broaching, gear-shaping, -hobbing, -shaving, etc) of ferrous metals. Due to its high EP/AW additive content it provides a strong boundary film at low cutting speeds and high cutting forces therefore it decreases friction which results in long tool life and excellent surface quality.

It is not recommended for cutting of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 20	21.5	-12	184	0.875

MOL Acticut ME 25
environmentally compatible broaching oil

High performance chlorine free cutting oil. Designed for extreme heavy-duty cutting operations (e.g. broaching, gear-shaping, -hobbing, -shaving, etc) of ferrous metals. Due to its high EP/AW additive content it provides a strong boundary film at low cutting speeds and high cutting forces therefore it decreases friction which results in long tool life and excellent surface quality.

It is not recommended for cutting of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 25	26	-12	180	0.890

MOL Acticut ME 32
environmentally compatible cutting oil

Highly refined mineral oil based active type cutting oil. Designed for machining of cast iron and steel alloys. It forms a strong lubricating film even at high (700-800 °C) temperatures and in the case of difficult-to-machine materials. Long tool life and excellent machined surface are provided by its use.

Due to its active sulphur content it is not recommended for cutting of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 32	32	-9	210	0.880

CUTTING OILS

MOL Acticut ME 37
environmentally compatible cutting oil

Highly refined mineral oil based active type cutting oil. Suitable for a wide range of cutting processes of steel alloys, most beneficial in heavy-duty processes (drilling, thread cutting, gear hobbing, broaching etc). Long tool life and excellent machined surface are provided by its use, without oil mist formation.

It is not recommended for machining of colour metals.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Acticut ME 37	37	-9	210	0.875

MOL Polimet EDM 3
electric spark erosion oil

Colourless, special hydrocarbon type EDM fluid with excellent electrical properties, filterability and oxidation resistance for all oil based spark erosion operations where a high quality surface finish or high chip removal is required.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet EDM 3	2.3	-27	103 (PM)	0.815

MOL Polimet M 4
environmentally compatible honing oil

Highly refined mineral oil based special cutting oil. Suitable for fine machining (honing, superfinishing, grinding) of ferrous and non-ferrous metals. Due to its rheological characteristics it shows good rinsing and cooling properties. Long tool life and excellent finished surface quality are provided by its use.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet M 4	5.2	-45	140	0.860

MOL Polimet ME 4
environmentally compatible superfinishing oil

Highly refined mineral oil based special cutting oil. Designed for fine machining (super finishing, grinding) of ferrous and non-ferrous metals. Use is advantageous for other medium heavy machining operations as well. Due to its rheological characteristics it shows good rinsing and cooling properties. Long tool life and excellent finished surface quality are provided.

Performance levels, approvals:
EMAG

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 4	5.4	-42	136	0.870

MOL Polimet ME 8
cutting oil

Highly refined mineral oil based inactive type cutting oil. It is specially designed for grinding cemented carbide tools and steel with high cutting speed. Due to its rheological characteristics it has good rinsing and cooling properties, furthermore it shows good filterability. Excellent surface quality is provided by its use, with low odour and oil mist.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 8	9.3	-30	144	0.870

CUTTING OILS

MOL Polimet ME 12
cutting oil

Highly refined mineral oil based inactive type cutting oil. Designed for general machining especially on automatic lathe machines. Suitable equally for machining colour and light metals as well as steel alloys. Due to its rheological characteristics it shows good rinsing and cooling and low oil carry over properties. Long tool life and excellent machined surface quality are provided by its use, with low odour and oil mist. It offers temporary corrosion protection.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 12	11.9	-18	-175	0.850

MOL Polimet ME 17
environmentally compatible cutting oil

Highly refined mineral oil based inactive type cutting oil. Designed for general machining especially on automatic lathe machines. Suitable equally for machining colour and light metals as well as steel alloys. Due to its rheological characteristics it shows good rinsing and cooling properties. Long tool life and excellent machined surface quality are provided by its use, with low odour and oil mist. It offers temporary corrosion protection.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 17	15.6	-12	185	0.860

Performance levels, approvals:
EMAG

MOL Polimet ME 18
cutting oil

Highly refined mineral oil based inactive type cutting oil. It is specially designed for grinding of hardened steel gears additionally usable for general machining. Due to its rheological characteristics it shows good rinsing and cooling properties. Excellent machined surface quality are provided by its use (without risk of micro crack and burning), with low odour and oil mist. Suitable also for machining colour and light metals.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 18	18	-12	190	0.855

Performance levels, approvals:
EMAG

MOL Polimet ME 20
cutting oil

Highly refined mineral oil based inactive type cutting oil. Suitable for a wide range of cutting operations, especially in automatic lathe machines. It can be used for machining yellow, light metals, automatic and easy machinable steels as well, even difficult-to-machine steels. Long tool life and outstanding machined surface are provided by its use.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 20	19.5	-12	200	0.868

CUTTING OILS

MOL Polimet ME 25
environmentally compatible cutting oil

Highly refined mineral oil based inactive type cutting oil. Suitable for a wide range of cutting operations, especially in automatic lathe machines. It can be used for machining yellow, light metals, automatic and easy machinable steels as well, even difficult-to-machine steels. Long tool life and outstanding machined surface are provided by its use.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ME 25	24.5	-15	195	0.875

Performance levels, approvals:
EMAG

MOL Polimet HM 32
environmentally compatible cutting oil

Highly refined mineral oil based multi-purpose cutting oil. Designed for a wide range of cutting operations as turning, milling, thread cutting, drilling, gear shaping. Long tool life and outstanding machined surface are provided by its use, without oil mist formation. Advantageous in automatic and multi-spindle lathe machines, where the oil complies with both the requirements of cutting oil and hydraulic oil at performance level ISO-L-HM and DIN 51524-2 HLP. Suitable for machining of automatic and other easy machinable steels as well as yellow and light metals.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet HM 32	32.5	-27	210	0.876

