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

- · 1.1 Product identifier
- · Trade name: Zinc spray E-COLL
- · Article number: 4317784349406
- · 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 Anticorrosion additive
- · 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

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



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Causes skin irritation. Skin Irrit. 2 H315

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: acetone

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Low boiling point naphtha - unspecified

· Hazard statements

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

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

· 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.

P280 Wear protective gloves / eye protection.
P271 Use only outdoors or in a well-ventilated area.

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:

EUH018 In use may form flammable/explosive vapour-air mixture.

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: 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: 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	10- <25%
CAS: 7440-66-6 EINECS: 231-175-3 Reg.nr.: 01-2119467174-37	zinc powder -zinc dust (stabilized) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5-10%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%
EC number: 918-668-5 Reg.nr.: 01-2119455851-35-xxxx	Chronic 2, H411; 1 STOT SE 3, H335-H336	2.5-10%

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	(1)	Contd. of page 2)
CAS: 106-97-8	butane	2.5-10%
EINECS: 203-448-7	♦ Flam. Gas 1, H220; Press. Gas C, H280	-
Reg.nr.: 01-2119474691-32-xxxx		
CAS: 100-41-4	ethylbenzene	<2.5%
EINECS: 202-849-4	Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1,	-
Reg.nr.: 01-2119489370-35-xxxx	H̃304; ♠ Acute Tox. 4, H̃332	

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

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:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow product to reach sewage system or any water course.

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.

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· Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Protect from heat and direct sunlight.

 \cdot 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

67-64	4-1 acetone	
WEL	Short-term value: 3620 mg/m³, 1500 ppm	
	Long-term value: 1210 mg/m³, 500 ppm	
1330	20-7 xylene	
WEL	Short-term value: 441 mg/m³, 100 ppm	
	Long-term value: 220 mg/m³, 50 ppm	
	Sk; BMGV	
106-9	97-8 butane	
WEL	Short-term value: 1810 mg/m³, 750 ppm	
	Long-term value: 1450 mg/m³, 600 ppm	
	Carc (if more than 0.1% of buta-1.3-diene)	

WEL Short-term value: 552 mg/m³, 125 ppm Long-term value: 441 mg/m³, 100 ppm Sk

· Ingredients with biological limit values:

1330-20-7 xylene

BMGV 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift

Parameter: methyl hippuric acid

- · 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.

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· Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

Self-contained respiratory protective device.

· Protection of hands:



Protective gloves

· Material of gloves

Butyl rubber, BR

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

SECTION 9: Physical and chemical properties

General Information		
Appearance:		
Form:	Aerosol	
Colour:	Grey	
Odour:	Acetone-like	
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:	0.7 Vol %	
Upper:	13.0 Vol %	
Oxidising properties	Not determined.	
Vapour pressure at 20 °C:	4200 hPa	
Density at 20 °C:	0.93 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	

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		(Contd. of page
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octano	l/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
<i>VOC (EC) %</i>	66.00 %	
VOC(EC) g/l	613.8 g/l	
VOCV (CH)	66.00 %	
Solids content:	32.3 %	
· 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.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

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

· LD/LC5	· LD/LC50 values relevant for classification:		
	1330-20-7 xylene		
		4300 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
	Low boiling point naphtha - unspecified		
Oral	LD50	>6800 mg/kg (rat)	
Dermal	LD50	>3400 mg/kg (rab)	

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, 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

May cause drowsiness or dizziness.

- · 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.

E/D/E

Safety data sheet according to 1907/2006/EC, Article 31

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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.
- · Ecotoxical effects:
- · Remark: Very toxic for fish
- $\cdot \textit{Additional ecological information:}$
- · 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. Also poisonous for fish and plankton in water bodies.

- · 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:
- · European waste catalogue

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

SECTION 14:	Transpor	t in	format	ion
SECTION 14.	Transpor	ι $\iota\iota\iota\iota$	or mui	uuu

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name	UN1950 AEROSOLS, ENVIRONMENTALLY
· ADR	HAZARDOUS
· IMDG	AEROSOLS, MARINE POLLUTANT
· IATA	AEROSOLS

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



· Class
 · Label
 2 5F Gases.
 2.1

· IMDG



· Class 2 Gases.

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· Label	2.1
· IATA	
· Class	2 Gases.
· Label	2.1
· 14.4 Packing group	
· ADR, IMDG	Void
· 14.5 Environmental hazards:	
Marine pollutant:	Yes
G . I . I . (ADD)	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Gases.
· EMS Number:	F- D , S - U
14.7 Transport in bulk according to Anne	ex II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
- ADR	
· Limited quantities (LQ)	LQ2
· Tunnel restriction code	B1D
· UN ''Model Regulation'':	UN1950, AEROSOLS, ENVIRONMENTALL HAZARDOUS, 2.1

SECTION 15: Regulatory information

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

P3a FLAMMABLE AEROSOLS

E2 Hazardous to the Aquatic Environment

· 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.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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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.

- · Department issuing SDS: Product safety department
- · Contact: sdb@ede.de
- · 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

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, Schweis (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 - Category 1

Aerosol 1: Aerosols - Category 1

Press. Gas C: Gases under pressure - Compressed gas

Flam. Liq. 2: Flammable liquids - Category 2

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

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