

Printing date 21.07.2022 Version number 60 (replaces version 59) Revision: 21.07.2022

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

· 1.1 Product identifier

·Trade name: OPN-Zinc Repair Spray Type II

· Article number: 63122

·Unique formula identifier (UFI): TATM-H555-Y003-9J6Y

· 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 Paint

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

OPN-CHEMIE GmbH

In der Au 14

57290 Neunkirchen

www.opn-chemie.de

· Further information obtainable from:

Barbara Angelika Gros-Petri

E-Mail (competent person) baerbel.petri@opn-chemie.de

· 1.4 Emergency telephone number:

Emergency information service Vergiftungs-Informations-Zentrale Freiburg +49 (0) 761 / 1 92 40

### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.

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 GB CLP regulation.

· Hazard pictograms





GHS02 GHS07

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

acetone

Hydrocarbons, C9, aromatics

ethyl 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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(Contd. of page 1) · 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.

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

P251 Do not pierce or burn, even after use. P261 Avoid breathing vapours or spray.

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

Wear protective gloves / eye protection / face protection. P280

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

present and easy to do. Continue rinsing.

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

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

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

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking. Buildup of explosive mixtures possible without sufficient ventilation.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable. · vPvB: Not applicable.
- **SECTION 3: Composition/information on ingredients**

#### · 3.2 Mixtures

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

· Dangerous components:		
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-xxxx	acetone Flam. Liq. 2, H225;	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-xxxx	butane, pure Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<20%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5-<10%
EC number: 918-668-5 Reg.nr.: 01-2119455851-35-xxxx	Hydrocarbons, C9, aromatics  Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	5-<10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate  Flam. Liq. 3, H226; STOT SE 3, H336	5-<10%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	2.5-<5%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-xxxx	xylene  Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-<5%

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EINECS: 231-072-3 aluminium powder (stabilized) 2.5-<5% Reg.nr.: 01-2119529243-45-xxxx Flam. Sol. 2, H228; Water-react. 2, H261

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

### **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

Take affected persons into fresh air and keep quiet.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately remove any clothing soiled by the product.

· After eve contact:

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

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

Breathing difficulty

Headache

Dizziness

Dizziness

Nausea

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

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

Later observation for pneumonia and pulmonary oedema.

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Fire-extinguishing powder

Carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

Foam

- 5.2 Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information

Cool endangered receptacles with water spray.

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

#### **SECTION 6: Accidental release measures**

#### · 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

### • 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:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

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#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin and eyes.

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

Keep ignition sources away - Do not smoke.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Protect from heat and direct sunlight.
- · 7.3 Specific end use(s) No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

Inhalative DNEL 200 mg/m³ (ME)

· 8.2 Exposure controls
· Ingredients with limit values that require monitoring at the workplace:
CAS: 67-64-1 acetone
WEL Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm
CAS: 106-97-8 butane, pure
WEL Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
CAS: 108-65-6 2-methoxy-1-methylethyl acetate
WEL Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk
CAS: 141-78-6 ethyl acetate
WEL Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm
CAS: 1330-20-7 xylene
WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk, BMGV
· DNELs
CAS: 67-64-1 acetone
Oral DNEL 62 mg(kg (ME)

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### · Ingredients with biological limit values:

CAS: 1330-20-7 xylene

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.
- **Appropriate engineering controls** No further data; see item 7.
- · Individual protection measures, such as 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.

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.

Not necessary if room is well-ventilated.

- · Recommended filter device for short term use: Filter AX
- · Hand protection



Protective gloves

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

 $\cdot \ Material \ of \ gloves$ 

Butyl rubber, BR

Recommended thickness of the material:  $\geq 0.7$  mm

· Penetration time of glove material

≥60 min

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

· Eye/face protection



Tightly sealed goggles

· **Body protection:** Protective work clothing

## **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information

Physical state
 Colour:
 Odour:
 Odour threshold:
 Melting point/freezing point:

Aerosol
Silver-coloured
Characteristic
Not determined.
Undetermined.

· Boiling point or initial boiling point and boiling

range Not applicable, as aerosol.

· Flammability Not applicable.