Performance levels, approvals:
ISO-L-HM, DIN 51524-2 (HLP)

MOL Polimet HM 46
environmentally compatible cutting oil

Highly refined mineral oil based multi-purpose cutting oil. Designed for a wide range of cutting operations as turning, milling, thread cutting, drilling, gear shaping. Long tool life and outstanding machined surface are provided by its use, without oil mist formation. Advantageous in automatic and multi-spindle lathe machines, where the oil complies with both the requirements of cutting oil and hydraulic oil at performance level ISO-L-HM and DIN 51524-2 HLP. Suitable for machining of automatic and other easy machinable steels as well as yellow and light metals.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet HM 46	44.5	-30	225	0.882

Performance levels, approvals:
ISO-L-HM, DIN 51524-2 (HLP)

MOL Polimet ES 56
synthetic cutting and deep-drawing oil

Multipurpose ester based neat oil. Designed for heavy duty cutting processes (e.g. thread cutting, tapping, gear hobbing, drilling, etc.) of steel, aluminium and copper alloys, especially advantageous for edge milling of cast aluminium plate (at high temperature, 300 °C) because no stain is left on the metal at high temperature. In addition, it is suitable for sheet metal forming of stainless steels (e.g. deep-drawing).

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Polimet ES 56	56.5	-24	230	0.935

FORMING OILS

MOL Fortilmo AWD 25
aluminium fine wire-drawing oil

Highly refined mineral oil based special wire-drawing oil. Designed for high speed wire-drawing of both alloyed and unalloyed aluminium fine wire. Homogenous, bright wire surface is provided by its use.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo AWD 25	23	-9	165	0.860

MOL Fortilmo AWD 150
aluminium wire-drawing oil

Highly refined mineral oil based high performance wire-drawing oil. Designed for wire-drawing of alloyed and unalloyed aluminium coarse wire on both drawing store and sliding type drawing machines. Homogenous, bright wire surface is provided with high drawing speed based on its good lubricity.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo AWD 150	150	-12	220	0.900

MOL Fortilmo AWD 150 Special
aluminium wire-drawing oil

Highly refined mineral oil based high performance wire-drawing oil. Designed for wire-drawing of alloyed and unalloyed aluminium coarse wire on both drawing store and sliding type drawing machines. Homogenous, bright wire surface is provided with high drawing speed based on its outstanding lubricity.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo AWD 150 S.	150	-12	225	0.900

FORMING OILS

MOL Fortilmo ADD 20
aluminium deep-drawing oil

Highly refined mineral oil based special deep-drawing oil. Suitable for light- and medium-duty sheet-metal pressing technologies (blanking, deep-drawing, etc) of unalloyed and alloyed aluminium fine plates. Due to its excellent lubricity it provides tool protection and bright piece surface without any scratches. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo ADD 20	20.7	-24	180	0.860

MOL Fortilmo SCF 32
environmentally compatible pressing oil

Highly refined mineral oil based, chlorine free stamping oil. Designed for fine blanking and bending as well as low-strain deep-drawing of steel, light and non-ferrous metals. Due to its strong lubricating film it provides good tool protection.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SCF 32	32	-36	210	0.885

It can be easily removed from surface with water based alkaline washers.

MOL Fortilmo SDD 40
heavy-duty deep-drawing oil

High performance chlorine free deep-drawing oil. Suitable for both medium and heavy duty deep-drawing operations and stamping of sheet steels. Due to its extreme strong lubricating film it provides high deformation and good tool protection. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SDD 40	41.4	-42	> 205	0.930

MOL Fortilmo SDD 68
environmentally compatible deep-drawing oil

Highly refined mineral oil based chlorine free deep-drawing oil. Suitable for sheet-metal press works (e.g. blanking, bending, punching, and medium duty deep-drawing) of steels. Due to its strong lubricating film it provides good tool protection.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SDD 68	71.2	-18	210	0.945

It can be easily removed from surface with water based alkaline washers.

FORMING OILS

MOL Fortilmo SDD 130
heavy-duty deep-drawing oil

High performance chlorine free deep-drawing oil. Suitable for both medium and heavy duty deep-drawing operations and stamping of sheet steels. Due to its extremely strong lubricating film it provides high deformation and good tool protection. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SDD 130	135	-18	> 230	0.950

MOL Fortilmo SDD 200
heavy-duty deep-drawing oil

High performance chlorine free deep-drawing oil. Suitable for both medium and heavy duty deep-drawing operations and stamping of sheet steels. Due to its extreme strong lubricating film it provides high deformation and good tool protection. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SDD 200	202	-12	> 230	0.961

MOL Fortilmo SDD 550
environmentally compatible deep-drawing oil

High performance chlorine free deep-drawing oil. Suitable for both medium and heavy duty deep-drawing operations and stamping of sheet steels, light and colour metals. Due to its extreme strong lubricating film it provides high deformation and good tool protection. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo SDD 550	490	-9	200	0.950

It is recommended to remove the lubricating film from the piece immediately after use.

