

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

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

- **1.1 Product identifier**
- **Trade name:** Zinkspray
- **Article number:** 19-52440-4020
- **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)
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category** PC9a Coatings and paints, thinners, paint removers
- **Process category**
 - PROC11 Non industrial spraying
 - PROC7 Industrial spraying
- **Application of the substance / the mixture** Spray varnish
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Mobacc/Pharmaspray/Eurofill
 - 9640 AH Veendam
 - The Netherlands
 - Tel: +31(0)598 626666
 - Fax: +31(0)598 625976
 - E-mail: j.sleumer@mobacc.com
- **Further information obtainable from:** Research & Development/E-mail: j.sleumer@mobacc.com
- **1.4 Emergency telephone number:** During normal opening hours: Tel: +31(0)598 626666

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.



GHS09 environment

Aquatic Chronic 2 H411 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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.



Xi; Irritant

R36: Irritating to eyes.



F+; Extremely flammable

R12: Extremely flammable.

(Contd. on page 2)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 1)



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66: Repeated exposure may cause skin dryness or cracking.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **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 GHS09

- **Signal word** Danger

- **Hazard-determining components of labelling:**

Acetone

- **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/sparks/open flames/hot surfaces. - No smoking.

P251 Pressurized container: Do not pierce or burn, even after use.

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

P273 Avoid release to the environment.

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

P261 Avoid breathing mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P302+P352 IF ON SKIN: Wash with plenty of water.

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

P403 Store in a well-ventilated place.

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.

(Contd. on page 3)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 2)

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· 3.1 Substances

· Additional information:

CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49	Acetone Xi R36; F R11 R66-67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-<50%
CAS: 7440-66-6 EINECS: 231-175-3 Reg.nr.: 01-2119467174-37	zinc powder -zinc dust (stabilized) N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	10-<25%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane (containing < 0.1% butadiene (203-450-8)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 1330-20-7	Xylol, Isomerengemisch (wenn Flammpunkt<21 °C) Xn R20/21; Xi R38; F R11 Flam. Liq. 1, H224; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	3-<10%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene (mix) Xn R20/21; Xi R38 R10 Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	3-<10%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	propan-2-ol Xi R36; F R11 R67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	3-<10%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Xn R20; F R11 Flam. Liq. 2, H225; Acute Tox. 4, H332	1.0-<2.5%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Xi R36 R10 Flam. Liq. 3, H226	1.0-<2.5%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 01-2119463881-32	zinc oxide N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1-<2.5%

· 3.2 Mixtures

· **Description:** Active substance with propellant

· **Dangerous components:** -

· Ingredients according to detergents guideline 648/2004/EC

aliphatic hydrocarbons	15 - 30%
aromatic hydrocarbons	5 - 15%

· **Additional information:**

GB

(Contd. on page 4)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 3)

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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye 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**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Water haze
Fire-extinguishing powder
Carbon dioxide
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:** Mount respiratory protective device.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
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:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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.

7 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

(Contd. on page 5)

GB

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 4)

- **Information about fire - and explosion protection:**
 - Do not spray onto a naked flame or any incandescent material.
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
 - Pressurized 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 pressurized containers.
- **Information about storage in one common storage facility:**
 - Observe official regulations on storing packagings with pressurized containers.
- **Further information about storage conditions:**
 - Keep receptacle tightly sealed.
 - Do not seal receptacle gas tight.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **7.3 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.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

67-64-1 Acetone

WEL	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm
-----	----------------------------------------------------------------------------------------------------------

106-97-8 butane (containing < 0.1% butadiene (203-450-8))

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)
-----	-------------------------------------------------------------------------------------------------------------------------------------------------------

74-98-6 propane

OEL	Short-term value: 3600 mg/m ³ , 2000 ppm Long-term value: 1800 mg/m ³ , 1000 ppm
-----	-----------------------------------------------------------------------------------------------------------

1330-20-7 Xylol, Isomerengemisch (wenn Flammpunkt < 21 °C)

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk, BMGV
-----	------------------------------------------------------------------------------------------------------------------

1330-20-7 xylene (mix)

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
-----	------------------------------------------------------------------------------------------------------------------

