# LUBRICATION SOLUTIONS

# METAL WORKING FLUIDS

MOLYDAL

# ROLLER LUBRICATION

# REDUCE

COSTS

IMPROVE PRODUCTIVITY

# **ROLLER LINE**

- Optimal spreading and control of the lubricant
- · For any kind of lubricant
- No mist
- Very significant oil consumption reduction
- Comply with the most demanding HSE requirements
- High reliability
- Very low maintenance costs
- · Different widths available

# MOLYDAL since 1958

Leader in the production of metalworking fluids, MOLYDAL offers a complete range of products and solutions complying with users' technical and environmental requirements:

- Vanishing fluids
- Neat oils
- Minimal quantity lubrication oils
- Soluble oils

To meet each customer's needs, MOLYDAL has developed:

- VOC-free eco-responsible products; MOLYDAL's R&D laboratory is particularly involved in the design of new vegetable-based products.
- High-performance products for the cutting operations.
- Drawing and profiling sectors.

• Lubrication systems with rollers as well as minimal quantity lubrication systems.

A local advisory team is at users' disposal, giving them guidance, solutions and customised recommendations

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	MY 0	MY 1	MY 13	MYC 129	MYC 170	MYC 60	MYE 605 AL	MYE 607 AL	MYE 610	MYE 615 AL
Flash point	41°C	62°C	36°C	116°C	62°C	103°C	41°C	62°C	62°C	62°C
V.O.C. content	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Viscosity @ 20°C (Cst)	1,30	1,30	2,50	3,00	2,50		2,00	2,00	2,00	3,00
CLP classified	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
NSF approved	NSF H1	NSF H1	No	No	No	No	FDA	FDA	No	NSF H1
Light duty	•	•					•	•	•	
Medium duty			•	•	•			•		
Heavy duty			•		•	•				•
Profiling	•	•							•	



# MY O

DESCRIPTION

Fast-evaporating colourless fluid with a hydrocarbon base. Approved by NSF on the requirements of the FDA, in category H1, registration 129621. For cold deforming of all metals of slight thickness. Makes it possible to avoid subsequent degreasing operations. Can be bonded, welded, and painted.

USE For all cutting, stamping, profiling, folding, cambering, and light stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys) of slight thickness.



# **MY 1**

DESCRIPTION

Evaporable colourless fluid with a hydrocarbon base. Approved by NSF on the requirements of the FDA, in category H1, registration 128921. For cold deforming of all metals of slight thickness. Makes it possible to avoid subsequent degreasing operations. Can be bonded, welded, and painted.

USE For all cutting, stamping, profiling, folding, cambering, and light stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys) of slight thickness.



#### **MY 13** DESCRIPTION

Fast-evaporating fluid made up of hydrocarbons reinforced with extreme-pressure, anti-wear additives as well as smoothening agents. Guaranteed chlorine-free and free of animal fat. Imperceptible dry film, practically free of sticky residue and white traces. Can be bonded, welded, and painted. USE

#### MY13FT 200 L DRUM

For deforming difficult parts. For all cutting, stamping, profiling, folding, cambering, and light stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys) of medium to large thickness.

4





PACKING		REF
200 L	DRUM	MYC60FT
1000 L	CONTAINER	MYC60CO



PACKING		REF
60 L	KEG	MYE605AL60
1000 L	CONTAINER	MYE605ALCO
200 L	DRUM	MYE605ALFT



PACKING	3	REF			
60 L	KEG	MYE607AL60			
1000 L	CONTAINER	MYE607ALCO			
200 L	DRUM	MYE607ALFT			



PACKING	ì	REF
1000 L	CONTAINER	MYE6101000
200 L	DRUM	MYE610FT



MYE615ALFT

200 L

DRUM

# **MYC 170**

#### DESCRIPTION

Colourless liquid product made up of hydrocarbons reinforced with extreme-pressure, anti-wear additives as well as smoothening agents. Characterised by a near absence of sticky residues, white traces after evaporation. Does not clog spraying systems or nozzles.

#### USE

For all operations of: cutting; stamping; folding; cambering; rolling; profiling. On all metals. Ready for use and does not require any preparation or any control of the concentration. Can be applied indifferently: to felt; to the roller; as drip feed; by spraying at a rate of 1 to 4 grammes per m2 according to the operation.

