

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 **Revision:** 2025-10-16 Version number: 8.0

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

1.1 **Product identifier**

> **OPN Zinc Spray - grey -**Trade name

Unique formula identifier (UFI) 59SM-E5VE-9005-CF76

Other means of identification

Article number 63110 Tariff No 32082090

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

Relevant identified uses Industrial use Professional use

Consumer use (private households) Paint, coating and lacquer

Sector of use Long term protection for all metallic surfaces

Uses advised against Do not use for products which come into contact with foodstuffs

1.3 Details of the supplier of the safety data sheet

OPN-CHEMIE GmbH

In der Au 14 57290 Neunkirchen www.opn-chemie.de

Competent person responsible for the safety data sheet: Barbara Angelika Gros-Petri e-mail (competent person) baerbel.petri@opn-chemie.de

1.4 **Emergency telephone number**

> Emergency information service Poison Information Center Freiburg +49(0)761/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Hazard class and category	Hazard state- ment
2.3	Aerosols	Aerosol 1	H222,H229
3.3	Serious eye damage/eye irritation	Eye Irrit. 2	H319
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	STOT SE 3	H336
4.1C	Hazardous to the aquatic environment - chronic hazard	Aquatic Chronic 2	H411

Code	Supplemental hazard information
EUH066	Repeated exposure may cause skin dryness or cracking

Remarks

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS02, GHS07, GHS09



Page 1 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -Date of compilation: 2015-08-19 **Revision**: 2025-10-16 Version number: 8.0

Hazard statements

H222 Extremely flammable aerosol.

Pressurised container: May burst if heated. H229 H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness. H411 Toxic 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.

Acetone

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

P251 Do not pierce or burn, even after use.

P261 Avoid breathing spray.

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

P273

Avoid release to the environment.
Call a POISON CENTER/doctor if you feel unwell. P312

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

P501 Dispose of contents / container in accordance with national regulations of the disposal.

Additional labelling requirements

EUH066 Repeated exposure may cause skin dryness or cracking.

Buildup of explosive mixtures possible without sufficient ventilation.

Hazardous ingredients for labelling

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 **Mixtures**

Description of the mixture

Mixture of substances listed below with nonhazardous additions

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Acetone	CAS No 67-64-1 EC No 200-662-2 REACH Reg. No 01-2119471330- 49-xxxx 01-2119498062- 37-xxxx	10 – < 25	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	
Butane	CAS No 106-97-8 EC No 203-448-7 REACH Reg. No 01-2119474691- 32-xxxx	10 - < 25	Flam. Gas 1A / H220 Press. Gas L / H280	
Zinc	CAS No 7440-66-6 EC No 231-175-3 REACH Reg. No 01-2119467174- 37-xxxx	10 - < 25	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	****

Page 2 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Hydrocarbons, C9, aromatics	CAS No 64742-95-6 EC No 918-668-5 REACH Reg. No 01-2119455851- 35-xxxx	5 - < 10	Flam. Liq. 3 / H226 STOT SE 3 / H335 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	
Propane	CAS No 74-98-6 EC No 200-827-9 REACH Reg. No 01-2119486944- 21-xxxx	5 - < 10	Flam. Gas 1A / H220 Press. Gas C / H280	
Di-"isononyl" phthalate	CAS No 28553-12-0 EC No 249-079-5 REACH Reg. No 01-2119430798- 28	1 – < 5		

3.3 Remarks

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical adviceIn case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actionsProvide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsinglrrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious) Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed 4.2

Narcotic effects.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 **Extinguishing media**

Suitable extinguishing media

Water spray. BC-powder.

Unsuitable extinguishing media

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

Hazardous combustion products

Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

Page 3 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Version number: 8.0 Revision: 2025-10-16

In case of fire and/or explosion do not breathe fumes.Co-ordinate firefighting measures to the fire surroundings.Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reason-

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 **Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.lf substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5.Personal protective equipment: see section 8.Incompatible materials: see section 10.Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Storage class (LGK)

2 B

· Flammability hazards

Do not spray on an open flame or other ignition sourceProtect from sunlight.

