

SAFETY DATA SHEET - SDS

Product : CUTTING FLUID # CF-32, CF-128

JAN 2021

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product CUTTING FLUID # CF-32,CF-128

Internal identification code --

Relevant recommended uses Industrial uses.

Company METLAB CORPORATION

Address 4011 HYDE PARK BLVD NIAGARA FALLS NY 14305

Phone number 800-828-6866 Fax: 716-282-6971

Emergency Phone number For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident:
Call CHEMTREC Day or Night USA + Canada = 1-800-424-9300/703-527-3887

2. HAZARDS IDENTIFICATION

Classification No classification is assigned according to OSHA HCS 2012.

Label Elements

- **Hazard Pictograms** Not applicable.
- **Signal Word** Not applicable.
- **Hazard Statements** Not applicable.
- **Precautionary Statements** Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Brand or Generic Chemical Name Polyethyleneglycol 200

Product Type Substance.

Synonyms Polyethylenoglycol 200; Polyglycol 200; Polyoxyethylene 200; PEG 200; PEG-4 (INCI Name).

CAS Number 25322-68-3.

Impurities which contribute to the classification of the substance There are no impurities which contribute to the classification of the substance.

4. FIRST-AID MEASURES

Procedure in Case of:

- **Ingestion** Seek prompt medical attention.
Do not induce vomiting.
Vomiting should only be induced by medical personnel.
If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs.
Never give anything by mouth to an unconscious or convulsing person.
- **Inhalation** Seek prompt medical attention.
Remove victim to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.
- **Skin contact** Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower.
Seek prompt medical attention.
- **Eye contact** Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open.
Remove contact lenses if easy to do.
Seek prompt medical attention.

Most important symptoms/effects, acute and delayed

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

- **TLV-TWA (ACGIH)** 1,4-Dioxane: 20 ppm; 72 mg/m³ [Skin].
Ethylene oxide: 1 ppm; 1.8 mg/m³.
Skin - Danger of cutaneous absorption.
- **PEL-TWA (OSHA)** 1,4-Dioxane: 100 ppm; 360 mg/m³ [Skin].
Ethylene oxide: 1 ppm.
Skin - Danger of cutaneous absorption.
- **TLV-STEL (ACGIH)** Ethylene glycol: 100 mg/m³.
(H) - Aerosol only.
Ceiling (C) - The concentration that shall not be exceeded during any part of the working exposure.
A4 - Not classifiable as a Human Carcinogen.
- **LT(NR15)** Ethylene oxide: 39 ppm; 70 mg/m³.
- **Odor Threshold** Ethylene glycol: 60.3 mg/m³.
- **IDLH** 1,4-Dioxane: 500 ppm.
Ethylene oxide: 800 ppm.
- **Biological Exposure Indices (ACGIH)** Not established.

Engineering Control Measures

In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).

Individual Protection Measures

- **Eye Protection** Side shields or wide vision safety goggles.
- **Skin Protection** PVC apron.
It is recommended to adopt safety boots/shoes.
- **Hand Protection** Gloves made of:
Rubber.
PVC (Polyvinyl chloride).
- **Breathing equipment** In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self contained breathing apparatus.
It is recommended to wear face mask with organic vapors cartridge in case of exposure to vapors/aerosols.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid. Hygroscopic. Viscous. Colorless.
Odour and Odour threshold	Odorless.
pH	5.0 to 7.0 (sol. 5% / 25 °C).
Melting point/Freezing point	< 0 °C (It is sub-chilled).
Initial Boiling Point and Boiling Range	Not available.
Flash point	171 to 182 °C (open cup).
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density (air = 1)	6.9.
Relative density (water=1)	1130 kg/m ³ (20 °C).
Apparent density	Not applicable.
Solubility	Completely soluble in water (20 °C).

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Partition Coefficient n-octanol/water Log Kow: -2.30.
Auto-ignition temperature 182 °C.
Decomposition temperature Not available.
Viscosity 3.9 to 4.8 cSt (210 °F).

10. STABILITY AND REACTIVITY

Chemical stability Stable under normal conditions of use and storage.
Reactivity No hazardous reactivity is expected.
Possibility of Hazardous Reactions Not polymerize.
Conditions to avoid High temperatures, ignition sources and prolonged exposure to the air.
Incompatible materials Avoid contact with:
Acids.
Oxidizing materials.
Combustible materials.
Hazardous decomposition products In case of combustion it may generate carbon monoxide, besides CO₂.
Considerations on the use of the product Not applicable.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

- **Oral** LD50, rat: 28000 mg/kg.
- **Inhalation** Survival, blood counts, hematological parameters, respiratory physiology and histopathology were not different from the control values in a study with rats and mice exposed for 6 hours to a PEG200 concentration of 2516 mg/m³.
- **Dermal** LD50, rabbit: > 20000 mg/kg.

