

EC Material Safety Data Sheet acc. to 91/155/EWG



Trade name: Milling oil 9758
revised on: 05.06.2009
Date of impression: 05.06.2009

1. Identification of the Substance/Preparation/Manufacturer

Material safety data sheet acc. to 91/155/EWG

Product designation: Milling oil 9758

Intended use: Milling oil to be used in precision technique

Manufacturer:

GEBR. BRASSELER GmbH & Co. KG
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NATIONAL POISONING EMERGENCY CENTER (BERLIN) +49 (0)30 19240 (poisoning emergency)

2. Composition/Information on Ingredients

Chemical characterisation: Isoparaffin hydrocarbon

Chemical name	CAS number	EINECS number	% weight	Code letter	R-Phrases*
Isoalkanes	90622-58-5	265-067-2	100%	Xn	R65, R66

*NOTE: See section 16 with regard to the wording of the R-Phrases

3. Data regarding health hazards

Classification: Xn | R65, R66

Physical / Chemical hazards

Material may release vapours, which can form highly inflammable mixtures. Accumulated vapours may deflagrate or explode in case of ignition. Material may accumulate electrostatic charging, which may lead to electric discharge and spark formation.

Health hazards

Harmful to health: may cause lung damage if swallowed. Repeated exposure may cause rough, chapped skin.

May be irritating to eyes, nose, throat and lungs.

Note: Without the previous advice of a specialist, this substance should not be used for purposes any other than those mentioned under section 1.

4. First Aid Measures

If inhaled: Remove affected person from further exposure. For those providing assistance, avoid exposure to yourself and others. Use appropriate respiratory protection. If respiratory irritation, dizziness, nausea or unconsciousness occurs seek medical advice immediately. If breathing has stopped, assist ventilation with a medical device or use mouth-to-mouth resuscitation.

Skin contact: Wash off with plenty of water and soap. Take off contaminated clothing. Wash clothing before re-use.

Eye contact: In case of contact with the eyes, flush with plenty of water. If eye irritation develops, seek medical advice.

If ingested: Seek medical advice immediately. Do not induce vomiting.

Note to physicians: Aspiration of material into the lungs can cause chemical pneumonia. Give corresponding medical treatment.

5. Fire-fighting Measures

Suitable extinguishing media: To extinguish use water mist, foam, powder or carbon dioxide (CO₂)

Unsuitable extinguishing agent: Direct water jet

Fire-fighting instructions: Do not allow liquid fire extinguishing media (or dilutions thereof) to enter into waters, sewage systems or clear-water reservoirs. Cool surfaces exposed to fire with water mist and protect personnel.

Exceptional fire hazards: inflammable

Dangerous combustion products: free carbon dioxides, fume, vapour, products of incomplete combustion.

Ignition properties:

Flash point (procedure): > 62°C (144°F) (ASTM D-93)

Ignition range (vol.-% in air app.): lower expl. limit: 0.6 Upper expl. limit: 7.0

Auto ignition temperature: > 200°C (392°F)

6. Accidental Release Measures

Safety measures

See section 5 for information on how to protect against fire. See section 3 for information on serious hazards. See section 4 for information on first aid measures. See section 8 for information on personal protective equipment.

Measures to be taken in the event of a spill

Landspill: Absorb with liquid absorbent material (sand, diatomite, universal absorbents)

Waterspill: Remove substance from the surface by skipping or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Environmental precautions

Large spills: Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Handling: Avoid prolonged contact with skin. Follow the instructions for correct grounding / connection. Prevent small spills and leakages which present a slip hazard. Material may accumulate electrostatic charging, which may lead to electric spark formation (source of ignition).

Loading / Unloading temperature: ambient

Transport temperature: ambient

Transport pressure: ambient

Static accumulator: This material is a static accumulator

Further information on storage conditions: Not required

Storage category: LGK 8AL Combustible caustic materials (liquid)

Storage: Keep containers closed. Store in a cool, ventilated place

Storage temperature: ambient

Storage pressure: ambient

8. Exposure Control / Personal Protective Equipment

Exposure limit values / Reference values

Substance designation	Form	Limit value
ISOALKANE, C11- C15	Vapour	8 hours (average) 1,200 mg/m ³ 171 ppm Overall

Exposure limit and control of exposure at the workplace:

Personal protective equipment varies according to the potential exposure conditions such as procedures, handling, concentration, and ventilation of each individual. The below listed information on the selection of protective equipment for use with this material, is based upon normal use according to the intended application.

Respiratory protection: If the concentration of pollutants in the air cannot be maintained at a harmless level by technical measures, all affected staff should wear approved respiratory protection to protect their health.

Hand: If prolonged or repeated contact is likely, chemical resistant gloves are recommended.

Eyes: If contact is likely, safety glasses with side shield are recommended.

General hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Wash work clothing and protective equipment regularly to remove contaminations. Discard contaminated clothing and footwear that cannot be cleaned. Keep your work place clean and tidy.

Environmental controls: See sections 6, 7, 12, 13.

