

SAFETY DATA SHEET**SECTION I - PRODUCT IDENTIFICATION**

Product Identifier: Lupromax-MF-GP
Other means of identification: General Purpose Emulsion Cutting Fluid
Recommended use and restriction on use: LUPROMAX-MF-G.P. is an economical general purpose water soluble cutting fluid concentrate.
Manufacturer's Name: MAGNA INTERNATIONAL PTE LTD
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SECTION II – HAZARDS IDENTIFICATION**GHS CLASSIFICATION:**

NOT HAZARDOUS

GHS LABEL ELEMENTS SYMBOL(S)

No Pictogram

SIGNAL WORDS:

No signal word

GHS HAZARDS STATEMENT:

PHYSICAL HAZARDS: Not classified as a physical hazard under GHS criteria.

HEALTH HAZARDS: Not classified as health a hazard under GHS criteria.

ENVIRONMENTAL HAZARDS: Not classified as an environmental hazard under GHS criteria.

GHS PRECAUTIONARY STATEMENTS:

Prevention: No precautionary phrase

Response: No precautionary phrase

Storage: No precautionary phrase

Disposal: No precautionary phrase

Other hazards which do not result in classification.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name:</u>	<u>Weight %:</u>	<u>CAS#</u>
Distillates, petroleum, hydrotreated light naphthenic, Distillates, petroleum, hydrotreated heavy naphthenic, Highly-refined petroleum lubricant oils Mixture, Proprietary Ingredients, Diethylene glycol, Triethanolamin	100%	Mixture

SECTION IV – FIRST AID MEASURES**Inhalation**

Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.

Skin Contact

If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

Eye Contact

Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

Ingestion

Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

SECTION V – FIRE FIGHTING MEASURES

Suitable Fire-extinguishing media

Foam (alcohol-resistant foam), powder, and carbon dioxide are effective fire-extinguishing agents.

Specific hazards arising from the chemical

This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, vapors can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point. Burning may produce oxide of carbons and other substances

Special protective actions for fire fighters

Firemen should wear self-contained breathing apparatus and protective clothing when fighting chemical fires.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance of selection of personal protective equipments see Chapter 8 of this Safety Data Sheet. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal.

Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material is miscible in water. Comply with all laws and regulations.

Environmental Precautions

Prevent spills from entering drains or sewers and contact with soil.

Methods and materials for contaminated and cleaning up

For small spills, carefully flush with water. For large spills, contain spills. Do not touch or walk through spilled material. Dike ahead of large spills to prevent run-off. Mop, pump or absorb onto suitable absorbent and place in container for reuse, recycle or proper disposal. Flush area with water to eliminate residues.

SECTION VII – HANDLING AND STORAGE

Precautions for safe handling

Carefully maintain metalworking fluid and associated equipment. Monitor metalworking fluid on a regular basis. Maintain product mist concentrations below applicable occupational exposure limits. Avoid contamination with tramp oil and other materials to minimize product degradation. Avoid exposing product to extreme temperatures. Replace used metalworking fluid if microbial growth is not manageable. Rancid or foul smelling used metalworking fluids may indicate uncontrolled microbial growth. Replace used metalworking fluid at the end of the useful service life. Carefully clean metalworking equipment and associated delivery systems prior to introducing new product.

Product container is not designed for elevated pressure. Do not pressurize, cut, weld, braze solder, drill, or grind on containers. Do not expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain product residues that can ignite with explosive force.

Conditions for safe storage, including any incompatibilities

Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Substance Applicable Workplace Exposure Levels

Oil Mist, Mineral:	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s). STEL: 10 mg/m ³ 15 minute(s). OSHA PEL (United States). TWA: 5 mg/m ³ 8 hour(s).
Metalworking fluid:	NIOSH (United States). TWA: 0.4 mg/m ³ 8 hour(s). Form: *Thoracic particulate mass
Diethylene glycol:	AIHA WEEL (United States). TWA: 10 mg/m ³ 8 hour(s).
Triethanolamine:	ACGIH (United States). TWA: 5 mg/m ³ 8 hour(s).

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Eye Protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.

Hand Protection

Avoid skin contact. Use gloves constructed of chemical resistant materials such as heavy nitrile rubber or appropriate barrier creams with prolonged or repeated contact. If the product is processed or handled at elevated temperature, protect against thermal burns by using heat-resistant (insulated) gloves. Do not wear gloves or loose fitting clothing around rotating or moving equipment. Use good personal hygiene practices.

