

## SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006

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

#### 1.1. Product identifier

Trade name: InnoMetal Reaction Layer Remover

Other names: -

MSDS name: EN\_InnoMetal\_MSDS\_Reaction Layer Remover\_1\_1

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

1.2.1. Application of the substance / the mixture

Surface treatment

Removes the reaction layer on metal surfaces

1.2.2. Applications advised against

No further relevant information available.

#### 1.3. Details of the supplier of the safety data sheet

**InnoMetal GmbH**

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D-33104 Paderborn

Fon: +49 (0)221 9582011

info@innometal.de

#### 1.4. Emergency telephone number

Monday - Friday, 9:00 am - 4:00 pm

+49 (0)221 958 2011

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 | Eye Irrit. 2A H319 | STOT SE 3 H336

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



F; Flammable



Xi; Harmful

R11 Highly Flammable

R20/22 Harmful by inhalation and if swallowed

R66 Repeated exposure may cause skin dryness and cracking

R67 Vapours may cause drowsiness and dizziness

R36/37 Irritant to eyes and respiratory system

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

Signal word: Danger

Hazard statements:

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

Precautionary statements:

P261: Avoid breathing mist, spray, vapours.

P303+P361+P353: - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media for extinction.

### 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

Components:

CAS	EINECS	Chemical name	from %	till %	Hazard pictograms	R phrases	Index Number
67-64-1	200-662-2	Acetone	99	100	F, Xi	11, 36, 66, 67	606-001-00-8

Labelling (CLP):

CAS	EINECS	Chemical name	Hazard pictograms	Signal word	Hazard statements
67-64-1	200-662-2	Acetone	GHS02, GHS07	Danger	H225, H319, H336

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

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

### **4.1. Description of first aid measures**

General information: Move out of dangerous area. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. Show this safety data sheet to the doctor in attendance.

After inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

After skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.

After eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Consult a specialist.

After swallowing: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.

Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention.

### **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms/injuries: Eye irritation.

Symptoms/injuries after inhalation: May cause drowsiness or dizziness.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Symptoms/injuries after ingestion: Ingestion may cause nausea, vomiting and diarrhoea.

### **4.3. Indication of any immediate medical attention and special treatment needed**

If medical advice is needed, have product container or label at hand.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing agents:

Dry chemical

Alcohol-resistant foam

CO<sub>2</sub>

Do not use a heavy water stream. A heavy water stream may spread burning liquid

### **5.2. Special hazards arising from the substance or mixture**

Fire hazard: Highly flammable liquid and vapour.

Explosion hazard: May form flammable/explosive vapour-air mixture.

Reactivity: Reacts with chloroform and bromoform under basic conditions, causing fire and explosion hazard. Ignites on contact with the chloride.

### **5.3. Advice for firefighters**

Protective equipment: In the event of fire, wear self-contained breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, containers should be stored separately in closed containments.

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

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

Use personal protective equipment.

Ensure adequate ventilation.

Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces.

No smoking. Avoid breathing (vapour, mist).

Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice.

### **6.2. Environmental precautions**

Do not allow to enter sewers/ surface or ground water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

### **6.3. Methods and material for containment and cleaning up**

Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as sawdust or cellulosic material.

Clear up spills immediately and dispose of waste safely.

### **6.4. Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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

### **7.1. Precautions for safe handling**

Handle empty containers with care because residual vapours are flammable. Avoid exceeding of the given occupational exposure limits (see section 8). Avoid contact with skin and eyes. For personal protection, see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in workrooms. Dispose of rinse water in accordance with local and national regulations. Keep away from sources of ignition. Do not smoke. Use only non-sparking tools. Keep away from heat/sparks/open flames/hot surfaces. Avoid breathing mist, spray, and vapours. Use only outdoors or in a well-ventilated area. Wear recommended personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### **7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible products: Strong acids. Strong bases. Strong oxidizers.

Incompatible materials: Heat sources.

Storage area: Keep in fireproof place.

Special rules on packaging: Attacks many plastics.

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

### **7.3. Specific end use(s)**

Solvent to remove the reaction layer on metallic surfaces.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:	
1330-20-7 Xylene	
MAK	500 ml·m <sup>-3</sup> , 1200 mg·m <sup>-3</sup>
TWA	250 ppm (590 mg/m <sup>3</sup> )

### 8.2. Exposure controls

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Filter type AXBEK (EN 14387).

Protection of hands: Wear chemically resistant protective gloves. Use an appropriate method to take them off avoiding skin contact with its surface. The used gloves have to comply with specifications of CE 89/686/EWG and norm EN 374.

Full contact: Butyl rubber, minimal thickness 0.3 mm, penetration time 480 minutes.

Splash contact: Butyl rubber, minimal thickness 0.3 mm, penetration time 480 minutes.



