

***SAFETY DATA SHEET***  
***according to 1907/2006/EC, Article 31***

Revision date: 01.08.2017

**1- IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

**Product details**

**Trade name:** Aerosol Zink spray

**Article number:** 26711

**Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information available.

**Sector of Use:**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Product category:** PC9a Coatings and paints, thinners, paint removers

**Intended use:** Car refinishing Product/ Anticorrosion additive, Lacquer

**Manufacturer/Supplier:** Chamäleon GmbH

Rudolf-Diesel-Straße, 8a, 69115 Heidelberg -- Germany

**Further information obtainable from:** Product Safety Department

**Information in case of emergency:** + 49 70024112112 (CH)

**2 – HAZARDS IDENTIFICATION**

**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 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.

**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

GHS09

**Signal word:** Danger**Hazard-determining components of labelling:**

acetone

butanone

Hydrocarbons

**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.

H410 Very 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.

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

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents / container in accordance with regional regulations.

**Additional information:**

Buildup of explosive mixtures possible without sufficient ventilation.

**Other hazards****Results of PBT and vPvB assessment****PBT:**Not applicable.**vPvB:**Not applicable.

### 3- COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical characterization: Mixtures

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

<b>Dangerous components:</b>		
CAS: 7440-66-6 EINECS: 231-175-3 Index number: 030-001-01-9 Reg.nr.: 01-2119467174-37	zinc powder -zinc dust (stabilized)  Aquatic Acute 1, H400; Aquatic Chronic 1 H410	25-<50%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37	dimethyl ether  Flam. Gas 1, H220 Press. Gas C, H280	12.5-<20%
CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49	acetone  Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	12.5-<20%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene, mixture of isomers  Flam. Liq. 3, H226 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	10-<12.5%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	propane  Flam. Gas1, H220; Press. Gas C, H280	5-<10%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	butane  Flam. Gas1, H220; Press. Gas C, H280	5-<10%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 Reg.nr.: 01-2119457290-43	butanone  Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	2.5-<5.0%
EC number: 918-668-5 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35	Hydrocarbons  Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335-H336	2.5-<5.0%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	isobutane  Flam. Gas 1, H220 Press. Gas C, H280	<2.5%

CAS: 100-41-4 EINECS: 202-849-4 Index number: 601-023-00-4 Reg.nr.: 01-2119489370-35	ethylbenzene	<2.5%
	Flam. Liq. 2, H225 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332 Aquatic Chronic 3, H412	
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32	zinc oxide	<2.5%
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	

**Additional information:**

The content of Benzene (EINECS-Nr. 200-753-7) in the ingredients is less than 0,1% (Note P Annex 1A 1272/2008 EU), so the classification as carcinogen need not to apply.  
For the wording of the listed hazard phrases refer to section 16..

**4- FIRST - AID MEASURE**

**Description of first aid measures**

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**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.

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

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5- FIRE - FIGHTING MEASURE**

**Extinguishing media**

**Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

**Special hazards arising from the substance or mixture**

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

**Advice for firefighters -**

**Protective equipment:**

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Mouth respiratory protective device

## **6- ACCIDENTAL RELEASE MEASURE**

### **Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

### **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.

### **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### **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.

## **7- HANDLING AND STORAGE**

### **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

### **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

### **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:** Keep container tightly sealed.

**Storage class:** 2 B

**Specific end use(s)** No further relevant information available.

## **8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

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

### **Control parameters**

<b>Ingredients with limit values that require monitoring at the workplace:</b>	
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

67-64-1 acetone	
WEL	Short-term value: 3620 mg/m <sup>3</sup> , 1500 ppm Long-term value: 1210 mg/m <sup>3</sup> , 500 ppm
1330-20-7 xylene, mixture of isomers	
WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
106-97-8 butane	
WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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
100-41-4 ethylbenzene	
WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm Sk
<b>Ingredients with biological limit values:</b>	
1330-20-7 xylene, mixture of isomers	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
78-93-3 butanone	
BMGV ()	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one

**Additional information:** The lists valid during the making were used as basis.

**Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.
- Avoid contact with the eyes.

**Respiratory protection:**

- Filter AX
- Not necessary if room is well-ventilated.

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.

**Protection of hands:**

In case of contact with spray dust protective gloves made of butyl should be used (min. 0.4 mm thick), e.g. KCL Camatril, article no. 898 or similar products.

Solvent resistant gloves

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**

Butyl rubber, BR

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.

**Penetration time of glove material**

Butyl rubber gloves with a thickness of 0.4 mm are resistant to:

Acetone: 480 min

Butyl acetate: 60 min

Ethyl acetate: 170 min

Xylene: 42 min

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**

<b>Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
<b>Form:</b>	<i>Aerosol</i>
<b>Colour:</b>	<i>Silver grey</i>
<b>Odour:</b>	<i>Characteristic</i>
<b>Odour threshold:</b>	<i>Not determined.</i>
<b>pH-value:</b>	<i>Not determined.</i>
<b>Change in condition</b>	
<b>Melting point/freezing point:</b>	<i>Undetermined.</i>
<b>Initial boiling point and boiling range:</b>	<i>Not applicable, as aerosol</i>

