

# Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet

Date / Revised: 16.11.2023

Product: **HARDWALL 3 SUPER**

Version: 1.0

(30721390/SDS\_GEN\_NZ/EN)

Date of print: 22.11.2023

## 1. Substance/preparation and manufacturer/supplier identification

**Product name:**  
**HARDWALL 3 SUPER**

Not recommended use: Uses other than recommended

Manufacturer/supplier:

Chemetall (New Zealand) Ltd  
664 Rosebank Road Avondale,  
Auckland 1026  
NEW ZEALAND  
Telephone: 008 837 464, +64 9 820 3888  
Telefax number: +64 9 820 3979  
E-mail address: nzadmin@basf.com

Emergency information:

National Poisons Centre: 0800 764 766  
BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)  
BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

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## 2. Hazard identification

Classification of the substance and mixture:

Acute toxicity: Cat.3 (Inhalation - vapour)  
Acute toxicity: Cat.3 (oral)  
Acute toxicity: Cat.3 (Inhalation - dust)  
Skin corrosion/irritation: Cat.2  
Serious eye damage/eye irritation: Cat.1  
Respiratory sensitization: Cat.1  
Skin sensitization: Cat.1  
Germ cell mutagenicity: Cat.2  
Carcinogenicity: Cat.1A (by inhalation)  
Reproductive toxicity: Cat.1B (unborn child)  
Hazardous to the aquatic environment - acute: Cat.1

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Hazardous to the aquatic environment - chronic: Cat.1  
Specific target organ toxicity — repeated exposure: Cat.1  
Specific target organ toxicity — repeated exposure: Cat.2

Label elements and precautionary statement:

Pictogram:



Signal Word:

Danger

Hazard Statement:

H301	Toxic if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer by inhalation.
H360	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P201	Obtain special instructions before use.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing and eye protection or face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P260	Do not breathe dust or mist.
P270	Do not eat, drink or smoke when using this product.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391	Collect spillage.
P314	Get medical advice/attention if you feel unwell.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P308 + P313	IF exposed or concerned: Get medical attention.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P310	Immediately call a POISON CENTER or physician.
P330	Rinse mouth.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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Other hazards which do not result in classification:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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### 3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

inorganic compounds

**Hazardous ingredients**

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nickel difluoride

Content (W/W):  $\geq 75\%$  -  $\leq 100\%$ 

CAS Number: 10028-18-9

Acute Tox.: Cat. 3 (Inhalation - dust)  
Acute Tox.: Cat. 3 (Inhalation - vapour)  
Acute Tox.: Cat. 3 (oral)  
Skin Corr./Irrit.: Cat. 2  
Eye Dam./Irrit.: Cat. 1  
Resp. Sens.: Cat. 1  
Skin Sens.: Cat. 1  
Muta.: Cat. 2  
Carc.: Cat. 1A (by inhalation)  
Repr.: Cat. 1B (unborn child)  
STOT RE: Cat. 1  
Aquatic Acute: Cat. 1  
Aquatic Chronic: Cat. 1  
STOT RE: Cat. 2  
M-factor acute: 1  
M-factor chronic: 1

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## 4. First-Aid Measures

**General advice:**

Keep warm, calm and covered up. Never give anything by mouth to an unconscious person. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product. Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

**If inhaled:**

Immediate medical attention required. Remove the affected individual into fresh air and keep the person calm. If breathing is irregular or stopped, administer artificial respiration.

**On skin contact:**

If symptoms persist, seek medical advice. Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

**On contact with eyes:**

Remove contact lenses, if present. Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist. Immediate medical attention required.

**On ingestion:**

Summon medical aid without delay. Do not induce vomiting due to aspiration hazard. Rinse mouth immediately with water. Keep at rest.

**Note to physician:**

Symptoms: allergic symptoms, skin irritation, Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Hazards: Dusts may cause mechanical irritation to eyes.

Treatment: Symptomatic treatment (decontamination, vital functions).

Antidote: No known specific antidote.

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## 5. Fire-Fighting Measures

Suitable extinguishing media:

carbon dioxide, alcohol-resistant foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

Fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

Cool closed containers in the vicinity of the source of fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

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## 6. Accidental Release Measures

Personal precautions:

Use personal protective clothing. Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Methods for cleaning up or taking up:

Ensure adequate ventilation. Contain and collect spillages with a protected vacuum cleaner or by wet brushing and place in a closed container for disposal in accordance with the waste regulations. Do not use a dry brush as dust clouds or static can be created.

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## 7. Handling and Storage

Handling

Avoid dust formation. Protect against moisture. Provide good ventilation of working area (local exhaust ventilation if necessary). Do not return residues to the storage containers. Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws. The workplace should be equipped with an emergency shower and eye-rinsing facility. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame. The relevant fire protection measures should be noted.

### Storage

Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Suitable materials for containers: Carbon steel (Iron), tinned carbon steel (Tinplate), High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyethylenetherephthalate (PET), Polypropylene (PP)

Suitable materials for containers: rubberized

Further information on storage conditions: Keep container dry. Keep in a cool, well-ventilated place. Protect against moisture. Avoid direct sunlight. Close containers carefully once opened and store them upright in order to prevent any leakage. No smoking. No admission for unauthorised personnel. Always keep in containers of same material as the original one. Observe label precautions.