· Lower and upper explosion limit

· Lower: Not determined.

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· **Upper:** Not determined.

· Flash point: Not applicable, as aerosol.

· Ignition temperature: >200 °C

• Decomposition temperature: Not determined.
• nH Not determined.

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

·Solubility

• water: Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value)
 Vapour pressure:
 Not determined.
 Not determined.

· Density and/or relative density

Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

· 9.2 Other information

· Appearance:

· Form: Aerosol

 $\cdot \ Important \ information \ on \ protection \ of \ health \ and$ 

environment, and on safety.

Auto-ignition temperature: Not determined.Explosive properties: Not determined.

· Solvent separation test:

Organic solvents: 93.6 %
 VOC (EC) 677.7 g/1
 Solids content: 0.0 %

· Change in condition

• Evaporation rate Not applicable.

· Information with regard to physical hazard classes

Explosives VoidFlammable gases Void

• **Aerosols** Extremely flammable aerosol. Pressurised container:

May burst if heated.

· Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable

gases in contact with water Void
Oxidising liquids Void
Oxidising solids Void
Organic peroxides Void
Corrosive to metals Void
Desensitised explosives Void

## **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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- · 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.

## **SECTION 11: Toxicological information**

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

· LD/LC50	· LD/LC50 values relevant for classification:			
ATE (Acu	ATE (Acute Toxicity Estimates)			
Dermal	LD50	28,488 mg/kg		
Inhalative	Inhalative LC50/4 h 285 mg/l			
CAS: 67-0	CAS: 67-64-1 acetone			

Oral	LD50	5,800 mg/kg (rat)
	LD50	20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	~76 mg/l (rat)

**CAS: 74-98-6 propane** 

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

**CAS: 106-97-8 butane, pure** 

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

CAS: 75-28-5 isobutane

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

### Hydrocarbons, C9, aromatics

Oral	LD50	3,592 mg/kg (rat)
Dermal	LD50	>3,160 mg/kg (rat)
Inhalative	LC50/4 h	>6,193 mg/l (rat)

### CAS: 108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8,532 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	35.7 mg/l (rat)

### CAS: 141-78-6 ethyl acetate

Oral		5,620 mg/kg (rabbit)
Dermal	LD50	>20,000 mg/kg (rat)
Inhalative	LC50/4 h	1,600 mg/l (rat)

### CAS: 1330-20-7 xylene

Oral	LD50	3,523 mg/kg (rat)
		1,100 mg/kg (ATE)
Inhalative	LC50/4 h	11 mg/l (ATE)

- · Serious eye damage/irritation Causes serious eye irritation.
- · STOT-single exposure May cause drowsiness or dizziness.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

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### **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Remark: Harmful to 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.

Harmful to aquatic organisms

### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

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

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

### **SECTION 14: Transport information**

· 14.1 UN n	umber or	· ID number
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· ADR/RID/ADN, IMDG, IATA UN1950

· 14.2 UN proper shipping name

· ADR/RID/ADN UN1950 AEROSOLS

· IMDG AEROSOLS

· IATA AEROSOLS, flammable

- · 14.3 Transport hazard class(es)
- · ADR/RID/ADN



· Class 2 5F Gases.

· Label 2.1

· IMDG, IATA



· Class 2.1 Gases.

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Label	2.1
14.4 Packing group ADR/RID/ADN, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Code  Segregation Code	Warning: Gases.  F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 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.
14.7 Maritime transport in bulk according to IM instruments	Not applicable.
Transport/Additional information:	
ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ) Transport category Tunnel restriction code	1L Code: E0 Not permitted as Excepted Quantity 2 D
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L 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
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- $\cdot$  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
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

GB

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

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H261 In contact with water releases flammable gases.
- 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.
- H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### · 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 Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1A: Flammable gases - Category 1A

Aerosol 1: Aerosols - Category 1

Press. Gas (Comp.): Gases under pressure - Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 3: Flammable liquids – Category 3

Flam. Sol. 2: Flammable solids - Category 2

Water-react. 2: Substances and mixtures which in contact with water emit flammable gases - Category 2

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

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

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

· \* Data compared to the previous version altered.