

1 Identification of substance

- **Product details**
- **Trade name:** MA 4522 red / rot
- **Application of the substance / the preparation** Permanent marker ink
- **Manufacturer/Supplier:**
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- **Information department:**
Technical Service, Dr. B. Polzin
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- **Emergency information:**
Product Safety, Dr. Polzin
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2 Composition/Data on components

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

• **Dangerous components:**

107-98-2	1-methoxy-2-propanol	25-50%
71-23-8	propan-1-ol	25-50%

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

3 Hazards identification

- **Hazard description:**



Irritant

- **Information pertaining to particular dangers for man and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Has a narcotizing effect.
Flammable.
Risk of serious damage to eyes.
Vapours may cause drowsiness and dizziness
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 2
Fire = 3
Reactivity = 0

4 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. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

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5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **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:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

107-98-2 1-methoxy-2-propanol

REL	Short-term value: 540 mg/m ³ , 150 ppm Long-term value: 360 mg/m ³ , 100 ppm
TLV	Short-term value: 553 mg/m ³ , 150 ppm Long-term value: 369 mg/m ³ , 100 ppm

71-23-8 propan-1-ol

REL	500 mg/m ³ , 200 ppm
REL	Short-term value: 625 mg/m ³ , 250 ppm Long-term value: 500 mg/m ³ , 200 ppm Skin
TLV	Short-term value: (614) mg/m ³ , (250) ppm Long-term value: 492 mg/m ³ , 200 ppm NIC-400; 984; NIC-A 3; delete Skin

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

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 to be checked prior to the application.

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- **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:**



Tightly sealed goggles

9 Physical and chemical properties

• General Information

Form:	Fluid liquid
Color:	According to product specification red
Odor:	Characteristic

Important information on protection of health

- **Change in condition and environment, and on safety.**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	96°C (205°F)

- **Flash point:** 21 - 55°C (70 - 131°F)
- **Ignition temperature:** 270.0°C (518°F)
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- **Explosion limits:**

Lower:	2.1 Vol %
Upper:	13.5 Vol %
- **Vapor pressure at 20°C (68°F):** 19.0 hPa (14 mm Hg)
- **Density at 20°C (68°F):** 0.830 g/cm³
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Viscosity:**

Dynamic at 20°C (68°F):	4 mPas
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- **Solvent content:**

Organic solvents:	87.4 %
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- **Solids content:** 12.6 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

12 Ecological information

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1263
- **Packing group:** III
- **Proper shipping name (technical name):** PAINT
- **Label:** 3

- **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 3 (F1) Flammable liquids
- **Danger code (Kemler):** 30
- **UN-Number:** 1263
- **Packaging group:** III
- **Description of goods:** 1263 PAINT

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 1263
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Propper shipping name:** PAINT

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1263
- **Label:** 3
- **Packaging group:** III
- **Propper shipping name:** PAINT

15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

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• **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

• **Proposition 65**

• **Chemicals known to cause cancer:**

None of the ingredients is listed.

• **Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

• **Carcinogenicity categories**

• **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

• **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

• **NTP (National Toxicology Program)**

None of the ingredients is listed.

• **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

• **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

• **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

• **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

• **Hazard symbols:**



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• **Risk phrases:**

Flammable.
Risk of serious damage to eyes.
Vapours may cause drowsiness and dizziness

• **Safety phrases:**

Keep out of the reach of children.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear eye/face protection.
If swallowed, seek medical advice immediately and show this container or label.
Dispose of this material and its container at hazardous or special waste collection point

• **National regulations:**

• **Technical instructions (air):**

Class	Share in %
NK	87.4

• **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

• * Data compared to the previous version altered.