

Printing date 19.02.2020 Version number 49 Revision: 19.02.2020

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

· 1.1 Product identifier

· Trade name: Zinc spray · Article number: LOS95

· 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture Anticorrosion additive

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

EURO-LOCK Vertriebs-GmbH

Nordweststrasse 3 D-959387 Ascheberg Tel.: +49 (0) 2593/95887-0 Fax.: +49 (0) 2593/95887-29

www.euro-lock.de

· Further information obtainable from:

info@euro-lock.de

• 1.4 Emergency telephone number: Tel.: +49 (0) 2593/95887-0

Monday to Thursday 8.00 - 17.00, Friday 08.00 - 13.00 CET.

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.



GHS08 health hazard

STOT RE 2 H373 May cause damage to the hearing organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms









GHS07

· Signal word Danger

· Hazard-determining components of labelling:

xylene

acetone

Hydrocarbons, C9, aromatics

ethylbenzene

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.

H373 May cause damage to the hearing organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects. H410

· Precautionary statements

If medical advice is needed, have product container or label at hand. P101

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Do not spray on an open flame or other ignition source. P211

Do not pierce or burn, even after use. P251 Do not breathe vapours/spray. P260

P271 Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection / face protection. P280

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell. P312

Collect spillage. P391 P405 Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C. P410+P412 P501 Dispose of contents/container to hazardous or special waste collection point.

· Additional information:

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 Mixtures

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

· Dangerous components:		
CAS: 7440-66-6	zinc powder -zinc dust (stabilized)	25-<50%
EINECS: 231-175-3	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
Reg.nr.: 01-2119467174-37-xxxx		
CAS: 67-64-1	acetone	10-<20%
EINECS: 200-662-2	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3,	
Reg.nr.: 01-2119471330-49-xxxx	H336	

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CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane, pure Flam. Gas 1, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-xxxx	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-<20%
EC number: 918-668-5 Reg.nr.: 01-2119455851-35-xxxx	Hydrocarbons, C9, aromatics Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	5-<10%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1, H220; Press. Gas (Comp.), H280	5-<10%
CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 02-2119752523-40-xxxx	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	1-<2.5%

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

Take affected persons into fresh air and keep quiet.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately remove any clothing soiled by the product.

· After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty

Headache

Dizziness

Dizziness

Nausea

· 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

Later observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- \cdot Suitable extinguishing agents:

Fire-extinguishing powder

Carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

Foam

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· For safety reasons unsuitable extinguishing agents: Water

· 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

During heating or in case of fire poisonous gases are produced.

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

· Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

· 6.2 Environmental precautions:

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

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).

Dispose contaminated material as waste according to item 13.

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

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin and eyes.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

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:

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- · 7.3 Specific end use(s) Industrial Processing.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

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(Contd. of page 4) · Ingredients with limit values that require monitoring at the workplace: **CAS: 67-64-1 acetone** WEL | Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm **CAS: 106-97-8 butane, pure** 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) CAS: 1330-20-7 xylene WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk, BMGV CAS: 100-41-4 ethylbenzene WEL Short-term value: 552 mg/m³, 125 ppm Long-term value: 441 mg/m³, 100 ppm Sk · DNELs **CAS: 67-64-1 acetone** Inhalative DNEL 200 mg/m³ (ME) · Ingredients with biological limit values: CAS: 1330-20-7 xylene **BMGV** 650 mmol/mol creatinine Medium: urine Sampling time: post shift

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Parameter: methyl hippuric acid

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

- · Recommended filter device for short term use: Filter AX
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

$\cdot \ Penetration \ time \ of \ glove \ material$

≥60 min

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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• Eye protection: Safety glasses



Tightly sealed goggles

· 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: Grey

Odour: Acetone-like
Odour threshold: Not determined.

pH-value: Not determined.

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: < 0 °C

· Flash point: Not applicable, as aerosol.

• Flammability (solid, gas): Not applicable.

· Ignition temperature: >200 °C

· **Decomposition temperature:** Not determined.

· Auto-ignition temperature: Not determined.

• Explosive properties: Not determined.

· Explosion limits:

Lower:

Upper: Not determined.

Vapour pressure: Not determined.

Description 20 °C: 0.05572 g/cm³

Density at 20 °C: 0.95572 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.

Not determined.

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

· Viscosity:

Dynamic:Not determined.Kinematic:Not determined.Organic solvents:63.9 %VOC (EC)611.2 g/l

Solids content: 0.0 %

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

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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 Contact with water releases flammable gases.
- · 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 Based on available data, the classification criteria are not met.

20,000 mg/kg (rabbit)

	· LD/LC50 values relevant for classification:			
	ATE (Acute Toxicity Estimates)			
	Dermal	LD50	10,422 mg/kg	
	Inhalative	LC50/4 h	92 mg/l	
	CAS: 67-64-1 acetone			
ſ	Oral	LD50	5,800 mg/kg (rat)	

CAS: 74-9		
Inhalative	LC50/4 h	~76 mg/l (rat)

Dermal

Inhalative LC50/4 h >20 mg/l (rat)

CAS: 106-97-8 butane, pure

LD50

Inhalative LC50/4 h 658 mg/l (rat)

CAS: 1330-20-7 xylene

Dermal LD50 1,100 mg/kg (ATE) Inhalative LC50/4 h 11 mg/l (ATE)

CAS: 75-28-5 isobutane

Inhalative LC50/4 h 658 mg/l (rat)

CAS: 100-41-4 ethylbenzene

Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	17,800 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (ATE)

- 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

May cause damage to the hearing organs through prolonged or repeated exposure.

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· Aspiration hazard

May be fatal if swallowed and enters airways.

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
- · 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.

Also poisonous for fish and plankton in water bodies.

Very toxic for 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.

· European waste catalogue		
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	
15 01 04	metallic packaging	

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

14.1 UN-Number	
ADR/RID/ADN, IMDG, IATA	UN1950
14.2 UN proper shipping name	
ADR/RID/ADN	UN1950 AEROSOLS, ENVIRONMENTALLY
	HAZARDOUS
IMDG	AEROSOLS, MARINE POLLUTANT
IATA	AEROSOLS, flammable

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(Contd. of page 8) · 14.3 Transport hazard class(es) · ADR/RID/ADN 2 5F Gases. · Class 2.1 · Label · IMDG 2.1 · Class 2.1 · Label · IATA · Class 2.1 · Label 2.1 · 14.4 Packing group · ADR/RID/ADN, IMDG, IATA Void · 14.5 Environmental hazards: Product contains environmentally hazardous substances: zinc powder -zinc dust (pyrophoric) · Marine pollutant: Symbol (fish and tree) · Special marking (ADR/RID/ADN): Symbol (fish and tree) · 14.6 Special precautions for user Warning: Gases. · Danger code (Kemler): · EMS Number: F-D,S-U · Stowage Code SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 · Segregation Code litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2. · 14.7 Transport in bulk according to Annex II of Not applicable. Marpol and the IBC Code

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· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E0
	Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

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.
- · Seveso category
- E1 Hazardous to the Aquatic Environment

P3a FLAMMABLE AEROSOLS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- \cdot Qualifying quantity (tonnes) for the application of upper-tier requirements $200\ t$
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 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.
- H373 May cause damage to the hearing 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.

· 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)

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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)

VOC: Volatile Organic Compounds (USA, EU) DNEL: Derived No-Effect Level (REACH) 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 (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 4: Acute toxicity - dermal – 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

* Data compared to the previous version altered.

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