Consideration of other advice

· Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

this information is not available

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture

Relevant DNELs of components							
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time	
Acetone	67-64-1	DNEL	1,210 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects	

Page 4 / 12 (en)

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey - Revision: 2025-10-16 Date of compilation: 2015-08-19 **Version number:** 8.0

Relevant DNELs of co	mponents					
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Acetone	67-64-1	DNEL	2,420 mg/m³	Human, inhalatory	Worker (industry)	Acute - local effects
Acetone	67-64-1	DNEL	186 mg/kg bw/day	Human, dermal	Worker (industry)	Chronic - systemic effects
Hydrocarbons, C9, aromatics	64742-95-6	DNEL	150 mg/m ³	Human, inhalatory	Worker (industry)	Chronic - systemic effects
Hydrocarbons, C9, aromatics	64742-95-6	DNEL	25 mg/kg bw/day	Human, dermal	Worker (industry)	Chronic - systemic effects
Di-"isononyl" phthal- ate	28553-12-0	DNEL	366 mg/kg	Human, dermal	Worker (industry)	Chronic - systemic effects
Di-"isononyl" phthal- ate	28553-12-0	DNEL	51.72 mg/m³	Human, inhalatory	Worker (industry)	Chronic - systemic effects

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Acetone	67-64-1	PNEC	100 ^{mg} / _I	Microorganisms	Sewage treatment plant (STP)	Short-term (singl instance)
Acetone	67-64-1	PNEC	21 ^{mg} / _l	Aquatic organisms	Water	Intermittent releas
Acetone	67-64-1	PNEC	10.6 ^{mg} / _I	Aquatic organisms	Freshwater	Short-term (singlinstance)
Acetone	67-64-1	PNEC	1.06 ^{mg} / _I	Aquatic organisms	Marine water	Short-term (sing instance)
Acetone	67-64-1	PNEC	100 ^{mg} / _I	Aquatic organisms	Sewage treatment plant (STP)	Short-term (sing instance)
Acetone	67-64-1	PNEC	30.4 ^{mg} / _{kg}	Aquatic organisms	Freshwater sedi- ment	Short-term (sing instance)
Acetone	67-64-1	PNEC	3.04 ^{mg} / _{kg}	Aquatic organisms	Marine sediment	Short-term (sing instance)
Acetone	67-64-1	PNEC	29.5 ^{mg} / _{kg}	Terrestrial organ- isms	Soil	Short-term (sing instance)
Zinc	7440-66-6	PNEC	100 ^{µg} / _I	Microorganisms	Sewage treatment plant (STP)	Short-term (sing instance)
Zinc	7440-66-6	PNEC	14.4 ^{µg} / _I	Aquatic organisms	Freshwater	Short-term (sing instance)
Zinc	7440-66-6	PNEC	7.2 ^{µg} / _I	Aquatic organisms	Marine water	Short-term (sing instance)
Zinc	7440-66-6	PNEC	100 ^{µg} / _I	Aquatic organisms	Sewage treatment plant (STP)	Short-term (sing instance)
Zinc	7440-66-6	PNEC	146.9 ^{mg} / _{kg}	Aquatic organisms	Freshwater sedi- ment	Short-term (sing instance)
Zinc	7440-66-6	PNEC	162.2 ^{mg} / _{kg}	Aquatic organisms	Marine sediment	Short-term (sing instance)
Zinc	7440-66-6	PNEC	83.1 ^{mg} / _{kg}	Terrestrial organ- isms	Soil	Short-term (sing instance)
Di-"isononyl" phthal- ate	28553-12-0	PNEC	30 ^{mg} / _{kg}	Terrestrial organ- isms	Soil	Short-term (sing instance)

Page 5 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0

8.2 **Exposure controls**

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Do not spray in eyes. If required use tight-fitting goggles.

Skin protection

Hand protection

Wear suitable gloves.

Type of material

NBR: acrylonitrile-butadiene rubber.

Material thickness

> 0.7 mm

Breakthrough times of the glove material

>480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Operate if possible out of doors or in a well-ventilated placeIn case of inadequate ventilation wear respiratory protection. Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Aerosol (Spray aerosol)

Colour Grey

Odour Product specific

Melting point/freezing point Not applicable, as aerosol.* Not applicable, as aerosol.* Initial boiling point and boiling range

Flammability (solid, gas) flammable aerosol in accordance with GHS criteria

Explosive limits 5 vol% - 15 vol%

Not applicable, as aerosol.* Flash point

Auto-ignition temperature

Not applicable, as aerosol.*

Decomposition temperature Not relevant

Viscosity Not relevant (Aerosol)

Water solubility Insoluble

Partition coefficient

Partition coefficient n-octanol/water (log value) Not relevant (mixture)

Vapour pressure 3.8 bar at 20 °C

6.8 bar at 50 °C

 $0.86 \, ^{\mathrm{g}}/_{\mathrm{ml}}$ at 20 °C Density

(Calculated value)

Particle characteristics Not applicable, as aerosol.*

9.2 Other information

* The finished mixture in an aerosol container is formed after addition of propellant. Several details are not measurable in an hermetic closed, pressurized container.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials"The mixture contains reactive substance(s). Risk of ignition.

Page 6 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 **Revision:** 2025-10-16 Version number: 8.0

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition sourceKeep away from heat.

Hints to prevent fire or explosion

Protect from sunlight.