MOL Fortilmo NFD 702
forming oil

High performance chlorine free deep-drawing oil. Suitable for both medium and heavy duty deep-drawing operations and stamping of sheet steels, light and colour metals. Due to its extreme strong lubricating film it provides high deformation and good tool protection. The residual film is removable easily by water based alkaline washers.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo NFD 702	610	-6	256	0.910

FORMING OILS

MOL Fortilmo EV 101
vanishing oil

Special solvent based evaporative type oil. Suitable for wide range of sheet metal press works like bending, stamping, punching, deep-drawing etc. of steel, aluminium and copper alloys on pressing machines. Due to absence of any traces on pieces after evaporation degreasing is not necessary before welding or painting.

Product	Kinematic viscosity at 20 °C mm ² /s	Pour point °C	Flash point (Pensky-Martens) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo EV 101	1.5	< -50	42	0.770

MOL Fortilmo EV 603
vanishing oil

Special solvent based evaporative type oil. Suitable for wide range of sheet metal press works like bending, stamping, punching, deep-drawing etc. of steel, aluminium and copper alloys on pressing machines. Due to absence of any traces on pieces after evaporation degreasing is not necessary before welding or painting.

Product	Kinematic viscosity at 20 °C mm ² /s	Pour point °C	Flash point (Pensky-Martens) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo EV 603	1.84	< -30	65	0.780

MOL Fortilmo EV 671
vanishing oil

Special solvent based evaporative type oil. Suitable for wide range of sheet metal press works like bending, stamping, punching, deep-drawing etc. of steel, aluminium and copper alloys on pressing machines. It leaves small amount of oily residual after evaporation.

Product	Kinematic viscosity at 20 °C mm ² /s	Pour point °C	Flash point (Pensky-Martens) °C	Density at 15 °C-on g/cm ³
MOL Fortilmo EV 671	4.9	-24	65	0.795

QUENCHING OIL

MOL Quench 32 quenching oil

MOL Quench 32 is mineral oil based quenching oil adapted to specific requirements of the metals heat treatment processes when operating temperatures of the oil are from 30 °C to 100 °C.

Product	Kinematic viscosity at 40 °C mm ² /s	Pour point °C	Flash point (Cleveland) °C	Density at 15 °C-on g/cm ³
MOL Quench 32	32	-12	220	0.863

Performance levels, approvals:
ISO 6743-14 L-UHB, ISO 6743-14 L-UHA

LITHIUM COMPLEX LUBRICATING GREASES

MOL Favorit 2 lithium complex lubricating grease

Multi-purpose lithium complex lubricating grease. Due to its composition the product has excellent tackiness, good water resistance and very good corrosion protection. The good mechanical stability provides extended lifetime even in case of vibration.

Suitable for bearings running at high temperature and high load even in equipment subjected to vibration in the industry, agriculture and transportation.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:
DIN 51502: KP2N-30, ISO 6743-9: L-XCDEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Favorit 2	NLGI 2	280	200	270

MOL Favorit 2 Blue lithium complex lubricating grease

Multi-purpose, blue coloured lithium complex lubricating grease. Due to its composition the product has excellent tackiness, good water resistance and very good corrosion protection. The good mechanical stability provides extended lifetime even in case of vibration.

Suitable for bearings running at high temperature and high load even in equipment subjected to vibration in the industry, agriculture and transportation.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:
DIN 51502: KP2N-30, ISO 6743-9: L-XCDEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Favorit 2 Blue	NLGI 2	280	200	270

LITHIUM-BASE LUBRICATING GREASES

MOL Liton 00 automotive lubricating grease

Special Li/Ca-base lubricating grease with synthetic oil for central lubricating systems. Provides extremely good cold flow properties and very good corrosion protection. The product provides low friction and good wear protection.

It is approved by Willy Vogel as a lubricating grease for central lubricating systems of vehicles in the temperature range between -40 °C and +80 °C.

Temperature range of other applications: between -40 °C and +120 °C

Performance levels, approvals:

DIN 51502: KHCP00K-40, ISO 6743-9: L-XDCEB 00, Vogel

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 00	NLGI 00	415	40	180

MOL Liton 00EPT lithium-base lubricating grease

High performance lithium based lubricating grease. Based on its composition the product reduces friction and wear at heavy loaded contacts.

The lubricating grease is suitable for closed and open gears, clutches and other power transmissions. It can be used for lubrication of sliding bearing where liquid grease is requirement.

Temperature range: between -30 °C and +120 °C

Performance levels, approvals:

ISO 6743-9: L-XCCEB 00, DIN 51502: GP00K-30

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 00EPT	NLGI 00	415	400	180

MOL Liton 0EP lithium-base lubricating grease

High performance lithium based lubricating grease. The excellent EP properties of the grease provide low friction and wear to the equipment for a long time. The product has outstanding cold flow properties and pumpability, it can be used in a wide temperature range.

Usable for the lubrication of rolling and sliding bearings, gears, clutches and other transmission machinery.

Temperature range: between -30 °C and +120 °C

Performance levels, approvals:

DIN 51502: KP0K-30, ISO 6743-9: L-XCCEB 0

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 0EP	NLGI 0	370	200	190

LITHIUM-BASE LUBRICATING GREASES

MOL Liton 1EP lithium-base lubricating grease

Multi-purpose lithium-base lubricating grease. The product has excellent mechanical stability, EP properties and good static water resistance. It provides low wear and friction and very good corrosion protection to the equipment. Owing to the good pumpability it is recommended for central lubricating systems.

Suitable for sliding and rolling bearings, gears, clutches working at high loads in the transportation and industry.

Temperature range: between -30 °C and +120 °C

Performance levels, approvals:

DIN 51502: KP1K-30, ISO 6743-9: L-XCCEB 1

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 1EP	NLGI 1	325	200	190

MOL Liton 2EP lithium-base lubricating grease

High performance multi-purpose lithium-base lubricating grease. The excellent mechanical stability of the product provides good lubrication even in case of vibration. Owing to its good wear protection and EP properties it is suitable for the lubrication of equipment exposed to heavy load mainly in individual lubricating systems. Usable for the lubrication of rolling bearings, fans, working at high load within normal temperature range. Special application is the lubrication of railroad wheel bearings.