# **MYC 60**

#### DESCRIPTION

VOC-free and high flah point vanishing oil. its viscosity prevents from hazard phrase H304. Very low friction coefficient. MYC60 is formulated with aliphatic hydrocarburs and onctuousity additives. Thanks to its limited evaporation speed and its outstanding wetting property, it enables to decrease oil consumption.

USE Cutting, punching, profiling any kind of metals.

# **MYE 605 AL**

#### DESCRIPTION

Evaporable fluid for incidental contact with foodstuffs made up of hydrocarbons reinforced with extreme-pressure and antiwear additives as well as smoothening agents. Comprised only of raw materials approved by the FDA. Guaranteed chlorine-free, sulphur-free and free of animal fat. Imperceptible dry film, practically free of sticky residue and white traces. Can be bonded, welded, and painted.

#### USE

For manufacturing parts intended for food industries. For cold deforming of all metals. For all cutting, stamping, profiling, folding, cambering, and stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys).

# **MYE 607 AL**

#### DESCRIPTION

Evaporable fluid made up of hydrocarbons reinforced with extreme-pressure, anti-wear additives as well as smoothening agents. Comprised only of raw materials approved by the FDA. Guaranteed chlorine-free, sulphur-free and free of animal fat. Imperceptible dry film, practically free of sticky residue and white traces. Can be bonded, and welded. USE

For manufacturing parts intended for food industries. For cold deforming of all metals. For all cutting, stamping, profiling, folding, cambering, and stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys).

# **MYE 610**

# DESCRIPTION

Colourless evaporable fluid made up of hydrocarbons reinforced with extreme-pressure, anti-wear additives as well as smoothening agents. Guaranteed chlorine-free, sulphur-free and free of animal fat. Imperceptible dry film, practically free of sticky residue and white traces. Can be bonded, welded, and painted.

For cold deforming of all metals of slight thickness. For all profiling, cutting, stamping, folding, cambering, and stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys).

# **MYE 615 AL**

#### DESCRIPTION

Evaporable fluid made up of hydrocarbons reinforced with extreme-pressure, anti-wear additives as well as smoothening agents. Approved by NSF on the requirements of the FDA, in category H1, registration 130185. Guaranteed chlorine-free sulphur-free and free of animal fat. Slightly oily film, practically free of sticky residue and white traces. Can be bonded, and welded.

#### USE For cold deforming of all metals. For all cutting, stamping, profiling, folding, cambering, and stamping operations on all types of metals (ferrous metals, stainless and coated steels, cuprous, bronze, brass, aluminium, and its alloys).

# **NEAT OILS**

	H 125 AL	H 128	H 528	H 526	H 570	LUBA 21	LUBA 251	LUBA 40	LUBA 50	LUBA 200	LUBA 216 AL	H VG	НСВ 300	НСВ 400
Viscosity @ 40°C (Cst)	22	25	28	110	170	4 - 6	8 -10	8	50	200	42 – 50	40	42	29
Aspect, Colour	Colorless	Amber	Yellow	Amber	Amber	Co- lorless	Co- lorless	Yel- low	Yel- low	Amber	Yellow	Yel- low	Pale yellow	Pale yellow
4 balls test : welding (kg)	160	250	720	800	800	150	150	600	> 800	800	160	160	250	250
4 balls test : wear (mm)	/	0,8	< 0,70	< 0,70	< 0,70	0,70	0,6	< 0,6	< 0,9	< 1	/	/	< 0,5	< 0,5
CLP classified	No	Yes	No	No	No	No	No	No	No	No	No	No	Yes	Yes
NSF approved	Yes	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No
Ecofriendly	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Light duty	•	•	•			•	•	•			•	•		
Medium duty		•	•				•	•	•					
Heavy duty				•	•				•	•				
Light cutting and stamping	•	•	•			•	•	•			•	•		
Deep-drawing and heavy stamping				•	•				•	•				
Drilling, threading, tappind, sawing		•	•						•				•	•



#### H 125 AL NEAT OIL FOR INCIDENTAL CONTACT WITH FOODSTUFFS

#### DESCRIPTION

High-viscosity mineral oil for direct and indirect contact with foodstuffs. Approved by NSF on the requirements of the FDA, in category H1 and 3H, registration 137920. Silicone-free. Can be used on all metals and compatible with most elastomers and plastic materials. Colour: Colourless.

PACKING		REF					
60 L	KEG	H125AL60					
215 L	DRUM	H125ALFT					

USE For cutting or light stamping operations for the manufacture of parts intended for the food processing industries. For operations of cutting, deep drawing, and folding on all metals (covers, tin cans, etc.). to b eused with drip feed, manual roller, a spray without air or with low-pressure air.



