

Safety Data Sheet

ubrication Systems and Solutions Specialists

Safety Data Sheet

MK HIGH PERFORMANCE

MQL oil used in minimal systems for all the alloys of good tough ability

Safety Data Sheet dated 19/1/2009, version 1

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Trade name: Trade code: Product type and use: MK HIGH PERFORMANCE **3226666** Biodegradable fluid for metal working process

Company:

DROPSA SpA – Via B. Croce, 1 – 20090 Vimodrone (MI) Tel. 02 250791 – Fax 02 2507767

2. HAZARDS IDENTIFICATION

No specific hazards are encountered under normal product use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical composition :</u> Natural and synthetic esters, specific additives, EP, AW. <u>Hazardous components within the meaning of EEC directive 67/548 and corresponding classification</u>: None.

4. FIRST AID MEASURES

<u>Contact with skin:</u> Wash with much water and soap, and remove dirty clothing. Call a doctor if necessary. <u>Warning:</u> Whenever accidents occur near pipes under pressure, there always is the possibility that the substances expelled, whatever their composition, may be injected into subcutaneous tissues, even without visible wounds appearing. When this occurs, accompany the persons affected to the nearest hospital immediately. Injuries caused by high pressure jets call for immediate surgical treatment and may require steroid- based therapy in order to minimize damage to tissues and the loss of function.

<u>Contact with eyes:</u> Keep the eyelids open and wash immediately with much water for a few minutes. If pain persists and the eyes remain red, medical care is required;

<u>Swallowing:</u> Do not induce vomit to avoid the risk of inhalation through the respiratory tract. Consult a physician.

<u>Inhalation:</u> After exposure to highly concentrated vapors and mists, remove the persons affected to a well-ventilated room. Consult a physician if ailment persists.

5. FIRE-FIGHTING MEASURES

<u>Recommended extinguishers:</u> Water, CO2, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishers not to be used: None in particular.

<u>Risks arising from combustion</u>: Do not breathe combustion fumes. As a result of fire, the following compounds can develop: SOx, POx, COx. Avoid inhaling the fumes.

Protective equipment: Use protection for the respiratory tract.



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6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety: Use gloves and protective clothing.

<u>Environmental measures</u>: If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

<u>Cleaning methods</u>: If the spillage has been considerable, stem the flow and scoop spilled material up into appropriate containers. Stem small spillages with dirt, sand or other inert absorbents and dispose according to relevant legislation.

7. HANDLING AND STORAGE

<u>Handling precautions:</u> Avoid contact and inhalation of the vapors. See, too, paragraph 8 below. <u>Storage conditions:</u> Do not pour the product into other containers. Always use the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Precautionary measures</u>: Give adequate ventilation to the premises where the product is stored and/or handled.

<u>Respiratory protection:</u> Not required in normal working conditions.

Protection for hands: Not needed for normal use.

<u>Eve protection</u>: Wear safety goggles whenever there is the possibility of a contact with the product; For additional information refer to UNI-EN 166 norm;

Protection for skin: No special precaution must be adopted for normal use.

Exposure limit(s) (ACGIH): None.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and color: clear liquid color brow

Odor:	almost odorless
<u>Flash point</u> :	>280 ° C
Explosive properties:	NA
Oxidizing properties:	NA
Relative density:	0.930 Kg/l
<u>Lipid solubility</u> :	aromatic hydrocarbons, chlorinated solvents, petroleum solvents, esters, ketones
Viscosity 40°C ASTM D445:	101.9 cst
Pour point ASTM D97:	<-10 °C

10. STABILITY AND REACTIVITY

<u>Conditions to avoid:</u> Stable under normal conditions. <u>Substances to avoid:</u> None in particular. <u>Hazardous decomposition products:</u> None.

11. TOXICOLOGICAL INFORMATION

Set out below is the toxicological information relating to the main substances in the preparation. <u>By breathing:</u> Prolonged exposure to vapors or mists can cause irritation to the respiratory tract; <u>By swallowing</u>: The product can cause irritation in the digestive tract, with vomit, nausea and diarrhea; <u>By skin contact</u>: Prolonged and frequent con tact can contribute to dryness and irritation of the skin, and may cause dermatitis;

By eye contact: Can cause a light irritation



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12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

<u>The product is biodegradable at :</u> >80 %.

Biodegradability : The product is easily biodegradable.

List of substances dangerous for the environment and corresponding classification:

0.1% - 0.25% Triphenyl Phosphate

CAS: 115-86-6 EC: 204-112-2 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force. Dispose of exhausted products and of containers through authorized firms. Where applicable, refer to the following regulatory provisions : 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations. ADR-UN number: Not dangerous

15. REGULATORY INFORMATION

Council Directive 67/548/EEC (Classification, packaging and labeling of dangerous substances) and subsequent amendments.

Commission Directive 1999/45/EC (Classification, packaging and labeling of dangerous preparation) and subsequent amendments. Commission Directive 98/24/EC (Protection of the health and safety of workers

from the risk related to chemical agent). Commission Directive 2000/39/EC (Occupational exposure limit values). Regulation (EC) No 1907/2006 (REACH).

Special Provisions: Safety data sheet available for professional user on request.

<u>Where applicable, refer to the following regulatory provisions :</u> Regulation (EC) nr 648/2004 (Detergents). Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

16. OTHER INFORMATION

<u>Main bibliographic sources:</u> ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold ACGIH - Threshold Limit Values - 2004 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

This safety data sheet has been drafted taking into account the Guidelines for the Draft of Safety Data Sheets for Lubricants drawn up by the Gruppo Aziende Industriali della Lubrificazione (GAIL website http://assoscpecifici.federchimica.it/GAIL/Gail.htm) part of UEIL (Independent Union of the European Lubricants Industry)

This MSDS cancels and replaces any preceding release.