Temperature range: between -25 °C and +120 °C

Performance levels, approvals:

DIN 51502: KP2K-25, ISO 6743-9: L-XBCEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 2EP	NLGI 2	280	200	200

MOL Liton LT 2EP lithium-base lubricating grease

Multi-purpose lithium-base lubricating grease. The product has excellent pumpability therefore it is usable in central lubricating systems as well. The product has very good EP properties and good water resistance. It provides low wear and friction and very good corrosion protection to the equipment. Suitable for bearings, working at high load and normal temperature range in individual and central lubricating systems in automotive, steel and building industries.

Temperature range: between -30 °C and +120 °C (regular regreasing +140 °C)

Performance levels, approvals:

ZETOR, DIN 51502: KP2K-30, ISO 6743-9: L-XCCEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton LT 2EP	NLGI 2	280	200	195

LITHIUM-BASE LUBRICATING GREASES

MOL Liton LT 2 lithium-base lubricating grease

Lithium-base lubricating grease for general application. The product has good oxidation stability, static water resistance and corrosion protection.

Suitable for sliding and rolling bearings within normal temperature range, which do not run at high speed and pressure.

Temperature range: between -30 °C and +110 °C

Performance levels, approvals:
DIN 51502: K2K-30, ISO 6743-9: L-XCCEA 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton LT 2	NLGI 2	265	100	190

MOL Liton LT 2/3 lithium-base lubricating grease

Lithium-base lubricating grease for general application. The product has good oxidation stability, water resistance and corrosion protection.

Suitable for lubrication of sliding and rolling bearings, which do not run at high pressure and high speed within normal temperature range.

Temperature range: between -30 °C and +120 °C

Performance levels, approvals:
DIN 51502: K2/3K-30, ISO 6743-9: L-XCCEA 2/3

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton LT 2/3	NLGI 2/3	260	100	200

MOL Liton LTA 3EP lithium-base lubricating grease

High performance multi-purpose lithium-base lubricating grease. Due to its composition the product has excellent mechanical and oxidation stability and very good corrosion protection. The good mechanical stability provides extended grease service life. The excellent EP properties and low friction prolong the lifetime of the equipment. Usable for lubrication of bearings, working at high load in the transportation and industry as well. Special application includes the wheel bearings of railroad.

Temperature range: between -30 °C and +120 °C (short time: +140 °C)

Performance levels, approvals:
DIN 51502: KP3K-30, ISO 6743-9: L-XCCEB 3

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton LTA 3EP	NLGI 3	245	100	200

LITHIUM-BASE LUBRICATING GREASES

MOL Liton 2M lithium-base lubricating grease

High performance lithium-base lubricating grease containing molybdenum disulphide. The solid additive and EP content protects against seizure even in case of high dynamic load. It provides good corrosion protection for a long time even in wet conditions.

Suitable for equipment operating at high load and low speed subjected to high risk of seizure. It is primary used for heavy loaded sliding parts, joints, and pins in automotive chassis, mobile mechanisms, agricultural and building machines, and everywhere, where high load is typical.

Temperature range: between -30 °C to +140 °C

Performance levels, approvals:
ISO 6743-9: L-XCDEB 2, DIN 51502: KPF2N-30

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 2M	NLGI 2	280	200	200

MOL Liton 2MG lithium-base lubricating grease

High performance lithium-base lubricating grease containing molybdenum disulphide and graphite. The solid and EP additives protect against seizure in case of high dynamic load. It provides good corrosion protection for a long time even in wet conditions.

Suitable for equipment operating at high load and low speed subjected to high risk of seizure. Suitable for the lubrication of bearings, pivots and joints mainly in individual lubricating systems.

Temperature range: between -25 °C and +140 °C

Performance levels, approvals:
DIN 51502: KPF2N-25, ISO 6743-9: L-XBDEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Liton 2MG	NLGI 2	280	200	200

MOL Grafit LT 2EP lithium-base lubricating grease

High performance lithium-base lubricating grease containing graphite. The solid and EP additives protect against seizure in case of high dynamic load. It provides good corrosion protection for a long time even in wet conditions.

Suitable for equipment operating at high load and low speed subjected to high risk of seizure. Suitable for the lubrication of bearings, pivots and joints mainly in individual lubricating systems.

Temperature range: between -20 °C and +130 °C

Performance levels, approvals:
DIN 51502: KPF2K-20, ISO 6743-9: L-XBCEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Grafit LT 2EP	NLGI 2	280	200	200

LITHIUM-BASE LUBRICATING GREASES

RC-Grease K2 K

lithium-base lubricating grease

Lithium-base lubricating grease for general application. The product has good oxidation stability, static water resistance and corrosion protection.

Suitable for lubricating of rolling bearings, which do not run at high pressure and high speed at normal temperature range. It is also suitable for lubrication of pivots, springs and wire ropes exposed to medium loads.

Temperature range: between -25 °C and +110 °C

Performance levels, approvals:

ISO 6743-9: L-XBCEA 2, DIN 51502: K2K-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
RC-Grease K2 K	NLGI 2	285	100	195

ALUMINIUM COMPLEX LUBRICATING GREASES

MOL Alubia 00EP

aluminium complex lubricating grease

High performance aluminium complex lubricating grease. The product has excellent pumpability and very good low temperature characteristics. Due to its excellent EP properties it provides low friction and wear protection in case of high load.