Physical stresses which might result in a hazardous situation and have to be avoided

High temperatures.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

· Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

· Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Repeated exposure may cause skin dryness or cracking.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 **Toxicity**

Toxic to aquatic life with long lasting effects.

Ordinance on systems for handling water-polluting substances (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK (Germany) 2, obviously hazardous to water

Aquatic toxicity (chronic) of components								
Name of substance	CAS No	Endpoint	Value	Species	Exposure time			
Acetone	67-64-1	EC50	61.15 ^g / _l	Microorganisms	30 min			
Zinc	7440-66-6	LC50	330 ^{µg} / _I	Fish	95 h			
Zinc	7440-66-6	EC50	75 ^{µg} / _I	Fish	28 d			

Page 7 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0

Aquatic toxicity (chronic) of components							
Name of substance	CAS No	Endpoint	Value	Species	Exposure time		
Zinc	7440-66-6	EbC50	6,813 ^{µg} / _I	Aquatic invertebrates	21 d		
Zinc	7440-66-6	ErC50	410 ^{µg} / _l	Algae	10 d		
Hydrocarbons, C9, aromatics	64742-95-6	EL50	4.1 ^{mg} / _l	Aquatic invertebrates	24 h		
Hydrocarbons, C9, aromatics	64742-95-6	EC50	>99 ^{mg} / _I	Microorganisms	10 min		
Di-"isononyl" phthalate	28553-12-0	EC50	>83.9 ^{mg} / _I	Microorganisms	30 min		

12.2 Persistence and degradability

Degradability of components							
Name of substance	CAS No	Process	Degradation rate	Time	Method	Source	
Acetone	67-64-1	Carbon dioxide generation	90.9 %	28 d		ECHA	
Hydrocarbons, C9, aromatics	64742-95-6	Oxygen deple- tion	30.9 %	2 d		ECHA	
Di-"isononyl" phthalate	28553-12-0	Carbon dioxide generation	81 %	28 d		ECHA	

12.3 **Bioaccumulative potential**

oaccumulative potential of components						
Name of substance	CAS No	BCF	Log KOW	BOD5/COD		
Acetone	67-64-1		-0.23	963.5		
Butane	106-97-8		1.09 (pH value: 7, 20 °C)			
Zinc	7440-66-6	69.48				
Propane	74-98-6		1.09 (pH value: 7, 20 °C)			
Di-"isononyl" phthalate	28553-12-0	<3	8.8 - 9.7 (pH value: 4.6, 25 °C)			

12.4 Mobility in soil

Data are not available.

Results of PBT and vPvB assessment 12.5

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

12.6 **Endocrine disrupting properties**

Contains an endocrine disruptor (ED) at a concentration of \geq 0,1%.

Other adverse effects 12.7

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes

15 01 04 Metallic packaging

15 01 10 Packaging containing residues of or contaminated by dangerous substances

Page 8 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0

16 05 04 Containing hazardous gases in pressure containers (including halons)

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 **UN number or ID number**

> ADR/RID/ADN UN 1950 **IMDG-Code** UN 1950 ICAO-TI UN 1950

14.2 **UN proper shipping name**

> ADR/RID/ADN **AEROSOLS IMDG-Code AEROSOLS** ICAO-TI Aerosols, flammable

14.3 Transport hazard class(es)

> ADR/RID/ADN (2.1)**IMDG-Code** 2.1 ICAO-TI 2.1

14.4 Packing group Not assigned

14.5 **Environmental hazards** Hazardous to the aquatic environment

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information

Classification code 5F Danger label(s) 2.1



Environmental hazards Yes (hazardous to the aquatic environment)

Special provisions (SP) 190, 327, 344, 625

Excepted quantities (EQ) E0 Limited quantities (LQ) 1 L Transport category (TC) 2 Tunnel restriction code (TRC) D

International Maritime Dangerous Goods Code (IMDG) Additional information

Marine pollutant Yes (hazardous to the aquatic environment)

Danger label(s) 2.1



Special provisions (SP) 63, 190, 277, 327, 344, 381, 959

Excepted quantities (EQ) E0 Limited quantities (LQ) 1 L **EmS** F-D, S-U

Stowage category

International Civil Aviation Organization (ICAO-IATA/DGR) Additional information

Environmental hazards Yes (hazardous to the aquatic environment)

Danger label(s) 2.1

Page 9 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0



Special provisions (SP) A145, A167 **Excepted quantities (EQ)** E0 Limited quantities (LQ) 30 kg

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) /SVHC - candidate list

none of the ingredients are listed

Deco-Paint Directive

VOC content

63.63 %

547.2 g/i

The maximum content of VOC of the product in a ready to use con-

Maximum VOC content limit							
Product category	Product subcategory	Coating	Туре	VOC g/I			
Vehicle refinishing products	Special finishes	All types		840			

Industrial Emissions Directive (IED)

VOC content 63.63 %

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Pollutant release and transfer registers (PRTR)			
Name of substance	CAS No	Remarks	Threshold for releases to air (kg/year)
Zinc	7440-66-6	(8)	200

Legend

All metals shall be reported as the total mass of the element in all chemical forms present in the release

Water Framework Directive (WFD)

List of pollutants (WFD)			
Name of substance	CAS No	Listed in	Remarks
Butane		A)	
Zinc		A)	
Hydrocarbons, C9, aromatics		A)	

Legend

Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

Meldepflichtige Ausgangsstoffe für Explosivstoffe gemäß Anhang II:

Substance is listed: Acetone (CAS-Nr. 67-64-1).