67-63-0 propan-2-ol

WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
-----	--------------------------------------------------------------------------------------------------------

100-41-4 ethylbenzene

WEL	Short-term value: 552 mg/m ³ , 125 ppm Long-term value: 441 mg/m ³ , 100 ppm Sk
-----	-------------------------------------------------------------------------------------------------------------

(Contd. on page 6)

-GB

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 5)

108-65-6 2-methoxy-1-methylethyl acetate

WEL	Short-term value: 548 mg/m ³ , 100 ppm
	Long-term value: 274 mg/m ³ , 50 ppm
	Sk

· DNELs**67-64-1 Acetone**

Oral	DNEL Long term-systemic	62 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	62 mg/kg bw/day (Consumer)
		186 mg/kg bw/day (Worker)
Inhalative	DNEL Acute-local	2420 mg/m ³ (Worker)
	DNEL Long term-systemic	200 mg/m ³ (Consumer)
		1210 mg/m ³ (Worker)

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	DNEL Long term-systemic	50 mg/kg bw/day (Worker)
Dermal	DNEL Long term-systemic	5000 mg/kg bw/day (Consumer)
		5000 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	2.5 mg/m ³ (Consumer)
		5 mg/m ³ (Worker)

67-63-0 propan-2-ol

Oral	DNEL Long term-systemic	26 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	319 mg/kg bw/day (Consumer)
		888 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	89 mg/m ³ (Consumer)
		500 mg/m ³ (Worker)

1314-13-2 zinc oxide

Oral	DNEL Long term-systemic	0.83 mg/kg bw/day (Consumer)
Dermal	DNEL Long term-systemic	87 mg/kg bw/day (Consumer)
		87 mg/kg bw/day (Worker)
Inhalative	DNEL Long term-systemic	2.5 mg/m ³ (Consumer)
		5 mg/m ³ (Worker)

· PNECs**67-64-1 Acetone**

PNEC Freshwater sediment	30.4 mg/kg (Undefined)
PNEC Marine water	1.06 mg/l (Undefined)
PNEC Marine water sediment	3.04 (Undefined)
PNEC Soil	29.5 mg/kg (Undefined)

7440-66-6 zinc powder -zinc dust (stabilized)

PNEC Freshwater	20.6 ug/l (Undefined)
PNEC Freshwater sediment	118 mg/kg (Undefined)
PNEC Marine water	6.1 ug/l (Undefined)
PNEC Marine water sediment	56.5 mg/kg (Undefined)
PNEC Sewage Treatment Plant	52 ug/l (Undefined)
PNEC Soil	56.6 mg/kg (Undefined)

1314-13-2 zinc oxide

PNEC Freshwater	20.6 ug/l (Undefined)
PNEC Freshwater sediment	117 mg/kg (Undefined)
PNEC Marine water	6.1 ug/l (Undefined)

(Contd. on page 7)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 6)

PNEC Marine water sediment	56.5 mg/kg (Undefind)
PNEC Sewage Treatment Plant	52 ug/l (Undefind)
PNEC Soil	35.6 mg/kg (Undefind)

· **Ingredients with biological limit values:**

1330-20-7 Xylol, Isomerengemisch (wenn Flammpunkt < 21 °C)

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

1330-20-7 xylene (mix)

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:**

- 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.
- 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.
Filter AX/P2

· **Protection of hands:**



Protective gloves

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Nitrile rubber, NBR

· **Penetration time of glove material**

The exact break trough 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:** Use protective suit.

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Aerosol
Colour:	According to product specification

(Contd. on page 8)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 7)

· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	-44 °C
· Flash point:	-97 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	365 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.0 Vol %
Upper:	13.0 Vol %
· Vapour pressure at 20 °C:	8300 hPa
· Density at 20 °C:	0.886 g/cm ³
· 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.
· Solvent content:	
Organic solvents:	75.6 %
Solids content:	5.3 %
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **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:** No dangerous decomposition products known.