Skin corrosion/irritation Undiluted PEG200 applied once for 24 hours or applied repeatedly (14 days, every second day for 24 hours) did not cause skin irritation.

Serious eye damage/eye irritation (rabbit, 24h, 500 mg).
Slightly irritating.

Respiratory or skin sensitization Not available.

Germ cell mutagenicity Negative.
50 pph, hamster; 25 mmol/L, 3h, hamster (+S9); 3 - 7 mmol/L, 16h, hamster; 100 g/L, others microorganisms.

Carcinogenicity Produced no tumorigenic effect in mice after intravaginal contacts for 1 year. TDLo: 416 mg/kg.

Reproductive toxicity Slight teratogenic effects (skeletal malformations) observed in mice were not observed in studies performed with rats and rabbits exposed at dose levels from 1 to 10 g/kg/day. It is considered to be species-specific.

Specific target organ toxicity - Single exposure Not available.

Specific target organ toxicity - Repeated exposure Toxicological reports have suggested an acceptable daily intake of PEG for human estimated up to 10 mg/kg or 0.7 g/70-kg human/day. For low molecular weight PEGs, this acceptable dose could, in theory, give rise to a systemic (absorbed) dose of approximately 400 mg/day.

Aspiration hazard Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish -
LC50, 24h, Carassius auratus: > 5000 mg/L.
LC50, 96h, Carassius auratus: > 20000 mg/L.
LC50, 96h, Lepomis macrochirus: 1700 mg/L.

Persistence and Degradability 56.2% by BOD MITI test.
Not readily biodegradable.

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Bioaccumulative Potential Log Kow: -2.30.
It is not expected to bioaccumulate in the environment.

Mobility in soil Log Koc: -1.532.
It is expected to have high mobility in soil.

Other Adverse Effects Water hazard class 1: Slightly hazardous to water.

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal

- **Product** The preferred options for disposal include reuse, recycling, co-processing, finding a use for a by-product, incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions. The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.
- **Product Remains** Same method as indicated for product.
- **Packaging** Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies.

14. TRANSPORT INFORMATION

Land Transport ANTT Product not classified as hazardous in accordance with Resolution 420/2004 - Transport Ministry.

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **Hazard Class** Not classified.
- **Hazard Number** Not classified.
- **Packaging Group** Not classified.

Maritime Transport IMDG Product not classified as hazardous in accordance with IMDG Code - 2012 Edition - IMO (International Maritime Organization).

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **IMDG Class** Not classified.
- **Packaging Group** Not classified.
- **EmS** Not classified.

Air Transport ICAO-TI and IATA-DGR Product not classified as hazardous in accordance with Dangerous Goods Regulations - 56th Edition - IATA (International Air Transport Association).

- **UN number** N/A
- **Proper Shipping Name** Not classified.
- **ICAO/IATA Class** Not classified.
- **Label** Not classified.
- **Packaging Group** Not classified.

Land Transportation U.S DOT Product not classified as hazardous in accordance with U.S. DOT (United States Department of Transportation) - 49 CFR 172.101.

Packaging Type Bulk and Non-bulk

Proper Shipping Name Not classified.

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Hazard Class or Division Not classified.
ID Number Not classified.
Packaging Group Not classified.
Remarks Not classified.

15. REGULATORY INFORMATION

Applicable standards Resolution 420 / 2004 – Transport Ministry.
Dangerous Goods by Road (ADR) – Available from January 1st, 2011 – Unece (United Nations Economic Commission for Europe).
U.S.A Department of Transportation – DOT – 49 CFR 172.101.
IMDG Code - 2012 Edition - IMO (International Maritime Organization).
Dangerous Goods Regulations - 56th Edition - IATA (International Air Transport Association).

OSHA Hazard Communication Standard This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III - Sections 311 / 312 (40 CFR 370 Subparts B and C) Immediate (Acute) Health Hazard: No.
Delayed (Chronic) Health Hazard: No.
Fire Hazard: No.
Sudden Release of Pressure Hazard: No.
Reactive Hazard: No.

SARA Title III - Section 313 (40 CFR 372.65) This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

SARA Title III - Section 302 (40 CFR 355 Appendix A) Ethylene oxide (CAS 75-21-8): max. 10 ppm. TPQ: 1000 lb.