Suitable for the lubrication of sliding bearings, high performance gears, clutches and other power transmissions, in central lubricating systems as well.

Temperature range: between: -25 °C and +140 °C

Performance levels, approvals:

DIN 51502: GP00N-25, ISO 6743-9: L-XBDHB 00

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia 00EP	NLGI 00	415	460	205

MOL Alubia AK 00EP

aluminium complex lubricating grease

High performance aluminium complex lubricating grease with increased tackiness. The product provides low friction and wear even at high dynamic load.

It is used for sliding parts of vehicle chassis, low-speed, high performance gears, clutches, other power transmissions and chains.

The temperature range: between -20 °C and +140 °C

Performance levels, approvals:

DIN 51502: GP00N-20, ISO 6743-9: L-XBDHB 00

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 00EP	NLGI 00	415	400	200

MOL Alubia AK 1EP

aluminium complex lubricating grease

Water resistant lubricating grease with aluminium complex thickener. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load in individual and central lubrication systems. The good mechanical stability of the product provides the required lubrication for a long time.

Especially usable in the steel industry in central lubricating systems.

Temperature range: between -25 °C and +140 °C (in central systems: +160 °C)

Performance levels, approvals:

ISO 6743-9: L-XBDHB 1, DIN 51502: KP1N-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 1EP	NLGI 1	320	200	240

ALUMINIUM COMPLEX LUBRICATING GREASES

MOL Alubia AK 2EP aluminium complex lubricating grease

High performance, multi-purpose aluminium complex lubricating grease. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load. The good mechanical stability of the product provides good lubrication for a long time.

Usable in the industry and military heavy duty vehicles, in individual and central lubricating systems.

Temperature range: between -25 °C and +140 °C (regular regreasing: +160 °C)

Performance levels, approvals:

ISO 6743-9: L-XBDHB 2, DIN 51502: KP2N-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 2EP	NLGI 2	280	200	240

MOL Alubia AK 2 aluminium complex lubricating grease

Multi-purpose water resistant lubricating grease with aluminium complex thickener. Due to its excellent pumpability the product is especially usable in central lubricating systems.

Suitable for lubrication of sliding and rolling bearings, which do not run at high load and high speed. It can be also used for wheel hubs of light commercial vehicles.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:

ISO 6743-9: L-XCCHA 1/2, DIN 51502: K1/2N-30

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 2	NLGI 1/2	295	100	230

MOL Alubia 1 HT aluminium complex lubricating grease

High-performance aluminium complex lubricating grease. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load. It can be used in a wide temperature range. The good mechanical stability of the product provides reliable lubrication even in case of vibration for a long time.

Suitable for central lubricating systems especially in the industry.

Temperature range: between -30 °C and +160 °C

Performance levels, approvals:

DIN 51502: KP1P-30, ISO 6743-9: L-XCEHB 1

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia 1 HT	NLGI 1	325	380	240

ALUMINIUM COMPLEX LUBRICATING GREASES

MOL Alubia AK 2G aluminium complex lubricating grease

Aluminium complex lubricating grease with graphite. The solid additive content provides partial electrical conductivity and protects against seizure.

Usable for sliding and rolling bearings operating at high pressure in the industry, agriculture and transportation.

Temperature range: between -25 °C and +140 °C

Performance levels, approvals:

ISO 6743-9: L-XBDHB 2, DIN 51502: KF2N-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 2G	NLGI 2	295	100	240

MOL Alubia AK 2M aluminium complex lubricating grease

Special aluminium complex lubricating grease with molybdenum disulphide. The solid additive content protects against seizure even in case of high dynamic load.

Suitable for sliding and rolling bearings operating at high pressure in the industry, agriculture and transportation. Favourably used at forming of steel and aluminium products.

Temperature range: between -25 °C and +140 °C

Performance levels, approvals:

ISO 6743-9: L-XBDHB 2, DIN 51502: KF2N-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alubia AK 2M	NLGI 2	295	100	240

GEAR LUBRICATING GREASES

MOL Alugear LKP 000 gear lubricating grease

Special aluminium complex lubricating grease for gears containing graphite. Due to the EP and solid additive content it has excellent wear and EP properties and protects against seizure. The product has very good tackiness therefore especially usable for lubrication of gears operating at high load.

Special application of the grease includes closed gears in locomotives.

Temperature range: between -25 °C and +140 °C

Performance levels, approvals:

ISO 6743-9: L-XBDEB 000, DIN 51502: GPF000N-25

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alugear LKP 000	NLGI 000	465	240	not typical

MOL Alugear 0EPG gear lubricating grease

High performance aluminium complex lubricating grease containing special graphite. Based on the solid and EP additives it has excellent wear and EP properties, low friction, protects against seizure at high load conditions. Due to its very good pumpability it is suitable in central lubricating systems.

Especially recommended in open gears operating at high load and high temperature. In the cement industry, automatic spray systems are the preferred application.

Temperature range: between -20 °C and +140 °C (regular regreasing +180 °C)

Performance levels, approvals:

DIN 51502: OGPFF0N-20, ISO 6743-9: L-XBDEB 0

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alugear 0EPG	NLGI 0	365	500	200

MOL Alugear 1EPM gear lubricating grease

High performance aluminium complex lubricating grease containing molybdenum disulphide for gears. Based on the solid and EP additives, it has excellent wear and EP properties, low friction, protects against seizure at high load conditions. It has very good pumpability in a wide temperature range.

