

Printing date 28.03.2017 Version number 1 Revision: 28.03.2017

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

- · 1.1 Product identifier
- · Trade name: Zinkspray hell
- · 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

Colorspray (Aerosol) for limited paintworks.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Fermit GmbH Zur Heide 4,

D-53560 Vettelschoß

www.fermit.de

· Informing department:

Tel.: +49 (0) 2645-2207 Fax: +49 (0) 2645-3113 Email: info@fermit.de

• 1.4 Emergency telephone number: Tel.: +49 (0) 2645-2207

#### 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.



GHS07

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. Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 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

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#### · Hazard-determining components of labelling:

acetone

Solvent naphtha (petroleum), light arom.

n-butyl acetate

#### Hazard statements

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

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

H412 Harmful to aquatic life with long lasting effects.

#### · Precautionary statements

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.

#### · 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 the substances listed below including additives not requiring identification.

· Dangerous components:		
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-X	acetone  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	25 - 50%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-X	isobutane  Flam. Gas 1, H220; Press. Gas C, H280	10 - 25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-X	propane Flam. Gas 1, H220; Press. Gas C, H280	10 - 25%
CAS: 64742-95-6 EINECS: 265-199-0 Reg.nr.: 01-2119486773-24-X	Solvent naphtha (petroleum), light arom.  Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	≤10%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-X	xylene, mixed isomers, pure  Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox 4, H332; Skin Irrit. 2, H315	2.5-<10%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29-X	n-butyl acetate  Flam. Liq. 3, H226; STOT SE 3, H336	2.5-<10%

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

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#### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation Take affected persons into the open air and position comfortably
- · After skin contact

Wash with water and soap.

In cases of freeze burns, rinse with plenty of water. Do not remove clothing.

· After eye contact

Rinse opened eye for several minutes under running water.

In case of permanent aches and pains please go and see the doctor.

- · After swallowing Swallowing is not considered to be a possible way of exposure.
- 4.2 Most important symptoms and effects, both acute and delayed

drowsiness

Dazed

· 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, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · 5.2 Special hazards arising from the substance or mixture

Pressure build-up and risk of bursting when heated.

During incomplete combustion carbon monoxide can be formed.

Vapours are heavier than air and may travel long distances along ground, ignite and flash back to source.

- · 5.3 Advice for firefighters
- · Protective equipment:

Do not inhale explosion gases or combustion gases.

In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.

· Additional information

Cool endangered containers with water spray.

Remove goods in stock from incendiary zone, if possible.

## SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from sources of ignition - No smoking.

Avoid contact with eyes, skin and clothes.

Do not inhale vapours.

- 6.2 Environmental precautions: Damp down gases/fumes/haze with water spray jet.
- 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 information on disposal.

### SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

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Keep away from heat and direct sunlight.

Keep empty containers away from heat and ignition sources.

Do not spray into the eyes.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use.

Do not spray on flames or red-hot objects.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and containers:

Observe official regulations on storing packagings with pressurised containers.

· Information about storage in one common storage facility:

Keep away from food, drink and animal feeding stuffs.

Do not store together with oxidizing or self-igniting substances.

Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

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

## SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

WEL: workplace exposure limit

PNEC aqua (marine water)

67-64-1 a	cetone			
WEL (Gre	at Britain)			mg/m³, 1500 ppm
		Long-ter	m value: 1210 r	ng/m³, 500 ppm
IOELV (E	uropean Union)	Long-term value: 1210 mg/m³, 500 ppm isomers, pure		
1330-20-7	' xylene, mixed			
WEL (Great Britain)		Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV		
IOELV (European Union)		Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin		
123-86-4	n-butyl acetate			
WEL (Great Britain)		Short-term value: 966 mg/m³, 200 ppm		
			Long-term value: 724 mg/m³, 150 ppm	
· DNELs				
67-64-1 a	cetone			
Oral	DNEL (consum	ner, long-t	term, systemic)	62 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)		n, systemic)	186 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)		term, systemic)	62 mg/kg bw/day (human)
Inhalative	DNEL (worker,	DNEL (worker, long-term, systemic)		1210 mg/m³ (human)
	,		term, systemic)	200 mg/m³ (human)
,		short-term, local)		2420 mg/m³ (human)
· PNECs		<u> </u>		
67-64-1 a	cetone			
PNEC aqu	ua (freshwater)		10.6 mg/L (.)	

1.06 mg/L (.)

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PNEC STP 100 mg/L (.)
PNEC soil 29.5 mg/kg soil dw (.)
PNEC sediment (freshwater) 30.4 mg/kg sedim. dw (.)
PNEC sediment (marine water) 3.04 mg/kg sedim. dw (.)
PNEC aqua (intermittent releases) 21 mg/L (.)

#### · Ingredients with biological limit values:

#### 1330-20-7 xylene, mixed isomers, pure

BMGV (Great Britain) 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift Parameter: methyl hippuric acid

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

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Wash hands during breaks and at the end of the work.