Body Protection

Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

Respiratory Protection

Use adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

General Comments

Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	Liquid
Color	Dark Blue-Green
Odour	Petroleum
Odour Threshold	Not applicable
pH	Not applicable
Melting Point	Not applicable
Freezing Point	Not applicable
Boiling Point	Not applicable
Flash Point	155°C-Pensky-Martens (ASTM D-93)
Evaporation Rate	Not applicable
Upper explosive limit	Not applicable
Lower explosive limit	Not applicable
Vapour Pressure	<0.01 kPa @ 20°C
Vapour Density	>1 (Air =1)
Relative Density	0.92 g/cm ³ ± 0.05
Solubility	Emulsify in water
Partition coefficient: n-octanol/water	Not applicable
Viscosity	35cSt @ 40°C
Auto-ignition Temperature	Not applicable

SECTION X – STABILITY & REACTIVITY**Reactivity/Incompatible materials**

Strong oxidizers. This material contains amines that can react with nitrites to form nitrosamines. Certain nitrosamines have been associated with cancer in laboratory animals.

Chemical stability

Stable under normal temperature and pressure.

Possible of hazardous reaction

Data not available.

Conditions to avoid

Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.

Hazardous decomposition products

Burning may produce oxide of carbons and other substances.

SECTION XI – TOXICOLOGICAL INFORMATION

Toxicity Data Distillates, petroleum, hydrotreated light naphthenic:

ORAL (LD50): Acute: >5000 mg/kg [Rat].

DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

INHALATION (LC50) Acute: 9.6 mg/L (Female Rat).

INHALATION (LC50) Acute: 10.5 mg/L (Male Rat).

DRAIZE EYE Acute: Non-irritating (Rabbit).

DRAIZE DERMAL Acute: Mild skin irritant (Rabbit).

BUEHLER DERMAL Acute: Non-sensitizing (Guinea Pig).

28-Day DERMAL Sub-Chronic: Mild to moderate skin irritant (Rabbit & Rat).

A life-time dermal application of severely hydrotreated light naphthenic oils produced skin masses on mice which correlated with the skin irritation response levels of the test animals. Additional studies attribute these masses to a weak promotional activity. These studies indicate that light naphthenic oils are not mutagenic, tumor initiators nor complete chemical carcinogens. These materials have not been determined to be carcinogenic by IARC, NTP or OSHA.

Distillates, petroleum, hydrotreated heavy naphthenic:

ORAL (LD50): Acute: >5000 mg/kg [Rat].

DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Metalworking Fluid, Soluble:

Acute and chronic respiratory responses have been reported in occupational exposures to metal working fluids (MWF). In addition, exposure to MWF mists can aggravate existing respiratory conditions. Chronic effects of overexposure to MWF mists can include sinusitis, persistent cough, asthma, increased respiratory tract secretions and airway constriction. Certain studies have suggested that bacterial endotoxin in MWF can result in increased respiratory tract irritation among the exposed population. Endotoxins can stimulate alveolar macrophage release of cytokine mediators that are involved in broncho-constriction and inflammation.

Hypersensitivity pneumonitis (also known as allergic alveolitis) has been reported among automobile workers exposed to MWF. Hypersensitivity pneumonitis is a diffuse interstitialgranulomatous lung disease believed to be associated with an immunologic reaction of the lung to repeated inhalation of foreign antigens. In the acute phase, signs and symptoms include alveolar inflammation and influenza-like symptoms. In the chronic phase and following repeated exposures, it is characterized by pulmonary fibrosis. Reoccurring episodes of acute hypersensitivity pneumonitis can lead to progressive, irreversible lung impairment.

SECTION XII – ECOLOGICAL INFORMATION

Eco-toxicity: Data are not available for this product.

Mobility: Miscible in water and is expected to readily disperse in marine environmental.

Persistence and Degradability: Biodegradable. The inorganic solids are natural minerals.

Bio-accumulative Potential: Not expected to bio-accumulate.

SECTION XIII – DISPOSAL CONSIDERATIONS

Dispose off in accordance with existing Federal, State and local environmental regulation.

SECTION XIV – TRANSPORT INFORMATION

Proper Shipping Name	Not regulated
IMO Class	Not regulated
Hazard Label (S)	Not regulated
UN OR ID Number	Not regulated
MPA Group	Not regulated

SECTION XV – REGULATORY INFORMATION

TSCA Inventory	This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.
SARA 302/304 Emergency Planning and Notification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.
SARA 311/312 Hazard Identification	The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Chronic (Delayed) Health Hazard
SARA 313 Toxic Chemical Notification and Release Reporting	This product contains the following components in concentrations above de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

CERCLA	The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.
Clean Water Act (CWA)	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
California Proposition 65	This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.
New Jersey Right-to-Know Label	Petroleum Oil
Additional Regulatory Remarks	No additional regulatory remarks.

SECTION XVI – OTHER INFORMATION

H.M.I.S rating: Health - 1, Fire – 1, Reactivity – 0, Protection – B

Where

0 = Insignificant

1 = Slight

2 = Moderate

3 = Serious

4 = Severe

A = Safety Glass

B = Safety Glass & Gloves

C = Safety Glass , Gloves & Apron

D = Face Shield , Glove & Apron

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H.M.I.S: Hazardous Materials Identification System

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: recommended exposure limit

TWA8: The time weighted average concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

N.A: Not applicable

N/E: Not establish

N.D: Not determine

C: Ceiling (The concentration that should not be exceeded during any part of the working exposure).

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