It is recommended for closed and open gears, couplings operating at high load and temperature.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:

DIN 51502: GPF1N-30, ISO 6743-9: L-XCDEB 1

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Alugear 1EPM	NLGI 1	325	200	220

METALLURGICAL LUBRICATING GREASES

MOL Aluroil 1EP metallurgical lubricating grease

High quality lubricating grease with aluminium complex thickener. Due to its good wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load. It has excellent dynamic water resistance.

Usable for sliding and rolling bearings of hot rolling mill in the steel industry. Especially recommended in central lubricating systems.

Temperature range: between -20 °C and +140 °C

Performance levels, approvals:

DIN 51502: KP1N-20, ISO 6743-9: L-XBDHB 1

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Aluroil 1EP	NLGI 1	320	400	230

MOL Aluroil 1/2EP metallurgical lubricating grease

High performance aluminium complex lubricating grease. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load. It can be used within a high temperature range in individual and central lubrication systems. The good mechanical stability of the product provides reliable lubrication for a long time even in case of vibration.

Especially suitable for lubrication of rolling mill bearings in the steel industry.

Temperature range: between -20 °C and +140 °C (regular regreasing: +160 °C)

Performance levels, approvals:

ISO 6743-9: L-XBDHB 1/2, DIN 51502: KP1/2N-20

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Aluroil 1/2EP	NLGI 1/2	300	400	230

MOL Aluroil 2EP metallurgical lubricating grease

High performance aluminium complex lubricating grease. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load. The product has excellent dynamic water resistance, tackiness and very good corrosion protection. The good mechanical stability provides reliable lubrication even in case of vibration at high temperature.

Especially suitable for lubrication of rolling mill bearings mainly in individual lubricating systems.

Temperature range: between -20 °C to +160 °C

Performance levels, approvals:

DIN 51502: KP2P-20, ISO 6743-9: L-XBEHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Aluroil 2EP	NLGI 2	280	400	240

METALLURGICAL LUBRICATING GREASES

MOL Aluroll 2EPG

metallurgical lubricating grease

High performance aluminium complex lubricating grease with graphite. Due to the synergy of solid and EP additives the product provides excellent wear protection for the lubrication of bearings exposed to heavy load, slow speed and vibration where the risk of seizure is high. It has excellent dynamic water resistance and very good corrosion protection.

Especially suitable for lubrication of rolling mill bearings mainly in individual lubricating systems.

Temperature range of application: between -20 °C and +160 °C

Performance levels, approvals:

DIN 51502: KPF2P-20, ISO 6743-9: L-XBEHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Aluroll 2EPG	NLGI 2	280	400	240

MOL Aluroll Resist 2EP

metallurgical lubricating grease

High performance aluminum-complex lubricating grease. The EP/ AW properties, water resistance and sealing ability of the product are exceptional.

It is usable for lubrication of rolling bearings operating under high temperatures and high loads, where resistance to water washing are important. Especially suitable for lubrication of rolling bearings in the steel industry in individual and central systems as well.

Temperature range: between -20 °C and 180 °C (in central lubrication systems)

Performance levels, approvals:

ISO 6743-9: L-XBFHB 2, DIN 51502: KP2R-20

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Aluroll Resist 2EP	NLGI 2	285	200	245

CALCIUM SULPHONATE LUBRICATING GREASES

MOL Sulphogrease 1/2 HD

calcium sulphonate lubricating grease

High performance multi-purpose lubricating grease, produced from high quality mineral oil and calcium-sulphonate thickener. The natural EP, AW, water and corrosive resistance properties of the product are exceptional.

It is usable for lubrication of rolling bearings operating under high temperatures and high loads, where resistance to water washing and corrosion are important. The product is the primary grease of steel industry, but is highly suitable in mining, paper or cement industry as well.

Temperature range of application: -25 °C and +160 °C

Performance levels, approvals:

DIN 51502: KP1/2P-25, ISO 6743-9: L-XBEHB 1/2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Sulphogrease 1/2 HD	NLGI 1/2	295	430	above 300

MOL Sulphogrease 2 HD

calcium sulphonate lubricating grease

High performance multi-purpose lubricating grease, produced from high quality mineral oil and calcium-sulphonate thickener. The natural EP, AW, water and corrosive resistance properties of the product are exceptional.

It is usable for lubrication of rolling bearings operating under high temperatures and high loads, where resistance to water washing and corrosion are important. The product is the primary grease of steel industry, but is highly suitable in mining, paper or cement industry as well.

Temperature range of application: -25 °C and +160 °C

Performance levels, approvals:

DIN 51502: KP2P-25, ISO 6743-9: L-XBEHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Sulphogrease 2 HD	NLGI 2	280	430	above 300

MOL Sulphogrease 2 WRT

calcium sulphonate lubricating grease

High performance multi-purpose lubricating grease produced from high quality mineral oil and calcium-sulphonate thickener. The natural EP, AW, water and corrosive resistance properties of the product are exceptional. It offers resistance to seawater and provides excellent corrosion protection.

It is usable for equipment working at extreme conditions in industrial, automotive and marine application for heavily loaded bearing at high temperatures in wet and dusty environment.

Temperature range of application: -25 °C and +160 °C

Performance levels, approvals:

DIN 51502: KP2P-25, ISO 6743-9: L-XBEIB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Sulphogrease 2 WRT	NLGI 2	280	430	above 300

CALCIUM SULPHONATE LUBRICATING GREASES

MOL Sulphogrease 2GT HDX calcium sulphonate lubricating grease

High performance multi-purpose lubricating grease, produced from high quality mineral oil, calcium-sulphonate thickener and special graphite. Due to its enhanced tackiness and mechanical stability the grease has excellent adhesion to metal surfaces.