Storage stability:

Storage temperature: < 40 °C

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

nickel difluoride, 10028-18-9;

TWA value 2.5 mg/m<sup>3</sup> (ACGIHTLV)

Measured as: fluorine (F)

(OEL (NZ))

Measured as: fluorine (F)

Exposure can also be estimated by biological monitoring.

TWA value 2.5 mg/m<sup>3</sup> (OEL (NZ))

Measured as: fluorine (F)

TWA value 0.02 mg/m<sup>3</sup> (OEL (NZ))

Measured as: nickel (Ni)

TWA value 0.005 mg/m<sup>3</sup> (OEL (NZ)), Respirable dust

Measured as: nickel (Ni)

### Personal protective equipment

Respiratory protection:

Respiratory protection required if exposure limit (if available) may be exceeded (Particle filter EN 143 P3)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

nitrile rubber (NBR) - 0.4 mm coating thickness

butyl rubber (butyl) - 0.7 mm coating thickness

Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

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Body protection:

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Avoid inhalation of dusts.

Persons with a history of allergies, asthma, recurrent or chronic respiratory disease must not be employed in any process in which this product is used. Persons using this product should undergo lung function tests at regular intervals. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn. Remove contaminated clothing immediately and dispose of safely. Hands and/or face should be washed before breaks and at the end of the shift. Keep separated from food stuffs and feed stocks.

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## 9. Physical and Chemical Properties

Form:	solid
Colour:	green
pH value:	5.0 (10.00000 g/l, 20 °C)
Melting point:	not determined
onset of boiling:	Study technically not feasible.
Flash point:	not applicable, the product is a solid (ISO 3679)
Flammability (solid/gas):	not flammable
Lower explosion limit:	not applicable
Ignition temperature:	not applicable, the product is a solid
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Self heating ability:	It is not a material capable of spontaneous heating
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating
Vapour pressure:	(20 °C) The product is a non-volatile solid.  (50 °C) not determined

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Density: 1.000 g/cm<sup>3</sup>  
(20 °C)

Relative vapour density (air):  
The product is a non-volatile solid.

Solubility in water:  
≤ 20 g/l

Miscibility with water:  
miscible

Partitioning coefficient n-octanol/water (log Pow):  
not applicable for mixtures

Viscosity, kinematic:  
(23 °C)  
not applicable, the product is a solid  
  
(40 °C)  
not applicable, the product is a solid

Flow time:  
not applicable, the product is a solid

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## 10. Stability and Reactivity

Conditions to avoid:

Avoid dust formation. Avoid direct sunlight. Avoid humidity.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:

Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

Hazardous reactions:

Dust can form an explosive mixture with air.

When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced., No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

Reactivity:

No hazardous reactions if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

**Routes of exposure**

**Assessment of acute toxicity**



Of high toxicity after single ingestion. Of pronounced toxicity after short-term inhalation.

### **Symptoms**

allergic symptoms skin irritation Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

### **Irritation**

Assessment of irritating effects:

Skin contact causes irritation. May cause severe damage to the eyes.

### **Respiratory/Skin sensitization**

Assessment of sensitization:

The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

### **Germ cell mutagenicity**

Assessment of mutagenicity:

Mutagenic properties can not be excluded on the basis of experimental data.

### **Carcinogenicity**

Assessment of carcinogenicity:

The substance caused cancer by inhalation in animal studies.

### **Reproductive toxicity**

Assessment of reproduction toxicity:

Based on available data, the classification criteria are not met.

### **Developmental toxicity**

Assessment of teratogenicity:

The substance caused malformations/developmental toxicity in laboratory animals.

### **Specific target organ toxicity (single exposure)**

Based on available data, the classification criteria are not met.

### **Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs. Repeated exposure to small quantities may affect certain organs.

### **Aspiration hazard**

No aspiration hazard expected.

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## 12. Ecological Information

### Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. There are no test results available for this product. Do not allow to enter drains or waterways.

### Mobility

Assessment transport between environmental compartments:

No data available.

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

No data available concerning biodegradation and elimination.

### Bioaccumulation potential

Bioaccumulation potential:

No data available.

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## 13. Disposal Considerations

Do not discharge into drains/surface waters/groundwater.

Observe national and local legal requirements.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Domestic transport:

UN number or ID number: UN 3288

UN proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (NICKEL DIFLUORIDE)

Transport hazard class(es): 6.1

Packing group: II

Environmental hazards: no

Special precautions for user:

### Further information

Hazchem Code:2X

IERG Number:34

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### Sea transport

#### IMDG

UN number or ID number: UN 3288  
UN proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (NICKEL DIFLUORIDE)  
Transport hazard class(es): 6.1  
Packing group: II  
Environmental hazards: no  
Marine pollutant: NO  
Special precautions for user: EmS: F-A; S-A

### Air transport

#### IATA/ICAO

UN number or ID number: UN 3288  
UN proper shipping name: TOXIC SOLID, INORGANIC, N.O.S. (NICKEL DIFLUORIDE)  
Transport hazard class(es): 6.1  
Packing group: II  
Environmental hazards: No Mark as dangerous for the environment is needed  
Special precautions for user:

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## 15. Regulatory Information

### Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

A certified handler is not required for the handling of this substance.

Tracking requirements do not apply to this substance.

HSNO Approval Number HSR002614

Metal Industry Products (Toxic [6.1]) Group Standard 2017

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## 16. Other Information

Restricted to professional users.

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Vertical lines in the left hand margin indicate an amendment from the previous version.

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