

SAFETY DATA SHEET

according to Regulation (EC) No 453/2010

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

1.1. Product identifier

Trade name: InnoMetal Titanium

Other names: -

MSDS name: EN_InnoMetal_MSDS_Titanium

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

1.2.1. Application of the substance / the mixture

Additional component

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 Directive 67/548/EEC or Directive 1999/45/EC: Not applicable.

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 substance is not subject to classification according to EU lists and other sources of literature known to us.

Hazard pictograms:



GHS02

Signal word:

Warning

Hazard statements:

H228 – Flammable solid

Precautionary statements:

For professional use only

P phrases written on the label *

P210 – Keep away from heat, sparks, open flames, hot surfaces. –

No smoking *

P240 – Ground/bond container and receiving equipment *

P242 – Use only non-sparking tools *

- P243 – Take precautionary measures against static discharge *
- P281 – Use personal protective equipment as required *
- P370+P378 – In case of fire: Use Extinguishing powder for extinction *
- P402+P404 – Store in a dry place. Store in a closed container *
- P241 – Use explosion-proof equipment *
- P280 - Wear protective gloves, protective clothing, eye protection, face shield

2.3. Other hazards

Risk of dust explosion.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type: Mono-constituent
Name: Titanium powder
CAS No 7740-32-6
EC no 231-142-3

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Titanium	(CAS No) 7440-32-6 (EC no) 231-142-3		F; R10
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Titanium	(CAS No) 7440-32-6 (EC no) 231-142-3		Flam. Sol. 2, H228

Full text of R-, H- and EUH-phrases: see section 16

3.2. Mixtures

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
If symptoms persist consult doctor.
After swallowing: Seek medical treatment. Rinse out mouth and then drink plenty of water.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing agents:

Special powder for metal fires.

Dry sand

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents:

Water

Foam

Carbon dioxide

ABC powder

5.2. Special hazards arising from the substance or mixture

Contact with water releases flammable gases.

Dust can combine with air to form an explosive mixture.

Hydrogen

5.3. Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Keep away from ignition sources.

6.2. Environmental precautions

Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up

Pick up mechanically.

Do not flush with water or aqueous cleansing agents

Do not use vacuum cleaner.

6.4. Reference to other sections

See Section 7 for information on safe handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed.

Information about fire and explosion protection: Keep ignition sources away - Do not smoke.

Protect against electrostatic charges. Dust can combine with air to form an explosive mixture.

Use explosion-proof apparatus/fittings and spark-proof tools. Contact with water releases flammable gases.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Do not store together with oxidizing and acidic materials. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well-sealed receptacles.

7.3. Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Titanium powder (7440-32-6)		
France	VLE (mg/m ³)	Respirable dust: 5mg/m ³ / Inhalable dust: 10 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	Respirable dust: 3mg/m ³ / Inhalable dust: 10mg/m ³
Poland	NDS (mg/m ³)	10 mg/m ³
Poland	NDSCh (mg/m ³)	30 mg/m ³

8.2. Exposure controls

Respiratory protection: Suitable respiratory protective device recommended. Filter P1/Filter P2/Filter P3
Protection of hands: Preventive skin protection by use of skin-protecting agents is recommended.



Protective gloves

Eye protection: Goggles recommended during refilling.

Body protection: Protective work clothing.

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

Physical state: Solid

Appearance: Powder. Granular.

Form: Powder

Colour: Grey

Odour: Odourless

Outdoor threshold: No data available

PH: No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point/Melting range: 1660 °C

Freezing point: No data available

Boiling point/Boiling range: 3277 °C

Flash point: Not applicable.

Self ignition temperature: 300°C Dust

Decomposition temperature: No data available

Flammability (solid, gaseous): Flammable solid

Vapour pressure: No data available

Relative vapour density at 20°C: No data available

Relative density: No data available

Density: 4,5 g/cm³ (20°C)

Solubility: Insoluble.

Log Pow: No data available

Log Kow: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Explosive properties: Dust many form explosive mixture in air.

Oxidising properties: No data available

Explosive limits: No data available

9.2. Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with: Halogens, acid, Oxidation agents.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

Store away from heat. Avoid dust formation. Remove all sources of ignition.

10.5. Incompatible materials

Acid. Oxidizing agent. Water. Halogens.

10.6. Hazardous decomposition products

(see section(s) : 5.2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:	Not classified Chemically inert substance
Skin corrosion/irritation:	Not classified
Serious eye damage/irritation:	Not classified May cause slight irritation to eyes
Respiratory or skin sensitisation:	Not classified May cause irritation to the respiratory tract No sensitizing effect known
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified TDLo=158 mg/kg (multigeneration) (effects on embryo or fetus) (RTECS XR1700000)
Specific target organ toxicity (signal exposure):	Not classified
Specific target organ toxicity (repeated exposure):	Not classified
Aspiration hazard:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology-general: No data.

12.2. Persistence and degradability

No further relevant information available.

12.3. Bio-accumulative potential

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

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

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste): Disposal must be done according to official regulations. Empty containers should be taken for recycling, recovery or waste in accordance with local Regulation.

SECTION 14: Transport information

In accordance with ADR/RID/ADNR/IMDG/ICAO/IATA

14.1. UN number

UN-No: 2878

UN-No.(IATA) 2878

14.2. UN proper shipping name

Proper Shipping Name: TITANIUM SPONGE GRANULES / TITANIUM SPONGE POWDERS

Transport document description: UN 2878 TITANIUM SPONGE GRANULES / TITANIUM SPONGE POWDERS, 4.1 , III, €

14.3. Transport hazard class(es)

Class (UN): 4.1

CLASS (IATA): 4.1 – Flammable solids, self-reactive substances and solid desensitized explosives

Hazard labels (UN): 4.1



14.4. Packing group

Packing group (UN): III

14.5. Environmental hazards

Other information: No supplementary information available.

14.6. Special precautions for user

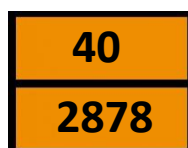
Special transport precautions: Store away from heat. Remove ignition sources. Avoid contact with water. Minimize generation of dust.

14.6.1

Hazard identification number (Kemler No.): 40

Classification code (UN): F3

Orange plates:



Transport category (ADR): 3
 Tunnel restriction code: E
 Limited quantities (ADR): 5 kg
 LQ: LQ09
 Excepted quantities (ADR): E 1
 EAC code: 4Y

14.6.2. Transport by sea

EmS-No. (1): F-G; S-G
 MFAG-No: 170

14.6.3. Air transport

No additional information available.

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

Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Authorisations and/or restrictions on use (Annex XVII):

40. Substances classified as flammable solids category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Titanium powder - Titanium
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Contains no REACH candidate substance.

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

16.2. Full text of R-,H- and EUH-phrases:

Flam. Sol. 2	Flammable solids, Category 2
H228	Flammable solid
R10	Flammable
F	Highly flammable

16.3. 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.