It is the primary grease for applications, where heavy load is combined with wet environment, e.g. steel, mining, paper or cement industry and there is high risk of seizure.

Temperature range of application: -25 °C and +180 °C (short time: 260 °C).

Performance levels, approvals:

DIN 51502: KPF2P-25, ISO 6743-9: L-XBEHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Sulphogrease 2GT HDX	NLGI 2	280	430	above 300

CALCIUM COMPLEX LUBRICATING GREASES

MOL Neoma NH 2 calcium complex lubricating grease

High performance calcium complex lubricating grease. Due to its excellent wear protection and EP properties it is suitable for the lubrication of bearings exposed to heavy load in a wide temperature range. The good mechanical stability of the product provides the required lubrication even in case of vibration for a long time.

The product is usable in the industry and military in heavy duty vehicles, in individual and central lubricating systems. Special application includes rolling mill bearings in the steel industry.

Temperature range: between -30 °C and +140 °C (regular regreasing: +180 °C)

Performance levels, approvals:

DIN 51502: KP2N-30, ISO 6743-9: L-XCDHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Neoma NH 2	NLGI 2	280	100	300

MOL Neoma GT 2EP calcium complex lubricating grease

Special high performance calcium complex lubricating grease containing PTFE and graphite. The solid additives protect against seizure. The synergy between solid and EP additives provides low wear and friction even at very high load.

Suitable for screws, drill heads operating at very high loads and low speed subjected to high risk of seizure.

Temperature range: between -20 °C and +180 °C

Performance levels, approvals:

DIN 51502: MPF1/2R-20, ISO 6743-9: L-XBFHB 1/2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Neoma GT 2EP	NLGI 1/2	295	100	300

MOL Neoma K 3 S calcium complex lubricating grease

High performance calcium complex lubricating grease. Due to its excellent wear protection and natural EP properties it is suitable for the lubrication of equipment exposed to heavy load in a wide temperature range. The good mechanical and oxidation stability of the product provides the required lubrication even in case of vibration for a long time.

The product is usable for sliding parts of machines and elevators in the industry and agriculture. The product is recommended mainly in individual lubricating systems.

Temperature range: between -30 °C and +120 °C (regular regreasing: +140 °C)

Performance levels, approvals:

DIN 51502: K2/3K-30, ISO 6743-9: L-XCCHB 2/3

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Neoma K 3 S	NLGI 2/3	265	100	300

CALCIUM-BASE LUBRICATING GREASES

MOL Calton C 1 calcium-base lubricating grease

Hydrated calcium-base lubricating grease for general application. Based on its composition it has very good water resistance. Due to its good pumpability it is mainly used in central lubricating systems.

Suitable for the lubrication of pivots, joints and springs. It is used in car factories as a maintenance grease owing to its compatibility with car paints.

Temperature range: between: -30 °C and +60 °C

Performance levels, approvals:

DIN 51502: K1C-30, ISO 6743-9: L-XCAHA 1

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Calton C 1	NLGI 1	330	100	85

MOL Calton C 2EP calcium-base lubricating grease

Hydrated calcium-base lubricating grease for general application. Based on the composition it has excellent dynamic water resistance and good lubricating characteristics.

Due to its good EP properties it is suitable for the lubrication of pivots, joints, bearings exposed to high load. It is mainly used in agriculture and industry.

Temperature range: between -20 °C and +60 °C

Performance levels, approvals:

DIN 51502: KP2C-20, ISO 6743-9: L-XBAHB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Calton C 2EP	NLGI 2	280	100	90

MOL Calton C 3 calcium-base lubricating grease

Hydrated calcium-base lubricating grease for general application. Based on its composition the product has excellent dynamic water resistance and good lubricating characteristics.

Suitable to lubricate bicycles, motorbikes, equipment in the agriculture, where sealing effect is required and load is moderate.

Temperature range: between -20 °C and +60 °C

Performance levels, approvals:

DIN 51502: K3C-20, ISO 6743-9: L-XBAHA 3

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Calton C 3	NLGI 3	230	100	95

MOL Calton G 3 calcium-base lubricating grease

Hydrated calcium-base lubricating grease with graphite. The solid additive content provides partial electrical conductivity and protects against seizure. Based on the composition it has excellent dynamic water resistance, good lubricating characteristics and long-lasting corrosion protection.

Usable for sliding and rolling equipment operating at high pressure in the industry, agriculture, transportation and plates of current collector shoes.

Temperature range: between -30 °C and +70 °C

Performance levels, approvals:

DIN 51502: KF3C-30, ISO 6743-9: L-XCAHB 3

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Calton G 3	NLGI 3	235	100	95

HIGH-TEMPERATURE LUBRICATING GREASES

MOL Helios 2 high-temperature lubricating grease

Bentonite-base lubricating grease for high temperature applications. The product provides low friction and good corrosion protection.

Suitable for the lubrication of chains in through-type furnaces and bearings of conveyors, baking kilns. In case of high temperature regular refilling is necessary. Mixing with other greases must be avoided.

Temperature range: between -20 °C and +200 °C

Performance levels, approvals:

DIN 51502: KP2S-20, ISO 6743-9: L-XBGEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Helios 2	NLGI 2	280	280	above 300

MOL Helios 2M high-temperature lubricating grease

High temperature bentonite-base lubricating grease with molybdenum disulphide. The product provides low friction, protects against seizure in case of high load. It has good corrosion protection properties.

Suitable for equipment working at high load and low speed e.g. chains in through-type furnaces and bearings of conveyors, baking kilns.

In case of high temperature regular refilling is necessary. Mixing with other greases must be avoided.