## <u>H 128</u>

#### NON-CHLORINATED NEAT OIL (SPECIAL CUPROUS)

#### DESCRIPTION

Low-viscosity, chlorine-free cutting oil. Colour: amber.

USE For cutting and light stamping operations on all metals. Can be used for machining operations on ferrous or non-ferrous metals (scalping, sawing, drilling and boring). Can be used with drip feed, manual roller, roller machine, a spray without air or with low-pressure air.



JERRYCAN

H52820

20 L

#### H 528

#### NON-CHLORINATED NEAT OIL

#### DESCRIPTION

Mineral based cutting fluid. Free from chlorine. Made with renewable resources improving antifriction power.

USE Low viscosity oil for sawing any kind of metals of low thickness.



2001

PACKING

DRUM

JERRYCAN

200 L

20 L

# H 526

#### NON-CHLORINATED NEAT OIL

DESCRIPTION

Mineral based cutting fluid. Free from chlorine. Made with renewable resources improving antifriction power.

USE Medium viscosity fluid for any kind of stamping and cutting operations on any materials.



DRUM

H526FT

REF

H570FT

H57020

### H 570 CHLORINE-FREE METALWORKING NEAT OIL

#### DESCRIPTION

Chlorine-free minreal based cutting fluid. Superior antifriction properties thanks to renewable materials additivation. USE

High viscosity oil for deep drawing and heavy stamping operations.



#### **LUBA 21** ECOFRIENDLY LUBRICANT FOR PROFILING AND LIGHT CUTTING OPERATIONS

#### DESCRIPTION

Cold forming chlorine-free fluid. Designed to replace solvanted oils and mineral based fluids. Made from vegetal synthetic esters, it possesses an outstanding wetting power allowing better parts finishings and longer tools lifetime. USE

Specifically designed for cutting, bending, punching, stamping operations. Highly suitable for sawing, drilling and threading operations. Recommended for light stamping.



DRUM

JERRYCAN

REF

LUBA251FT

LUBA25120

LUBA40FT

LUBA4020L

PACKING

200 L

20 L

200 L

20 L

#### LUBA 251 ECOFRIENDLY LUBRICANT FOR CUTTING AND LIGHT STAMPING OPERATIONS

#### DESCRIPTION

Cold forming chlorine-free fluid. Designed to replace solvanted oils and mineral based fluids. Made from vegetal synthetic esters, it possesses an outstanding wetting power allowing better parts finishings and longer tools lifetime.

USE LUBA251 can be used on any material: aluminum, steel, stainless steel. It is suitable for any coldforming operations. can be applied by rollers, droplets, MQL systems.



DRUM

JERRYCAN

### **LUBA 40**

ECOFRIENDLY EXTREME PRESSURE LUBRICANT FOR CUTTING AND STAMPING

Cold forming chlorine-free fluid. Designed to replace solvanted oils and mineral based fluids. Made from vegetal synthetic esters, it possesses an outstanding wetting power allowing better parts finishings and longer tools lifetime.

Specifically designed for severe stamping operations for any material: steel, stainless steel, aluminum and alloys. Suitable for threading, machinig operations.



7



JERRYCAN

DRUM

BOTTLE

20 L 200 L

125 MI

LUBA5020

LUBA50FT

LUBA50FL

#### ECOFRIENDLY EXTREME PRESSURE LUBRICANT FOR DEEP-DRAWING OPERATIONS

#### DESCRIPTION

LUBA 50

Cold forming chlorine-free fluid. Designed to replace solvanted oils and mineral based fluids. Made from vegetal synthetic esters, it possesses an outstanding wetting power allowing better parts finishings and longer tools lifetime.

USE For deep-drawing operations on any materials: steel, stainless steel, aluminum, copper and their alloys (on copper, rinse off immediately). Suitable for threading and drilling operations on stainless steel and inconel.

	PACKING		REF
200 L		DRUM	LUBA200FT
	20 L	JERRYCAN	LUBA200_20_

## EXTREME PRESSURE ECO-FRIENDLY LUBRICANT FOR DEEP-DRAWING OPERATIONS

#### DESCRIPTION

**LUBA 200** 

Cold forming synthetic vegetal ester based fluid. Designed to replaced chlorintated or high viscosisty mineral oils. Its wetting properties enables to improve parts finishings and tools lifetime.

USE for deep-drawing operations on any material (even copper and alloys). can also be used for threading, drilling.