<b>Flash point:</b>	<i>Not applicable, as aerosol</i>
<b>Flammability (solid, gas):</b>	<i>Not applicable.</i>
<b>Ignition temperature:</b>	<i>240 °C (464 °F)</i>
<b>Decomposition temperature:</b>	<i>Not determined.</i>
<b>Auto-ignition temperature:</b>	<i>Product is not selfigniting.</i>
<b>Explosive properties:</b>	<i>Not determined</i>
<b>Explosion limits:</b>	
<b>Lower:</b>	<i>1.1 Vol %</i>
<b>Upper:</b>	<i>26.2 Vol %</i>
<b>Vapour pressure at 20 °C (68 °F):</b>	<i>4 hPa (3 mm Hg)</i>
<b>Density at 20 °C (68 °F):</b>	<i>1.03 g/cm<sup>3</sup> (8.6 lbs/gal)</i>
<b>Relative density</b>	<i>Not determined.</i>
<b>Vapour density</b>	<i>Not determined.</i>
<b>Evaporation rate</b>	<i>Not applicable.</i>
<b>Solubility in / Miscibility with water:</b>	<i>Not miscible or difficult to mix.</i>
<b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
<b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not determined.</i>
<b>Kinematic:</b>	<i>Not determined.</i>
<b>Solvent content:</b>	
<b>Organic solvents:</b>	<i>65.3 %</i>
<b>VOC (EC)</b>	<i>---</i>
	<i>620.0 g/l</i>
<b>VOC-EU%</b>	<i>64.80 %</i>
<b>Solids content:</b>	<i>34.2 %</i>
<b>Other information</b>	<i>No further relevant information available.</i>

## 10- STABILITY AND REACTIVITY

**Reactivity** No further relevant information available.

### **Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

## **11- TOXICOLOGICAL INFORMATION**

### **Information on toxicological effects**

**Acute toxicity:** Based on available data, the classification criteria are not met

<b>LD/LC50 values relevant for classification:</b>		
67-64-1 acetone		
Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	>15,800 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (rat)
1330-20-7 xylene, mixture of isomers		
Oral	LD50	3,523 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	29,000 mg/m <sup>3</sup> (rat)
78-93-3 butanone		
Oral	LD50	>2,193 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	34 mg/m <sup>3</sup> (rat)
Hydrocarbons		
Oral	LD50	3,592 mg/kg (rat)
Dermal	LD50	3,160 mg/kg (rabbit)

#### **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 (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**

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.

## 12 – ECOLOGICAL INFORMATION

### Toxicity

<b>Aquatic toxicity:</b>	
115-10-6 dimethyl ether	
EC50 / 96 h	155 mg/l (algae)
LC50 / 48 h	>4,000 mg/l (daphnia magna)
LC50 / 96 h	>4,000 mg/l (fish)
67-64-1 acetone	
LC50/96h	8,300 mg/l (fish)
EC50/96h	7,200 mg/l (algae)
LC50 / 48 h	8,450 mg/l (crustacean (water flea))
1330-20-7 xylene, mixture of isomers	
EC50 / 48 h	7.4 mg/l (daphnia magna)
LC50 / 96 h	13.5 mg/l (fish)
78-93-3 butanone	
LC50 / 48 h	308 mg/l (daphnia magna)
LC50 / 72 h	1,972 mg/l (Pseudokirchneriella Subcapitata)
LC50 / 96 h	2,990 mg/l (fish)
Hydrocarbons	
EC50 / 48 h	3.2 mg/l (Daphnia magna)
EC50 / 72 h	2.75 mg/l (Pseudokirchneriella Subcapitata)
EC50 / 96 h	9.2 mg/l (Regenbogenforelle)

**Persistence and degradability** No further relevant information available.

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

#### **Ecotoxicological 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

#### **Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

### **13- DISPOSAL CONSIDERATION**

#### **Waste treatment methods**

##### **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

<b>European waste catalogue</b>	
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers

#### **Uncleaned packaging:**

##### **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings. Non contaminated packagings may be recycled.

### **14- TRANSPORT INFORMATION**

#### **UN-Number**

ADR, IMDG, IATA

UN1950

#### **UN proper shipping name**

ADR

1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS

IMDG

AEROSOLS, MARINE POLLUTANT

IATA

Aerosols, flammable

#### **Transport hazard class(es)**

ADR



Class

2 5F Gases.

Label

2.1

IMDG



Class

2.1

Label

2.1

IATA



Class 2.1  
Label 2.1

**Packing group**  
ADR, IMDG, IATA not regulated

**Environmental hazards:**  
Marine pollutant: Yes  
Symbol (fish and tree)  
Special marking (ADR): Symbol (fish and tree)

**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 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.

**Transport in bulk according to Annex II of  
Marpol and the IBC Code** Not applicable.

**Transport/Additional information:**  
**ADR**  
**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

### **15 – REGULATORY INFORMATION**

**Safety, health and environmental regulations/legislation specific for the substance or mixture.**

**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40

**National regulations:**

**Other regulations, limitations and prohibitive regulations**

<b>Substances of very high concern (SVHC) according to REACH, Article 57</b>
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None of the ingredients is listed
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Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **16-OTHER INFORMATION**

#### **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 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.

H412 Harmful to aquatic life with long lasting effects

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.