9. Physical and chemical characteristics

Physical state:	Liquid
Colour:	Colorless
Odour:	Characteristic
Odour threshold:	Not determined
Relative density (at 15 °C):	0.771
Density (at 15 °C):	770 kg/m ³ (6.43 lbs/gal, 0.77 kg/dm ³)
Flashpoint (procedure):	> 62 °C (144 °F) (ASTM D-93)
Ignition temperature (vol-% in air app.):	Lower explosion limit: 0.6 Upper explosion limit: 7.0
Auto-ignition temperature:	> 200 °C (392 °F)
Boiling point / Boiling range:	185 °C (365 °F) - 213 °C (415 °F)
Vapour density (Air = 1):	> 1 bei 101 kPa
Vapour pressure:	0.03 kPa (0.23 mm Hg) bei 20 °C 0.2 kPa (1.5 mm Hg) bei 38 °C 0.4 kPa (3 mm Hg) bei 50 °C
Evaporation Speed (n-Butyl acetate = 1):	0.03
pH-value:	Not applicable
Logarithm of the distribution coefficient between n-octanol and water:	Not determined
Solubility in water:	Insignificant
Viscosity:	1.38 cSt (1.38 mm ² /sec) at 40 °C (calculated) 1.67 cSt (1.67 mm ² /sec) at 25 °C

Oxidising properties:	See sections 3, 15, 16
Solidification point:	<-50°C (-58°F)
Melting point:	Not determined
Molar mass:	172
Hygroscopic:	no
Thermal expansion coefficient:	0,97-10 ⁻³ /K
Decomposition temperature:	Not determined

10. Stability and Reactivity

Stability:	Material is stable under normal conditions
Conditions to be avoided:	Unshielded flames and high energy ignition sources
Materials to be avoided:	Strong oxidising agents
Dangerous decomposition products:	This products does not decompose at ambient temperature
Dangerous polymerization:	no

11. Toxicological Information

Acute toxicity: Way of exposure Conclusion / Remarks

Inhalation: Minimally toxic.

Irritation: Insignificant risk in case of normal handling and ambient temperatures.

Ingestion: LD50 > 10,000 mg / kg Minimally toxic.

Skin: LD50 > 3,160 mg / kg Minimally toxic

Irritation: Mild irritation to skin with prolonged exposure

Eyes: May briefly cause mild discomfort to eyes

Chronic or other effects of the product: A vapour concentration exceeding the recommended exposure limit may be irritating to the eyes and respiratory tracts, cause headache and nausea, have a numbing effect and other effects on the central nervous system. Prolonged or repeated skin contact with materials with low viscosity may have a degreasing effect and cause irritation and inflammation to skin. If ingested or vomited there is a risk that small amounts of liquid which are aspirated into the lung may cause chemical pneumonitis or pulmonary oedema.

12. Ecological information

The information is based on data available for the material, the components of the material, and similar materials.

Ecotoxicity effects: Not expected to be harmful to aquatic organisms.

Unlikely to be chronically toxic to aquatic organisms.

Mobility: Slightly volatile, distributes quickly in the air. Distribution/sedimentation to the sediment layer or sewage solids unlikely.

Persistence and Degradability:

Biotic Degradation: Expected to be inherently biodegradable.

Hydrolysis: Not expected to transform significantly due to hydrolysis.

Photolysis: Not expected to transform significantly due to photolysis.

Oxidation by air: Expected to degrade quickly in the air

Other ecological information (VOC – volatile organic compound): Yes

13. Disposal considerations

Disposal of the product has to comply with the laws and guidelines relevant at the time of disposal and the product properties.

Disposal guidelines: The product can be disposed of by controlled burning at very high temperatures, which avoids the formation of undesired flammable products.

Information on correct disposal – European Waste Code: 08 01 02

Note: This waste code number was assigned to the product on the basis of the most frequent applications of this substance.

14. Information on transport

By road/rail (ADR/RID): This product is not subject to the ADR/RID regulations concerning the transport of dangerous goods by road/rail.

By sea (IMDG): This product is not subject to the regulation of the International Maritime Dangerous Goods Code.

By air (IATA): This product is not subject to the IATA-DGR regulations concerning the transport of dangerous goods by air.

15. Directives

Substance is classified hazardous according to the definition of the EC guidelines on hazardous substances/preparations.

Classification: (Classification of this product is in whole or in part based on test data)

Symbol: Xn (Harmful)

Type of special hazard: R65; Harmful: may cause lung damage if swallowed.

R66; Repeated contact may cause rough, chapped skin.

Safety recommendations: S23; Do not breathe in gas/fume/vapour/aerosol. S24; Avoid contact with skin. S62; Do not induce vomiting if swallowed. Seek medical advice immediately.

Contains: ISOALKANE, C11-C15

Legal Status and Relevant Laws and Directives

Listed in the following registers/countries: AICS, IECSC, EINECS, ENCS, KECI, PICCS

Relevant EC Guidelines and Provisions: 1999/13/EG (Limitation of emissions of volatile organic compounds)

Water pollution class: WGK 1

Statutory order on hazardous incidents: Not subject to the regulations of the German Statutory Order on Hazardous Incidents.

Technical Instructions – Air (TA-Air): This product contains matters that come under the provisions of 5.2.5

16. Other information

The keys of risk codes are listed under section 2 and 3 of the present document (for information only):

R65; Harmful to health: may cause lung damage if swallowed

R66; Repeated exposure may cause rough, chapped skin

Additional information:

The information given is based on our knowledge as it is today and provides information on safety precautions with regard to the product. These information do not warrant product properties.

Marking of changes:

Changes from the previous issue are marked with a bar (|) at the left margin of the page.