JERRYCAN

DRUM

PACKING

20 L 200 I

201

RFF

LUBA216AL20

LUBA216ALFT

# LUBA 216 AL

EXTREME PRESSURE ECO-FRIENDLY LUBRICANT FOR CUTTING - STAMPING - ACCIDENTAL CONTACT WITH FOOD

#### DESCRIPTION

Fluid exclusively made from renewable ressources. V.O.C. Free. Odourless and non irritating.without risk of explosion, and without safety labelling. Silicone free. MOSH-MOAH and POSH free lubricant.

#### USE

For cutting, stamping and bending operation on all materials except annealed stainless steel. Highly recommanded for cold forming operations in the agrofood industry, metalpackaging etc...



HVG20

# HVG

#### VEGETABLE OIL FOR DIRECT CONTACT

#### DESCRIPTION

Clean and general-purpose lubricant recommended for lubrication operation, cutting or light stamping in all fields of activities in the food industry. Free from silicone, allergens and GMO. Approved for the food industry - certified by the National Sanitation Foundation (NSF), which is based on the Food and Drug Administration's (FDA) class 3H, H1 requirements (Registration number 162091). This product is also acceptable for use as a release agent on grills, ovens, loaf pans, boning benches, chopping boards or other hard surfaces in contact with food. MOSH-MOAH and POSH free lubricant.

USE For all stamping, drop-stamping, bending, medium to heavy thickness on all metals except hardened or tempered stainless steels. Product ideally recommended for all cold forming operations on metals, tin, packing, etc...



CAN

# HCB 300

#### NEAT OIL FOR MICRO-SPRAYING

#### DESCRIPTION

Low-viscosity synthetic cutting fluid, formulated on an ester base, reinforced with an extreme pressure and anti-wear additive. For machining operations using micro-spraying, reducing the amount of lubricant and increasing cutting speeds. USE

For drilling, tapping, sawing, milling, etc. operations... Also used for cross-cutting aluminium profiles.



#### NEAT OIL FOR MICRO-SPRAYING



#### DESCRIPTION

Low-viscosity synthetic cutting fluid, formulated on an ester base, reinforced with an extreme pressure and anti-wear additive. For machining operations using micro-spraying, reducing the amount of lubricant and increasing cutting speeds. USE

For drilling, tapping, sawing, milling, etc. operations... Also used for cross-cutting aluminium profiles.

# Machining fluids



## **STAREX**

#### EXTREME PRESSURE CUTTING OIL

#### DESCRIPTION

Special extreme pressure oil for accurate and localised application. Can be used on all grades of steel and on light and cuprous alloys.

For various machining, drilling and tapping operations, by manual application. We recommend degreasing quickly to prevent superficial staining if visual appearance is important.



# <u>VG CUT 77</u>

#### ECOFRIENDLY AQUEOUS DRILLING/TAPPING LUBRICANT

#### DESCRIPTION

Ready-to-use aqueous fluid without V.O.C. non-flammable, V.O.C free Vegetable polymer-based. Odourless. No smoke emissions. Compatible with all types of metal, including copper and its alloys. Easy to degrease.

For drilling and tapping.



### TEREBOR

#### TAPPING, DRILLING AND MACHINING FLUID

#### DESCRIPTION

Low-viscosity lubricant for drilling, tapping, and machining. Blue colour. USE

For tapping high resistance extra hard steel, refractory steels and stainless steel. Chip removal on small diameters, blind holes and metals with low machinability, on automatic or semi-automatic machines.



## LUBA 50

#### ECOFRIENDLY, TAPPING, DRILLING AND MACHINING FLUID

#### DESCRIPTION

Designed to replace chlorinated mineral oils for threading and drilling, tapping operations. Made from vegetal esters, it possesses and outsatnding wetting power. It increases tools lifetime and improves parts finishings.

USE Can be used on any materials: stainless steel, steel, aluminum, copper etc.

