

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Trade name: InnoMetal Stainless Steel

Other names: -

MSDS name: EN_InnoMetal_MSDS_Stainless Steel

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

Einsteinstr. 12

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

Carc. 2, H351

STOT RE 1, H372

Skin Sens. 1, H317

Aquatic Chronic 3, H412

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



T; Toxic

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Harmful

R40: Limited evidence of a carcinogenic effect.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

Safety phrases:

22 Do not breathe dust.

24 Avoid contact with skin.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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:



GHS08



GHS07

Signal word: Warning

Hazard statements:

H351: Suspected of causing cancer.

H372: Causes damage to organs through prolonged or repeated exposure.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

Precautionary statements:

P281: Use personal protective equipment as required.

P273: Avoid release to the environment.

P308+313: If exposed or concerned: Get medical advice/attention.

P302+352: If on skin: Wash with plenty of soap and water.

2.3. Other hazards

Inhalation of dust or fumes leads to irritation of respiratory system. Inhalation of higher concentrations may cause metal fume fever.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description: Alloy of substances listed below with non-hazardous additions.

Dangerous components:

CAS-Nr.	EINECS	Chemical name	from %	till %	Hazard pictograms	R phrases	Index Number
7440-47-3	231-157-5	Chromium		< 40	substance with a Community workplace exposure limit	-	-
7440-02-0	231-111-4	Nickel	10	25	T, Xn, Xi	R48/23, R40, R43	-
7440-21-3	231-130-8	Silicon	0	5	substance with a Community workplace exposure limit	-	-
7440-44-0	231-153-3	Carbon	0	5	substance with a Community workplace exposure limit	-	-
7723-14-0	231-768-7	Phosphorus	0	1	F	R11, R52/53	-

Labelling (CLP):

CAS-Nr.	EINECS	Chemical name	Hazard pictograms	Signal word	Hazard statements
7440-47-3	231-157-5	Chromium	-	-	-
7440-02-0	231-111-4	Nickel	GHS07, GHS08	Danger	H351, 372, 317, 412
7440-21-3	231-130-8	Silicon	GHS09	Warning	H400, H410
7440-44-0	231-153-3	Carbon	-	-	-
7723-14-0	231-768-7	Phosphorus	GHS02	Danger	H228, 412 P210, 273

Non-dangerous components:

CAS-Nr.	EINECS	Chemical name	from %	till %	
7439-89-6	231-096-4	Iron		> 50	
7439-98-7	231-107-2	Molybdenum		< 10	
7440-42-8	231-151-2	Boron	0	5	Acute Tox. 4, H302
7439-96-5	231-105-1	Manganese	0	5	
7440-62-2	231-171-1	Vanadium	0	1	

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: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water.

If symptoms persist consult doctor.

After swallowing: If symptoms persist consult doctor.

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

Allergic reactions

Asthma attacks

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

For safety reasons unsuitable extinguishing agents:

Water

5.2. Special hazards arising from the substance or mixture

Dust can combine with air to form an explosive mixture.

5.3. Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Wear protective clothing.

Do not inhale dust / smoke / mist.

Keep unprotected persons away.

Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.

Dispose contaminated material as waste according to item 13.

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

Precautions for safe handling: Prevent formation of dust.

Provide suction extractors if dust is formed.

Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.

Waste air is to be released into the atmosphere only via suitable separators.

Information about fire and explosion protection: No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Store in cool, dry place in tightly closed receptacles.

Information about storage in one common storage facility: Do not store together with oxidizing and acidic materials.

Further information about storage conditions: None.

7.3. Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7440-47-3 chromium	
WEL	Long-term value: 0.5 mg/m ³
7440-02-0 nickel	
WEL	Long-term value: 0.5 mg/m ³ as Ni
7440-21-3 silicon	
WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
7440-44-0 carbon	
WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable
7723-14-0 phosphorus	
WEL	Short-term value: 0.3 mg/m ³ Long-term value: 0.1 mg/m ³

Additional information: The lists valid during the making were used as basis.

8.2. Exposure controls

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 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: Keep away from foodstuffs, beverages and feed.

Do not inhale dust / smoke / mist.

Avoid contact with the skin.

Wash hands before breaks and at the end of work.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

Appearance:

Form: Powder

Colour: grey coloured

Odour: Odourless

PH-value: Not applicable

Change in condition

Melting point/Melting range: > 1000 °C

Boiling point/Boiling range: > 2000 °C

Flash point: Not applicable.

Flammability (solid, gaseous): Not determined

Ignition temperature: Not determined

Decomposition temperature: Not applicable

Self-igniting: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

Dust can combine with air to form an explosive mixture.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapour pressure: Not applicable

Density at 20 °C: 6.0 - 10.0 g/cm³

Evaporation rate: Not applicable

Solubility in / Miscibility with water: Insoluble.

Partition coefficient (n-Octanol/water): Not applicable

Viscosity: Not applicable.

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 decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions

Reacts with acids, alkalis and oxidizing agents.
Risk of dust explosion.

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 toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: May cause sensitisation by skin contact.

Additional toxicological information:

Inhalation of dust or fumes leads to irritation of respiratory system. Inhalation of higher concentrations may cause metal fume fever.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

No further relevant information available.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity: No further relevant information available.

Terrestrial toxicity: No further relevant information available.

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

Remark: Harmful to fish.

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

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendation:

Contact manufacturer for recycling information. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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: -

14.2. UN proper shipping name

ADR: -

IMDG, IATA: -

14.3. Transport hazard class(es)

ADR: -

Class: -

Label: -

IMDG, IATA: -

Class: -

14.4. Packing group

ADR, IMDG, IATA: -

14.5. Environmental hazards

Marine pollutant: No.

14.6. Special precautions for user

Warning: -

Danger code (Kemler): -

EMS number: -

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

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

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 3)

R11 Highly flammable.

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitisation by skin contact.

R48/23 Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H228 Flammable solid.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

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.