CERCLA (40 CFR 302.4) / SARA 304 1,4-Dioxane (CAS 123-91-1): max. 10 ppm. RQ: 100 lb.
Ethylene oxide (CAS 75-21-8): max. 10 ppm. RQ: 10 lb.
Ethylene glycol (CAS 107-21-1): max. 0.25%. RQ: 5000 lb.
Reportable Quantity (RQ) of this product is 1000000 pounds based upon Ethylene oxide which yielded the lowest resultant RQ according to the following formula: CERCLA ingredient RQ / % of that ingredient in the product.

New Jersey Hazardous Substance List 1,4-Dioxane (CAS 123-91-1): Substance# 0789 (Special Health Hazard Code: CA – Carcinogen; F3 – Flammable 3rd degree).
Ethylene oxide (CAS 75-21-8): Substance# 0882 (Special Health Hazard Code: CA – Carcinogen; MU – Mutagen; TE – Teratogen; F4 – Flammable 4th degree; R3 – Reactive 3rd degree).
Ethylene glycol (CAS 107-21-1): Substance# 0878.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act) WARNING! This product contains a chemical known to the State of California to cause cancer.
- 1,4-Dioxane.
- Ethylene oxide.
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
- Ethylene oxide.

Pennsylvania Hazardous Substance List 1,4-Dioxane (CAS 123-91-1) and Ethylene oxide (CAS 75-21-8): Listed also as an environmental hazard and as a special hazardous substance.
1,2-ethanediol (CAS 107-21-1): Listed as an environmental hazard.
Ethanol, 2,2 -oxybis- (CAS 111-46-6): Listed.

Inventory Status United States & Puerto Rico – Toxic Substances Control Act (TSCA) Inventory: Yes
Canada – Domestic Substances List (DSL): Yes
Canada – Non-Domestic Substances List (NDSL): No
Europe – European Inventory of Existing Commercial Chemical Substances (EINECS): No
Europe – European List of Notified Chemical Substances (ELINCS): No
Australia – Australian Inventory of Chemical Substances (AICS): Yes
Philippines – Philippine Inventory of Chemicals and Chemical Substances (PICCS): Yes
Japan – Inventory of Existing and New Chemical Substances (ENCS): Yes
Korea – Existing Chemicals List (ECL): Yes
China – Inventory of Existing Chemical Substances in China (IECSC): Yes
New Zealand – New Zealand Inventory: Yes
*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

16. OTHER INFORMATION

Remarks Not applicable.

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Sources

LOLI - ChemADVISOR's Regulatory Database.
eChemPortal - The Global Portal to Information on Chemical Substances.
European Chemicals Agency - <http://echa.europa.eu/>.
Toxnet - Toxicology Data Network.
OECD Screening Information Data Sets (SIDS).
2016 Guide to Occupational Exposure Values – ACGIH.
2016 TLVs and BEIs – Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – ACGIH.

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists (USA).
ADR: European agreement concerning the international carriage of dangerous goods by road.
CAS: Chemical Abstracts Service (American Chemical Society - EUA).
EC50: Average concentration for 50% of maximum response.
LC: Lethal Concentration - substance concentration in the environment that leads to death after a certain period of exposure.
LC50: Lethal concentration for 50% of the test animals.
BOD: Biochemical Oxygen Demand.
LD50: Lethal Dose for 50% of the test animals.
LDLo: Lethal Dose Low - minimal amount of a chemical lethal to animals in testing.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods by Regulations by the IATA
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO.
IMDG: International Maritime Code for Dangerous Goods.
IDLH - Immediately Dangerous To Life or Health Concentrations.
Kow: Octanol/water partition coefficient.
LT (NR 15): Exposure limits of the standard number 15 - Unhealthy Operations and Activities from the Ministry of Labour and Employment of Brazil.
LOAEL: Lowest Adverse Effect Level
LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database
NLP: No Longer Polymers.
NIOSH: National Institute for Occupational Safety and Health.
NOAEL: No Observed Adverse Effect Level
NTP: National Toxicology Program.
OSHA: Occupational Safety and Health Administration (EUA).
PEL-TWA: Exposure Limit Allowed – time-weighted average.
RID: Regulations concerning the international transport of dangerous goods by rail.
TLV-STEL: Tolerance Limit - short period of time (15 minutes, maximum).
TLV-TWA: Tolerance Limit – time weighted average.
WGK: Wassergefährdungsklasse (Germany) - Water Hazard Class.

This Safety Data Sheet was authored according to our current knowledge and experience, however cannot imply guarantee of any nature. Considering the variety of factors that can affect their process or application, the information on this sheet does not exempt the processors from the responsibility of executing their own tests and experiments.