Temperature range: between -20 °C and +200 °C

Performance levels, approvals:

DIN 51502: KPF2S-20, ISO 6743-9: L-XBGEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Helios 2M	NLGI 2	280	280	above 300

FOOD-GRADE LUBRICATING GREASES

MOL Food Grease 00 food-grade lubricating grease

Food-grade lubricating grease with aluminium complex thickener and synthetic base oil. Causes no health risk in case of accidental contact with food.

It is especially recommended for low and medium performance gears but it is suitable in central lubricating systems as well. Due to its good water resistance the product can be used for lubrication of chains working in moisture and steam.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:

DIN 51502: GHC00N-30, ISO 6743-9: L-XCDHA 00, NSF H1[142055], HALAL

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Food Grease 00	NLGI 00	415	400	215

MOL Food Grease 1 food-grade lubricating grease

Special food-grade lubricating grease with aluminium complex thickener and synthetic base oil. Causes no health risk in case of accidental contact with food. Due to the composition it has excellent mechanical stability, good water resistance, excellent corrosion protection and good tackiness. It provides low friction and very good wear protection for the equipment for a long time.

Suitable for the lubrication of low and high performance food processing equipment.

Temperature range: between -30 °C and +140 °C

Performance levels, approvals:

DIN 51502: KHC1N-30, ISO 6743-9: L-XCDHA 1, NSF H1[142056], HALAL

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Food Grease 1	NLGI 1	320	400	230

MOL Food Grease 2 food-grade lubricating grease

Special food-grade lubricating grease with aluminium complex thickener and synthetic base oil. Causes no health risk in case of accidental contact with food. Due to the composition it has excellent mechanical stability, good water resistance, excellent corrosion protection and good tackiness. It provides low friction and very good wear protection for the equipment for a long time.

Suitable for the lubrication of low and high performance food processing equipment.

Temperature range: between -30 °C and +150 °C

Performance levels, approvals:

DIN 51502: KHC2N-30, ISO 6743-9: L-XCDHA 2, NSF H1[142057], HALAL

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Food Grease 2	NLGI 2	280	400	250

SPECIAL LUBRICATING GREASES

MOL Farm Grease 2MG lithium-base lubricating grease

High performance lithium-base lubricating grease containing molybdenum disulphide and graphite. The solid and EP additives protect against seizure in case of high dynamic load. It provides good corrosion protection for a long time even in wet conditions.

The product is used in equipment working in agriculture, subjected to high loads and high risk of seizure. Suitable for the lubrication of bearings, pivots and joints mainly in individual lubricating systems.

Temperature range: between -25 °C and +140 °C

Performance levels, approvals:

DIN 51502: KPF2N-25, ISO 6743-9: L-XBDEB 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Farm Grease 2MG	NLGI 2	280	200	200

MOL Chemresist 2 chemicals resistant lubricating grease

Chemical resistant lubricating grease consisting of synthetic base oil and aluminium complex thickener. Resistant to acids, alkalines and solvents. Due to its composition the product has good wear protection, low friction and very good tackiness.

Suitable for the lubrication of machines operating in an acidic or alkaline environment, for valves of pipelines transporting hydrocarbons.

Temperature range: between -40 °C and +180 °C

Performance levels, approvals:

DIN 51502: KHC2R-40, ISO 6743-9: L-XDFFA 2

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL Chemresist 2	NLGI 2	280	700	260

MOL OLP Medium overhead line protector grease

Overhead line protector, made of aluminium complex thickener, polymer and mineral oil.

The product has good corrosion protection and excellent adhesion properties.

The grease is used to prevent corrosion of overhead bare power lines from aluminium wires, aluminium alloy, steel wires or combination of these ones. The grease protects overhead line conductors from atmospheric corrosion in service and in storage.

Heating is not necessary during application.

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL OLP Medium	NLGI 2/3	270	100	250

SPECIAL LUBRICATING GREASES

MOL OLP Extra overhead line protector grease

Overhead line protector, made of organic thickener and a mix of mineral oils.

The product prevents long-lasting corrosion protection of overhead bare power lines made from aluminium wires, aluminium alloy, steel wires or combination of these ones during producing and storage.

Heating is not necessary during application.

The product meets the performance of EN 50326 standard. The standard requirements allow using the product in mainland, coast and marine overhead bare power lines.

Performance levels, approvals:

EN 50326: 20 A 110

Product	NLGI grade	Penetration after 60 strokes at 25 °C 0.1 mm	Base oil viscosity at 40 °C mm ² /s	Dropping point °C
MOL OLP Extra	NLGI 2/3	260		min 240

AUTOCHEMICALS / SPECIAL AUTOMOTIVE FLUIDS

MOL ThermoFluid FS HT1 food industrial and solartech heat transfer fluid concentrate

State-of-the-art propylene glycol based fluid concentrate. Nitrite-, amine-, borate and silicate-free. It must be diluted with distilled or deionised water before use. It is recommended for the cooling or heat transfer systems of solar heating, food processing and water purification equipments.

Product	Freezing point °C	Boiling point °C
MOL ThermoFluid FS HT1	-35 (50 vol.% in water)	164

MOL EcoClean-S engine degreaser

Suitable for removal of oil, grease and bitumen contaminations from engines, car under-bodies, accessories, agriculture- and off-highway machinery, railway carriage and underground storage tanks.

MOL EcoClean-W engine degreaser

Suitable for quick removal of oil, grease and other contaminations from metal surfaces, car under-bodies, mountings, tools, containers and tile linings.

Alycol Aqua distilled water

Produced by reverse osmosis water-treatment technology. It is essentially used for dilution of antifreeze coolant concentrates and recommended for refilling the liquid of batteries.

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