

SAFETY DATA SHEET

1 Identification of the substance or preparation and of the company/undertaking

Product Name: **HARDALLOY**
 Datasheet Number: 575472 4. 0. 0
 Use of the substance/preparation: Flame spraying powder
 Name of Supplier: Wilhelmsen Ships Service AS
 Address of Supplier: Willem Barentszstraat 50
 3165AB
 Rotterdam
 The Neherlands
 Telephone: +31 10 4877 777
 Fax: +31 10 4877 888
 Responsible Person: Patrick Rijdsdijk, Product HSE Manager, Tel.: +31 6 349 440 35
 Email: Patrick.Rijdsdijk@Wilhelmsen.com
 Name of Manufacturer: Wilhelmsen Ships Service AS
 Address of Manufacturer: Strandveien 20
 P.O.Box 33
 NO-1324 LYSAKER
 Norway
 Busines Unit Maintenance & Repair
 Telephone: +47 67 584550
 Emergency Telephone: ****ONLY TO BE USED IN CASE OF AN INCIDENT****
 NCEC: +44 1865 407333, CHEMTREC (800) 424 9300
 American Chemistry Council +1 703 527 3887,
 Greece +30 210 7793777

2 Hazards identification

- Odour: Odourless
- Appearance: powder, grey, insoluble in water
- Contact with eyes: Causes redness and irritation
- Contact with skin: In cases of severe exposure, irritation may develop
- Inhalation: Inhalation of fumes formed during welding and or cutting may be harmful.
- Limited evidence of carcinogenic effect (R40)
- May cause sensitisation by skin contact (R43)



Harmful

3 Composition/information on ingredients

Chemical Name	Concentration	CAS Number	EC Number	R Phrases*	Symbols
Nickel	>90	7440-02-0	231-111-4	40, 43	Xn
Aluminium powder (pyrophoric)	<10	7429-90-5	231-072-3	15, 17	F

*See Section 16

4 First aid measures

Contact with skin

- After contact with skin, wash immediately with plenty of soap and water (S28)
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- In the event of burns from the molten liquid, do not attempt to remove adhering material
- Burned skin must be flushed with large amounts of cold water.
- Burns must be treated by a physician.

Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Seek medical advice if necessary

Ingestion

- Induce vomiting (only if patient is conscious)
- Never make an unconscious person vomit or drink fluids
- Obtain immediate medical attention

Inhalation

- Inhalation is unlikely to occur
- Remove patient to fresh air
- Seek medical advice if necessary

General

- If you feel unwell, seek medical advice (show the label where possible) (S44)
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5 Fire-fighting measures

- Unstable above 420 deg C
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
 - Do not use water
 - Wear Positive-Pressure Breathing Apparatus
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6 Accidental release measures

Personal Precautions

- Wear protective clothing as per section 8

Environmental Precautions

- Do not flush spilt material into any public water system

Clean Up Actions

- Use vacuum cleaner to collect spilled material
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7 Handling and storage

Handling

- No special precautions are required for this product
- Use only in well ventilated areas (S51)
- Use good personal hygiene practices

Storage

- Keep container tightly closed (S7)
 - Keep only in the original container in a cool, well ventilated place away from acids and alkalis (S3/9/14/49)
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8 Exposure controls and personal protection

8 Exposure controls and personal protection (....)

Exposure Limits

- TLV (TWA) 1mg/m³ (Ni)
- TLV (TWA) 5mg/m³ (Aluminium powder (pyrophoric))

Exposure controls

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

Occupational exposure controls

- Where an air-purifying respirator is suitable, use EN143 type P-S or P-SL, or EN149 type FFP-S or FFP-SL
- Wear suitable protective clothing, including eye/face protection and gloves (leather are recommended)



Gloves



Suit



Goggles



Respirator

9 Physical and chemical properties

- Odour: Odourless
- Appearance: powder, grey, insoluble in water
- pH - not applicable
- Melting point 1400 - 1500 °C at 760 mm /Hg
- Water solubility <1 g/l
- Density 3000 - 4000 kg/m³
- Unstable above 420 deg C

10 Stability and reactivity

- No hazardous reactions known if used for its intended purpose, Stable at least up to 400 deg C
- Avoid contact with acids and alkalis

11 Toxicological information

Toxicological information

- No experimental data available

Inhalation

- Inhalation of fumes formed during welding and or cutting may be harmful.

Contact with skin

- May cause sensitisation by skin contact (R43)

Contact with eyes

- Causes irritation

Ingestion

- Not regarded as a potential route of exposure.

Carcinogenicity

- Limited evidence of carcinogenic effect (R40)

12 Ecological information

12 Ecological information (....)

Ecotoxicity

- No information available

Mobility

- Sinks in water

Persistence and Biodegradability

- No information available

Bioaccumulation Potential

- No information available

Other Adverse Effects

- No environmental problems are expected when the product is used / handled correctly.
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13 Disposal considerations

Classification

- EU Waste class: -

Disposal considerations

- Disposal should be in accordance with local, state or national legislation
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14 Transport information

Transport information

- Not classified as hazardous for transport
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15 Regulatory information



Harmful

Risk Phrases

- Limited evidence of carcinogenic effect (R40)
- May cause sensitisation by skin contact (R43)

Safety Phrases

- Do not breathe dust (S22)
 - Wear suitable protective clothing (S36)
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16 Other information

Text of R and S phrase codes used in this safety data sheet:- R15: Contact with water liberates extremely flammable gases; R17: Spontaneously flammable in air; R40: Limited evidence of carcinogenic effect; R43: May cause sensitisation by skin contact.