Protective gloves

Eye protection: Goggles recommended during refilling.

Body protection: Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

General protective and hygienic measures: Handle in accordance with good industrial hygiene and safety practice. When using, do not eat or drink. When using, do not smoke. Wash hands before breaks and at the end of workday.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Information

Appearance:

Form: liquid

Colour: colourless

Odour: characteristic

Melting point: - 94 °C - lit.

Boiling point / Boiling - range (°C): 56 °C at 1.013 hPa - lit.

Flash point (°C, c.c.): - 16.99 °C - closed cup

Self-ignition temperature (°C): 465.0 °C

Explosion limits (Vol. %) lower: 13, upper: 2

Vapour pressure: 533.3 hPa at 39.5 °C | 245.3 hPa at 20.0 °C

Density (g/cm<sup>3</sup>): 0.791 g/cm<sup>3</sup> at 25 °C

Solubility (in Water): Completely soluble.

Viscosity: ~ 21s at 4 mm

Solvent content (m %): ~ 79

Vapour density (n-octanol/water): log POW -0.24

### 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

No further relevant information available.

**10.3. Possibility of hazardous reactions**

No further relevant information available.

**10.4. Conditions to avoid**

Avoid ignition sources. Heat. Sparks. Open flame. Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

Reactions with strong oxidizers, acids, and bases. Attacks many plastics.

**10.6. Hazardous decomposition products**

Carbon oxides (CO, CO<sub>2</sub>). May release flammable gases

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acetone (f) 67-64-1

LD50 oral rat 5800 mg/kg

LD50 dermal rabbit 15688 mg/kg

LC50 Inhalation rat (mg/l) 76000 mg/m<sup>3</sup>

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: May cause drowsiness or dizziness.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Symptoms/injuries after ingestion: Ingestion may cause nausea, vomiting and diarrhoea.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Acetone (67-64-1)

LC50 fishes 1: 4144.846 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

EC50 Daphnia 1: 1679.66 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

LC50 fish 2: 6210 - 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

EC50 Daphnia 2: 12600 - 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)

**12.2. Persistence and degradability**

Readily biodegradable in water: 91 % (OECD- Method 301 B).

**12.3. Bio-accumulative potential**

BCF fish: 1 0.69 | Log Kow: -0.24 | Bioaccumulative potential: Not established.

**12.4. Mobility in soil**

No further relevant information available.

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

This substance does not contain any components, in concentrations 0.1 % or higher, which are classified as persistent, bio-accumulative and toxic (PBT) or very persistent and very bio-accumulative (vPvB).

**12.6. Other adverse effects**

Avoid release to the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Recommendation

Do not allow into drains or water sources. Residues in empty containers should be neutralised with decontaminant (see section 6). Dispose of according to the local applicable regulations.

European waste catalogue

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste Codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

## SECTION 14: Transport information

### 14.1. UN number

ADR, IMDG, IATA: 1090 Acetone

### 14.2. UN proper shipping name

ADR, IMDG, IATA: 1090 Acetone

### 14.3. Transport hazard class(es)

ADR:



Class: 3 Flammable Liquids

Label: 3

IMDG, IATA:



Class: 3 Flammable Liquids

### 14.4. Packing group

ADR, IMDG, IATA: II

### 14.5. Environmental hazards

Marine pollutant: No.

### 14.6. Special precautions for user

Warning: Paint related material

Danger code (Kemler): 33

EMS number: F-E, S-E

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Transport/Additional information:

ADR

Transport class: 3

Tunnel restriction code: D/E

UN "Model Regulation": UN1090, ACETONE, LIQUID, HIGHLY FLAMMABLE, 3, II

## **SECTION 15: Regulatory information**

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

National regulations:

Water hazard class: Water hazard class 1 (Self-assessment): Slightly hazardous for water.

### **15.2. Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

### **16.1. Wording of R und H phrases**

Relevant phrases (serves as the explanation for only the hazard and risk phrases noted in the MSDS, e.g. in chapter 2 and 3)

- Eye Irrit. 2A serious eye damage/eye irritation Category 2A
- Flam. Liq. 2 Flammable liquids Category 2
- STOT SE 3 Specific target organ toxicity (single exposure) Category 3
- H225 Highly flammable liquid and vapour
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness

H225: Highly flammable liquid and vapour

H319: Causes serious eye irritation

H336: May cause drowsiness or dizziness

R11 Highly Flammable

R20/22 Harmful by inhalation and if swallowed

R66 Repeated exposure may cause skin dryness and cracking

R67 Vapours may cause drowsiness and dizziness

R36/37 Irritant to eyes and respiratory system

### **16.2. Further information**

The information provided in this material safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warrant or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This information shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship.