

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

- **1.1 Product identifier**
- **Trade name:** Marker Spray E-COLL
- **Article number:** 4317784243605
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**  
 SU21 Consumer uses: Private households / general public / consumers  
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Application of the substance / the mixture** Auxiliary
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 E/D/E - Einkaufsbuero Deutscher Eisenhaendler GmbH  
 EDE Platz 1  
 D-42389 Wuppertal  
 Germany  
  
 Tel. +49 202 6096-0  
 e-mail: sdb@ede.de
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:** Giftinformationszentrum Mainz – Tel.: +49 (6131) 19240

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07

Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.

- **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**



GHS02



GHS07

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
 propan-2-ol
- **Hazard statements**  
 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.
- **Precautionary statements**  
 P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.

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## Safety data sheet

according to 1907/2006/EC, Article 31

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**Trade name: Marker Spray E-COLL**

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- P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
- P251 *Do not pierce or burn, even after use.*
- P211 *Do not spray on an open flame or other ignition source.*
- P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P410+P412 *Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Additional information:**

*EUH066 Repeated exposure may cause skin dryness or cracking.*

*Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.*

*Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.*

*Buildup of explosive mixtures possible without sufficient ventilation.*

· **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**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether ⚠ Flam. Gas 1, H220; Press. Gas C, H280	25-50%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43	butanone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%

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

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

*Immediately remove any clothing soiled by the product.*

*Personal protection for the First Aider.*

· **After inhalation:**

*Supply fresh air.*

*Seek medical treatment in case of complaints.*

· **After skin contact:**

*Immediately wash with water and soap and rinse thoroughly.*

*If skin irritation continues, consult a doctor.*

· **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

· **After swallowing:**

*Rinse out mouth and then drink plenty of water.*

*If symptoms persist consult doctor.*

· **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

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- **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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** Can form explosive gas-air mixtures.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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**  
Open and handle receptacle with care.  
Use only in well ventilated areas.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.  
Do not spray onto a naked flame or any incandescent material.  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Protect from heat and direct sunlight.
- **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.

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· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**115-10-6 dimethyl ether**

WEL	Short-term value: 958 mg/m <sup>3</sup> , 500 ppm Long-term value: 766 mg/m <sup>3</sup> , 400 ppm
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**67-63-0 propan-2-ol**

WEL	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm Long-term value: 999 mg/m <sup>3</sup> , 400 ppm
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**78-93-3 butanone**

WEL	Short-term value: 899 mg/m <sup>3</sup> , 300 ppm Long-term value: 600 mg/m <sup>3</sup> , 200 ppm Sk, BMGV
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· **Ingredients with biological limit values:**

**78-93-3 butanone**

BMGV	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one
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· **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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Short term filter device:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A/P2

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· **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

· **Body protection:** Protective work clothing

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### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

· <b>Form:</b>	Aerosol
· <b>Colour:</b>	Different according to colouring
· <b>Odour:</b>	Alcohol-like
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

##### · Change in condition

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Not applicable, as aerosol.

· **Flash point:** Not applicable, as aerosol.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 235 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

##### · Explosion limits:

· <b>Lower:</b>	1.8 Vol %
· <b>Upper:</b>	18.6 Vol %

· **Vapour pressure at 20 °C:** 5200 hPa

· <b>Density at 20 °C:</b>	0.72165 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.

· **Solubility in / Miscibility with water:** Fully miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

##### · Viscosity:

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

#### · 10.1 Reactivity

#### · 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:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** Irritating effect.

· **Sensitisation:** No sensitising effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

### 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.

· **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.

· **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**

Containers can be recycled if completely empty; if not, dispose product/containers as dangerous waste. Observe local regulations.

· **European waste catalogue**

16 05 04*	gases in pressure containers (including halons) containing dangerous substances
15 01 10*	packaging containing residues of or contaminated by dangerous substances

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1950

· **14.2 UN proper shipping name**

· **ADR**

UN1950 AEROSOLS

· **IMDG, IATA**

AEROSOLS

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· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 2 5F Gases.  
· **Label** 2.1

· **IMDG, IATA**



· **Class** 2 Gases.  
· **Label** 2.1

· **14.4 Packing group**

· **ADR** Void

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

Warning: Gases.

· **EMS Number:** F-D,S-U

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 1L  
· **Transport category** 2  
· **Tunnel restriction code** D

· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1

**SECTION 15: Regulatory information**

· **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**

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

· **Department issuing MSDS:** Product safety department

· **Contact:** Head of Product Safety Department

· **Abbreviations and acronyms:**

- 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

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**Safety data sheet**  
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*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)*  
*Flam. Gas 1: Flammable gases, Hazard Category 1*  
*Flam. Aerosol 1: Flammable aerosols, Hazard Category 1*  
*Press. Gas C: Gases under pressure: Compressed gas*  
*Flam. Liq. 2: Flammable liquids, Hazard Category 2*  
*Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2*  
*STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*

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