GB

(Contd. on page 9)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 8)

11 Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

67-64-1 Acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	7800 mg/kg (rbt)
Inhalative	LC50/4h	>20 mg/l (rat)

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4h	>5.4 mg/l (rat)

1330-20-7 xylene (mix)

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

67-63-0 propan-2-ol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	13900 mg/kg (rabbit)
Inhalative	LC50/6h	25000 mg/m3 (rat)

100-41-4 ethylbenzene

Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	17800 mg/kg (rbt)
Inhalative	LD50	>2000 mg/kg (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>20 mg/l (rat)

1314-13-2 zinc oxide

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50	>5700 (4 hours) mg/L (rat)
	LC50/4h	>5700 mg/l (rat)

· Primary irritant effect:

· **on the skin:** No irritant effect.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

12 Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

67-64-1 Acetone

EC50	8800 mg/l (Daphnia magna)
------	---------------------------

(Contd. on page 10)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 9)

	8300 (96h) mg/l (Fish)
7440-66-6 zinc powder -zinc dust (stabilized)	
EC10/21d	59.2 ug/l (Daphnia magna)
EC10/72h	27.3 ug/l (algae)
EC50	354 ug/l (Daphnia Magna 48h)
EC50 (72h)	0.17 mg/l (Selenastrum capricornatum (72 h))
EC50/48h	1 mg/l (Daphnia magna)
EC50/96h	0.527 mg/l (algae)
LC50	238-269 ug/l (Pimephales promelas (96 h))
LC50/96h	0.41 mg/l (Oncorhynchus mykiss)
NOEC (72h)	9 mg/l (Ceratophyllum demersum) 0.017 mg/l (Pseudokirchneriella subcapitata)
NOEC/21d	178 ug/l (Crustaceen-Palaemon elegans)
NOEC/4w	8.3 ug/l (Cyprinus carpio)
NOEC/72h	72.9 ug/l (Pseudokirchneriella subcapitata)
1330-20-7 xylene (mix)	
EC50/48h	3.2-9.5 mg/l (Daphnia magna)
LC50/96h	8.9-16.4 mg/l (Pimephales promelas)
67-63-0 propan-2-ol	
LC50 (24h)	9714 mg/l (Daphnia magna)
LC50/96h	9640 mg/l (Pimephales promelas)
LOEC (8 days)	1000 mg/l (algae)
100-41-4 ethylbenzene	
EC50	>100 mg/l (Daphnia magna)
LC50	>10 mg/l (Fish (96h))
1314-13-2 zinc oxide	
EC50	>1000 mg/l (Daphnia Magna 48h)
EC50 (72h)	0.17 mg/l (Selenastrum capricornatum (72 h))
EC50/48h	1 mg/l (Daphnia magna)
LC50	>320 mg/l (Lepomis macrochirus (96 h)) 1.1 mg/l (Oncorhynchus mykiss (96h)) 0.17 mg/l (Selenastrum capricornatum (72 h)) 2246 mg/l (Pimephales promelas (96 h))
NOEC (72h)	0.017 mg/l (Pseudokirchneriella subcapitata)

· **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:** 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.

Toxic for aquatic organisms

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

(Contd. on page 11)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 10)

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

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

14 Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **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
- **Special marking (ADR):** Symbol (fish and tree)
- **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 MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **ADR**
- **Limited quantities (LQ)** 1L
- **Transport category** 2

(Contd. on page 12)

GB

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 11)

· Tunnel restriction code	D
· UN "Model Regulation":	UN1950, AEROSOLS, ENVIRONMENTALLY HAZARDOUS, 2.1

15 Regulatory information

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

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	75-<100

· **VOC-CH** 75.58 %

· **VOC-EU** 669.6 g/l

· **Danish MAL Code** 4-3

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

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.

H280 Contains gas under pressure; may explode if heated.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R10 Flammable.

R11 Highly flammable.

R12 Extremely flammable.

R20 Harmful by inhalation.

R20/21 Harmful by inhalation and in contact with skin.

R36 Irritating to eyes.

R38 Irritating to skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Research & Development

· **Contact:** Ing. J. Sleumer

· **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 Organization

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 Harmonized System of Classification and Labelling of Chemicals

(Contd. on page 13)

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 25.04.2014

Version: 1

Revision: 25.04.2014

Trade name: Zinkspray

(Contd. of page 12)

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)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: 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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

GB