

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** MOLOTOW™ Chalk **silver**
- **Article number:** 228001, 328001, 628001, 693701
- **Registration number**
The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified
- **Application of the substance / the mixture** water based chalkmarker ink
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Feuerstein GmbH MOLOTOW Distribution
Willy-Brandt-Straße 9/2
D 77933 Lahr / Schwarzwald
Phone +49 (0)7821 92 229 0 [8:00 - 17:00 (UTC+1)]
Fax +49 (0)7821 92 229 99
www.molotow.com
- **1.4 Emergency telephone number:**
Feuerstein GmbH MOLOTOW Distribution
Phone +49 (0)7821 92 229 0 [8:00 - 17:00 (UTC+1)]

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** none
- **Signal word** none
- **Hazard statements**
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
Mixture of the following substances, containing non-hazardous substances and colouring agents.
- **Description:** Mixture of substances listed below with nonhazardous additions.

• **Dangerous components:**

CAS: 7429-90-5 EINECS: 231-072-3	aluminium powder (stabilised) ☠ Flam. Sol. 2, H228	10-25%
CAS: 134180-76-0 EC number: 603-798-4	Polyether modified trisiloxane ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	≤ 2.5%
CAS: 4724-48-5 EINECS: 225-218-5	octylphosphonic acid ☠ Acute Tox. 4, H302	≤ 2.5%
CAS: 95-38-5 EINECS: 204-414-9	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol ☠ STOT RE 2, H373; ☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☠ Acute Tox. 4, H302	≤ 1.0%
CAS: 9016-45-9 NLP: 500-024-6	nonylphenolethoxylates ☠ Eye Dam. 1, H318; ☠ Aquatic Chronic 2, H411; ☠ Acute Tox. 4, H302	< 0.1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
 - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
 - **After skin contact:** Generally the product does not irritate the skin.
 - **After eye contact:** Rinse opened eye for several minutes under running water.
 - **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
n.a.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore

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- to be checked prior to the application.
- **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	According to product specification
Odour:	Product specific
Odour threshold:	Not determined.

Important information on protection of health and environment, and on safety.

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pH-value at 20 °C: 9

Change in condition

Melting point/freezing point:	n.d. °C
Initial boiling point and boiling range:	100 °C

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Not determined.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure at 20 °C: 23 hPa

Density: Not determined.

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with water:

Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

Dynamic at 20 °C:	11 mPas
Kinematic:	Not determined.

Solvent content:

Organic solvents:	0.5 %
Water:	59.3 %

Solids content: 33.4 %

9.2 Other information

The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

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SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

134180-76-0 Polyether modified trisiloxane

Oral	LD50	3200, mg/kg (rat)
Dermal	LD50	1550 mg/kg (B)

- Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxicological effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

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|---|-----------------|
| 14.1 UN-Number
ADR, ADN, IMDG, IATA | not applicable |
| 14.2 UN proper shipping name
ADR, ADN, IMDG, IATA | not applicable |
| 14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class | not applicable |
| 14.4 Packing group
ADR, IMDG, IATA | not applicable |
| 14.5 Environmental hazards:
Marine pollutant: | No |
| 14.6 Special precautions for user | Not applicable. |
| 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |

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· UN "Model Regulation": not applicable

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 46b
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	≤1.0
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
H228 Flammable solid.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
- Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 2: Flammable solids - Category 2
Acute Tox. 4: Acute toxicity - Category 4
Skin Corr. 1B: Skin corrosion/irritation - Category 1B
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3
- * Data compared to the previous version altered.