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# MSA – EDF 50 US

Effective Date: 01/05/05

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## 1. Chemical Product and Company Identification

**Generic Name:**

**Mineral oil based metal working fluid**

**Manufacturer:**

unitech GmbH, Roentgenstr. 7, D-57439 Attendorn

Telephone Number: +49 (0) 2722 9376 0

Fax Number: +49 (0) 2722 9376 76

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## 2. Composition/Information on Ingredients

Mixture of specific additives in mineral oil

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## 3. Hazards Identification

### Emergency Overview

**Unnecessary exposure to the product should be avoided. In case of contact with skin, eyes and clothing, product has to be removed immediately.**

**Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**

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### Potential Health Effects

**Inhalation:**

Not expected to be a probable route of exposure to product. Inhalation can occur in applications where high mist levels are generated. Extended exposure to mist may cause upper respiratory irritation.

**Ingestion:**

Swallowing small quantities may cause nausea or diarrhea.

**Skin Contact:**

Prolonged contact may cause irritation; occasionally dermatitis due to hypersensitivity occurs.

**Eye Contact:**

Product may be a primary eye irritant.

**Chronic Exposure:**

Prolonged or repeated skin contact may cause dermatitis.

**Aggravation of Pre-existing Conditions:**

May aggravate existing skin irritation where further defatting or skin penetration could occur.

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## MSA – EDF 50 US

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### 4. First Aid Measures

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

If swallowed, **do not induce vomiting**. Rinse mouth with water. Get medical attention.

**Skin Contact:**

Wash exposed area with soap and water.

**Eye Contact:**

Flush immediately with running water. Get medical attention.

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### 5. Fire Fighting Measures

**Fire:**

Flash point: 165°C (329°F) CC.

Hazardous combustion products: smoke, fumes, COx, SOx, phosphorus oxides

**Explosion:**

Explosive vapor-air mists may be formed.

Explosive limits           LEL:   app. 0,6   Vol%

(Estimated values)   UEL:   app. 6,5   Vol%

**Fire Extinguishing Media:**

Dry chemical, alcohol foam, carbon dioxide, or water spray. Water spray may be used to keep fire exposed containers cool.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

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### 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Collect with absorbent material and discard according to Federal, State and Local regulations.

Keep product out of sewage systems or water bodies. Avoid entering into the ground.

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### 7. Handling and Storage

Storage place should provide protection against frost and heat. Best stored between 50 and 85°F in a dry and ventilated area.

Keep container tightly closed.

Avoid all contact with eyes and skin.

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**MSA – EDF 50 US**

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**8. Exposure Controls/Personal Protection****Airborne Exposure Limits:**

		<b>Contents</b>
Metalworking fluid (mist)	0,5 mg/m <sup>3</sup> (NIOSH, REL)	100%
Mineral oil (mist)	5 mg/m <sup>3</sup> (OSHA, PEL; ACGIH, TLV)	50 - 75%

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Skin Protection:**

If allowed wear protective gloves (nitrile). Use water-based skin barrier cream and clean body-covering clothing when handling.

**Eye Protection:**

Safety goggles are recommended where splashing is possible.

**Work/Hygiene Practices:**

Good personal hygiene should always be practiced.

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**9. Physical and Chemical Properties****Appearance:**

Yellow oily liquid

**Odor:**

Typical

**Solubility:**

Insoluble in water.

**Density:**

895 kg/m<sup>3</sup>

**pH @ 20 g/l in water, 20°C (68°F):**

ND

**% Volatiles by volume @ 21°C (70°F):**

0

**Boiling Point:**

>280°C (>536°F)

**Vapor Density (Air=1):**

ND

**Vapor Pressure (hPa):**

< 0,1

**Evaporation Rate:**

ND

## MSA – EDF 50 US

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### 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Hazardous combustion products: smoke, fumes, COx, SOx, phosphorus oxides

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Avoid contact with oxidizers or strong acids.

**Conditions to Avoid:**

Heat, flames, incompatibles.

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### 11. Toxicological Information

**Oral rat LD50** >2000 mg/kg (calculated)

**Skin Effects** Prolonged contact may cause irritation; occasionally dermatitis due to hypersensitivity occurs.

**Eye Effects** Mild eye irritation expected

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### 12. Ecological Information

This product represents a hazard to water. Keep product out of sewage systems or water bodies. Avoid entering into the ground.

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### 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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### 14. Transport Information

**By Land** Not a hazardous material (49 CFR 172.101).

**By Air or Vessel** Not a hazardous material (49 CFR 175.176)

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**MSA – EDF 50 US**

**15. Regulatory Information**

CERCLA Section 103

Components present in this product at a level which could require reporting under 40CFR302.4:           None

SARA Section 302:           Not applicable

SARA Hazard categories, SARA Sections 311/312

Acute	Chronic	Fire	Reactivity	Pressure
Yes	No	Yes	No	No

SARA Sections 313:           None

Chemical Inventories

The Ingredients of this product are on the following Chemical Substance Inventories:       EINECS   TSCA

**Poison Schedule:** No information found.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**16. Other Information**

**NFPA Ratings:**           Health: 1       Flammability: 1       Reactivity: 0

**Label Hazard Warning:** None.

**Label Precautions:**   As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the product and ensure prompt removal from skin, eyes and clothing.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Label First Aid:**       If swallowed, do not induce vomiting. Get medical intention immediately

**Product Use:**           Metal Working Fluid

**Revision Information:** No changes

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The opinions expressed herein are those of qualified experts within unitech GmbH and of their suppliers. We believe that the information contained herein is current as of the date of this Material Data Sheet. Since the use of this information and of these opinions and the condition and use of the product are not within the control of unitech GmbH, it is the user's obligation to determine the conditions of safe use of the product.

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