Do not inhale gases / fumes / aerosols.

Breathing equipment:

Not necessary if room is well-ventilated.

Use breathing protection in case of insufficient ventilation.

Filter AX.

#### · Protection of hands:

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

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

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

#### · For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR Butyl rubber, BR

Fluorocarbon rubber (Viton)

· Eye protection:



Tightly sealed safety glasses.

#### · Body protection:

Wear antistatic clothing made from natural fibres (cotton) or heat-resistant synthetic fibres.

#### Limitation and supervision of exposure into the environment

Avoid the uncontrolled release into the environment.

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## SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Aerosol
Colour: Colourless
Odour: Characteristic
Odour threshold: Not determined.

· pH-value:

Not determined.

· Change in condition

*Melting point/freezing point:* Not determined

Initial boiling point and boiling range: Not applicable, as aerosol

· Flash point: ca. -80 ℃

· Inflammability (solid, gaseous) Not applicable.

· Ignition temperature:

**Decomposition temperature:** Not determined.

· Explosive properties: Not determined.

· Critical values for explosion:

 Lower:
 1.4 Vol %

 Upper:
 13 Vol %

· Vapour pressure: Not determined.

Density
 Evaporation rate
 0.873 g/cm<sup>3</sup>
 Not applicable.

· Solubility in / Miscibility with

Water: Partly soluble

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

· Viscosity:

dynamic:Not determined.kinematic:Not determined.

· Solvent content:

· Organic solvents:

**VOC EU** 668.05 g/l **VOC EU** 90.89 %

• **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:

Avoid direct sunlight, heat and ignition sources.

· 10.3 Possibility of hazardous reactions

Danger of containers bursting because of high vapour pressure

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Strong oxidizing agents

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#### · 10.6 Hazardous decomposition products:

None in case of intended use and storage in compliance with instructions.

## SECTION 11: Toxicological information

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

· LD/LC50 values that are relevant for classification:								
67-64-1 acetone								
Oral	LD50	5800 mg/kg (rat)						
Dermal	LD50	> 7426 mg/kg (guinea pig) (21 CFR 191.10)						
		> 7426 mg/kg (rabbit) (21 CFR 191.10)						
Inhalative	LC50	132 mg/l/3h (rat)						
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.							
Oral	LD50	> 5000 mg/kg (rat)						
Dermal	LD50	> 2000 mg/kg (rabbit)						
Inhalative	LC50	> 7.63 mg/l/4h (rat)						

- · 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 (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

May be fatal if swallowed and enters airways.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

	· Aquatic toxicity	<i>/:</i>			
l	67-64-1 acetone	67-64-1 acetone			
I	EC50	> 10000 mg/l/24h (Daphnia magna)			
	LC50 (dynamic)	8120 mg/l/96h (Pimephales promelas) (OECD 203)			

- · 12.2 Persistence and degradability No further relevant information available.
- · Other information: There are no data available about the preparation.
- 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 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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• 12.6 Other adverse effects No further relevant information available.

## SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Proceed according to local, official regulations.

The waste code numbers mentioned are recommendations based on the probable use of the product.

· Europear	· European waste catalogue						
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST						
16 05 00	gases in pressure containers and discarded chemicals						
16 05 04*	gases in pressure containers (including halons) containing hazardous substances						
14 00 00	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08)						
14 06 00	waste organic solvents, refrigerants and foam/aerosol propellants						
14 06 03*	other solvents and solvent mixtures						

- · Uncleaned packagings:
- · Recommendation:

After use the packaging shall be discharged completely.

Dispose of packaging according to regulations on the disposal of packagings.

## SECTION 14: Transport information

· 14.1 UN-Number	•
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· *ADR, IMDG, IATA* UN1950

14.2 UN proper shipping name

· **ADR** 1950 AEROSOLS

· **IMDG** AEROSOLS, MARINE POLLUTANT

· 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: Not applicable.

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· 14.6 Special precautions for user Warning: Gases.

• Kemler Number:• EMS Number:23• 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.

• Segregation Code 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.

14.7 Transport in bulk according to Annex II

of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)Excepted quantities (EQ)Code: E0

Not permitted as Excepted Quantity

Transport categoryTunnel restriction code

· IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E0

Not permitted as Excepted Quantity

· UN "Model Regulation": UN 1950 AEROSOLS, 2.1

## SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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

Solvent naphtha (petroleum), light arom.

n-butyl acetate

· Hazard statements

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

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

H412 Harmful to aquatic life with long lasting effects.

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· Precautionary statements

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
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 ℃/122 ℉.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category P3a FLAMMABLE AEROSOLS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · National regulations
- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is contained.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

These data are based on our present knowledge. However, they 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.

H411 Toxic to aquatic life with long lasting effects.

#### · Department issuing data specification sheet:

This Material Safety Data Sheet has been drawn up in cooperation with:

DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,

phone: (+49) 511 42079 - 0, reach@dekra.com.

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#### · 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

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LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern 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 Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3