

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

- **1.1 Product identifier**
- **Trade name:** Aluminium Spray E-COLL
- **Article number:** 4317784349109
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 SU21 Consumer uses: Private households / general public / consumers
- **Application of the substance / the mixture** Coating material
- **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.

- **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 statements**
 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
 H319 Causes serious eye irritation.
- **Precautionary statements**
 P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 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.
 P271 Use only outdoors or in a well-ventilated area.

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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.

· **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: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119486136-34	xylene ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2.5-10%
CAS: 7429-90-5 EINECS: 231-072-3 Reg.nr.: 01-2119529243-45	aluminium powder (stabilised) ⚠ Flam. Sol. 1, H228	2.5-10%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-xxxx	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2.5-10%
CAS: 64742-95-6 EC number: 918-668-5 Reg.nr.: 01-2119455851-35-xxxx	Solvent naphtha (petroleum), light arom. ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H335-H336	<2.5%
CAS: 71-36-3 EINECS: 200-751-6 Reg.nr.: 01-2119484630-38	butan-1-ol ⚠ Flam. Liq. 3, H226; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	<1.25%
CAS: 78-78-4 EINECS: 201-142-8	isopentane ⚠ Flam. Liq. 1, H224; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	< 1%

· **Additional information:** For the wording of the listed risk 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.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **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:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **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.
Inform respective authorities in case of seepage into water course or sewage system.
- **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.

Do not spray onto a naked flame or any incandescent material.

- **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.

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- **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.

· **8.1 Control parameters**

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

106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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67-64-1 acetone

WEL	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm
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141-78-6 ethyl acetate

WEL	Short-term value: 400 ppm Long-term value: 200 ppm
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1330-20-7 xylene

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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123-86-4 n-butyl acetate

WEL	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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71-36-3 butan-1-ol

WEL	Short-term value: 154 mg/m ³ , 50 ppm Sk
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- **Ingredients with biological limit values:**

1330-20-7 xylene

BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
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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:**

Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2

- **Protection of hands:** Recommendation: protective gloves

- **Material of gloves**

Butyl rubber, BR
Recommended thickness of the material: ≥ 0.4 mm

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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.
- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Aerosol
Colour: Silver grey

· **Odour:** Aromatic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

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

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

· **Ignition temperature:** 365 °C

· **Decomposition temperature:** Not determined.

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

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

· Explosion limits:

Lower: 1.1 Vol %

Upper: 13.0 Vol %

· **Vapour pressure at 20 °C:** 4200 hPa

· **Density at 20 °C:** 0.7 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not applicable.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

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

· Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

VOC (EC) % 88.10 %

VOC (EC) g/l 625.0 g/l

VOCV (CH) 88.10 %

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

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.

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- **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.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **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 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
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**
Containers can be recycled if completely empty; if not, dispose product/containers as dangerous waste.
Observe local regulations.

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· **Recommendation**

Completely emptied packagings can be given for recycling. (In accordance with local authority regulations, take to chemical/physical treatment plant.)

· **European waste catalogue**

16 05 04* | gases in pressure containers (including halons) containing dangerous substances

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**

· **ADR** UN1950 AEROSOLS
 · **IMDG** AEROSOLS
 · **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**



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

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

Warning: Gases.
 · **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U

· **14.7 Transport in bulk according to Annex II of Marpol 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

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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.
- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

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

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

- **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)
- VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- 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. 1: Flammable liquids, Hazard Category 1
- Flam. Liq. 2: Flammable liquids, Hazard Category 2
- Flam. Liq. 3: Flammable liquids, Hazard Category 3
- Flam. Sol. 1: Flammable solids, Hazard Category 1
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2