National regulations (Germany)

Ordinance on systems for handling water-polluting substances (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Water hazard class 2 (obviously hazardous to water)

Page 10 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -

Date of compilation: 2015-08-19 **Revision:** 2025-10-16 Version number: 8.0

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Notation
5.2.5	Organic substances		≥ 25 wt%	0.5 ^{kg} / _h	50 ^{mg} / _{m³}	3)

Notation

A total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be 3) exceeded (except organic particulate matter)

Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 2 B (Aerosol dispensers or lighters)

National inventories

Country	Inventory	Status
EU	REACH Reg.	All ingredients are listed

Legend

REACH Reg. REACH registered substances

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet) 16.1

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3	Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	Endocrine disrupting properties: Contains an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.	Yes
15.1	5.1 VOC content: 75.29 % 647.5 \(\frac{9}{l} \) The maximum content of VOC of the product in a ready to use condition VOC content: 63.63 % 547.2 \(\frac{9}{l} \) The maximum content of VOC of the product in a ready to use condition		Yes
15.1	5.1 VOC content: VOC content: 75.29 % 63.63 %		Yes
15.1		National inventories: change in the listing (table)	

16.2 Abbreviations and acronyms

ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures

(European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).

ADR Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the Interna-

tional Carriage of Dangerous Goods by Road).

ADR/RID/ADN Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways

(ADR/RID/ADN).

Aquatic Acute Hazardous to the aquatic environment - acute hazard Aquatic Chronic Hazardous to the aquatic environment - chronic hazard.

Asp. Tox. BCF Aspiration hazard. Bioconcentration factor. BOD Biochemical Oxygen Demand.

CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances). CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

COD Chemical oxygen demand.

DGR Dangerous Goods Regulations (see IATA/DGR).

Derived Minimal Effect Level. **DMEL DNEL** Derived No-Effect Level.

≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth EbC50

(EbC50) or growth rate (ErC50) relative to the control.

EC50 Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 %

changes in response (e.g. on growth) during a specified time interval.

The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of EC No

Page 11 / 12 (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN Zinc Spray - grey -Date of compilation: 2015-08-19 Revision: 2025-10-16 Version number: 8.0

substances commercially available within the EU (European Union).

ED Endocrine disruptor.

EINECS European Inventory of Existing Commercial Chemical Substances.

EL50 Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test

ELINCS European List of Notified Chemical Substances.

FmS

Emergency Schedule.

= EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth ErC50

(EbC50) or growth rate (ErC50) relative to the control.

Eye Dam. Seriously damaging to the eye.

Eye Irrit. Irritant to the eye. Flam. Gas Flammable gas. Flammable liquid. Flam. Liq.

GHS "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations.

IATA International Air Transport Association.

IATA/DGR Dangerous Goods Regulations (DGR) for the air transport (IATA).

International Civil Aviation Organization. ICAO

ICAO-TI Technical instructions for the safe transport of dangerous goods by air.

IMDG International Maritime Dangerous Goods Code. IMDG-Code International Maritime Dangerous Goods Code.

LC50 Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality

during a specified time interval.

Lagerklasse (storage class according to TRGS 510, Germany). I GK

Log KOW n-Octanol/water. NLP No-Longer Polymer.

PBT Persistent, Bioaccumulative and Toxic. Predicted No-Effect Concentration. **PNEC**

Press. Gas Gas under pressure.

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals.

RID Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning

the International carriage of Dangerous goods by Rail).

STOT SE Specific target organ toxicity - single exposure.

SVHC Substance of Very High Concern.

TRGS Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany).

VOC Volatile Organic Compounds.

VPvB Very Persistent and very Bioaccumulative.

16.3 Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

16.4 Classification procedure

Physical and chemical properties. The classification is based on tested mixture.

Health hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

16.5 List of relevant phrases (code and full text as stated in section 2 and 3)

H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. Flammable liquid and vapour. H226

Pressurised container: May burst if heated. H229

Contains gas under pressure; may explode if heated. H280 H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects. H410 H411 Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

End of the safety data sheet

Page 12 / 12 (en)