 PACKING
 REF

 125 ML
 BOTTLE
 LUBASOFL

 200 L
 DRUM
 LUBASOFT

 20 L
 JERRYCAN
 LUBASO20

# SOLUBLE OILS

	SOLCUT 700 BS	SOLESTER 530	SOLESTER 540	SOLESTER 77
Viscosity @ 40°C	27	20	80	2
Basis oil	Mineral	Ester	Ester	Ester
Dilution	5 to 10 %	1 to 10 %	1 to 10 %	Ready to use
Emulsion stability	Stable up to 15%	Stable up to 25%	Stable up to 25%	Total
Refractometer reading coeficient	1,1	1,2	1	/
Ecofriendly	No	Yes	Yes	Yes
Light duty	•	•	•	
Medium duty		•	•	
Heavy duty			•	
Profiling	•	•	•	•



JERRYCAN

DRUM

SOLCUT700BS20

SOLCUT700BSFT

SOLESTER53020

SOLESTER5305L

SOLESTER530FT

20 L

200 L

20 L

5 L 200 L

# SOLCUT 700 BS

#### CHLORINE-FREE MULTI-PURPOSE SOLUBLE OIL

#### DESCRIPTION

Milky emulsion with good stability. It can be used with ordinary water. Guaranteed bore-free as well as being free of chlorine derivatives, secondary amines, and formaldehyde. Can be used on all types of metals (ferrous, cuprous, and aluminium).

USE Effective protection against corrosion for parts, tools, and machines. For all chip-removal operations. Machining, threadcutting, tapping, drilling, turning, and milling. from 5% to more than 10% in water, depending on difficulties and the extent of deformations.



JERRYCAN

JERRYCAN

DRUM

# **SOLESTER 530 / 540**

#### MICROEMULSION FOR ANY MATERIALS (EVEN COPPER AND ITS ALLOYS)

#### DESCRIPTION

Synthetic emulsion, from a blend of green chemicals and polyesters. Harmless to operators: no mineral oil, no VOC, no chlorine not CFC or formaldehyde. No hazardous labels or phrases.

USE From 2% to 8% for any machining operation. 1% to 2% for grinding.



# SOLESTER 77

#### WATER-BASED PROFILING FLUID

#### DESCRIPTION

Vegetable polymer based ready-to-use aqueous fluid, V.O.C free, non-flammable. Non hazardous (very safe for operators). Compatible with all types of metal, including copper and its alloys.

#### USE

Zinc-plated electro-galvanised steel profiling. Cutting and stamping without drawing out Stainless-steel rolling (manufacturing chimney sheaths). Manufacture of profiles of the gypsum panel type. Manufacture of vineyard posts

# PACKING REF 1 KG CAN DES5000B1

# DES 5000

#### EMULSION TREATMENT

#### DESCRIPTION

Biocide-free cleaner. DES 5000 is not an instantly-acting treatment but brings stability to the emulsion on the long-term. VOC-free and contains no formaldehyde.

USE DES 5000 is used to clean machinig circuits. It helps maintaining the emulsion stability in order to increase the emulsion lifetime. The treatment must be made while operating.

# MINIMUM QUANTITY LUBRICATION

Microlubrication consists in dosing and delivering a very small amount of lubricant thanks to a nozzle and a micropump.

> The liquid flows from the reservoir into a piston pump. This pushes an exact quantity of the lubricant into the internal feed tube. Separately supplied compressed air splits the medium at the nozzle tip and sprays it. External MQL in all metal-cutting operations. Pinpoint or small area lubrication in chipless forming operations. Application of mould release and anti-corrosion agents or other spray-on substances.

#### **ADVANTAGES:**

- Workstation cleanliness
- Tools lifetime
- Parts finishings improvement
- Very low consumption



A French company on a human scale engaged in certification and approval processes, MOLYDAL continues to consolidate its presence in Europe and pursue its development worldwide. The company's know-how has enabled it to offer a complete range of products and equipment intended for all business sectors (Metalwork, food industries, sugar industries, iron industry, granulation industry, plastic injection, automotive, energy, etc.), where certain approvals are sometimes required (PMUC, NSF, etc.).

#### THE MOLYDAL VALUES

• Quality policy with a product range designed in compliance with all regulations in force.

• Environmental policy with an eco-responsible product range, with performance equal or superior to current oil solutions.

• Innovation policy with the formulation and testing of the products of tomorrow by the integrated R&D laboratory.

#### THE MOLYDAL OBJECTIVES

• Pursue the development of the products and materials range to help industries to optimize the profitability of their processes.

• Pursue the company's partnership with various industries to optimize its range of products adapted to the specific features andor the constraints of manufacturing processes.

#### THE MOLYDAL SERVICES

 Technical solutions to specific industrial problems: customised recommendations and analysis.

• Responsive teams nearby for a personalised local service.

• The resumption of our chlorinated and non-chlorinated used products (field in keeping with waste recovery).

# A professional brand offered exclusively by the group companies







We are ISO 9001: 2015 approved for quality.



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