

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: WELDING ELECTRODE LHV 316N
 - Product Part Number: 699314 (3.2x350mm), 699322 (4.0x350mm)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Welding electrode
- 1.3 Details of the supplier of the safety data sheet

Head Office:

Wilhelmsen Ships Service AS Strandveien 20, N1324 Lysaker, Norway Tel: (47) 6349 440 35

Supplier:

Wilhelmsen Ships Service AS Willem Barentszstraat 50 3165AB Rotterdam Telephone: +31 4877 777 Fax: +31 4877 888 The Netherlands

Other suppliers SEE SECTION 16!!!

For quotations contact your local Customer Services

- Responsible Person:

Product HSE Manager, Tel.: +31 10 4877775 Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com

1.4 Emergency telephone number

-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 7793777Australia: +61 3 9630 0998
Giftinformasjonsentralen in Norway Tel.: +47 22591300

Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998

FOR QUOTATIONS PLEASE CONTACT YOUR LOCAL CUSTOMER SERVICES

SECTION 2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Not Classified
- 2.2 Label elements
 - Risk Phrases
 Not applicable
 - None
 - Safety Phrases
 Not applicable
- 2.3 Other hazards

SECTION 2 Hazards identification (....)

- Odour: Odourless
- Appearance: Welding electrode, grey, insoluble in water
- Contact with eyes: Looking into the welding / brazing flame with incorrect or insufficient
 eye protection may cause arc-eye.
- Contact with skin: May cause allergic reaction in susceptible people, In cases of severe exposure, redness and irritation may develop
- Inhalation: Inhalation of fumes formed during welding and or cutting may be harmful.
- Ingestion: Not regarded as a potential route of exposure.

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- Non classified ingredients

Concentration: >100%

CAS Number: -EC Number: -R/H Phrases: -Symbols: -Categories:

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
 - When in doubt or symptoms persist, seek medical attention

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- IF ON SKIN: Immerse in cool water/wrap in wet bandages (P302+P334).
- In case of burns immediately cool affected skin as long as possible with cold water
- Get medical advice/attention (P313).

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- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).
- When in doubt or symptoms persist, seek medical attention
- 4.2 Most important symptoms and effects, both acute and delayed
 - Inhalation of fumes formed during welding and or cutting may be harmful.
 - May cause blistering of the skin
 - Can cause damage to the eyes
- 4.3 Indication of any immediate medical attention and special treatment needed
 - No information available

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- 5.2 Special hazards arising from the substance or mixture
 - Smoke from fires is irritating
- 5.3 Advice for firefighters

SECTION 5 Fire-fighting measures (....)

- Smoke from fires is irritating
- Wear Positive-Pressure Breathing Apparatus

SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - No special precautions are required for this product
- 6.2 Environmental Precautions
 - No special precautions are required for this product
- 6.3 Methods and material for containment and cleaning up
 - Remove by mechanical means
- 6.4 Reference to other sections
 - None

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - Ensure adequate ventilation
 - Wear protective clothing as per section 8
- 7.2 Conditions for safe storage, including any incompatibilities
 - Keep in a cool, dry place
 - Protect from moist air
- 7.3 Specific end use(s)

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - TLV (TWA) 5 mg/m3 (Welding fumes)
- 8.2 Exposure controls
 - If practicable, engineering controls should be provided where airborne concentrations exceed exposure limits
- 8.3 Occupational exposure controls









- Wear suitable protective clothing, including eye/face protection and gloves (leather are recommended)
- Respiratory protection may be required under exceptional circumstances when excessive air contamination exists

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Odourless
 - Appearance: Welding electrode, grey, insoluble in water
 - pH not applicable
 - Boiling point not applicable
 - Vapour pressure not applicable
 - Vapour density not applicable

SECTION 9 Physical and chemical properties (....)

- Melting point >600 °C
- Insoluble in water
- 9.2 Other information
 - No information available

SECTION 10 Stability and reactivity

- 10.1 Reactivity
 - This article is considered stable under normal conditions
- 10.2 Chemical stability
 - This article is considered stable under normal conditions
- 10.3 Possibility of hazardous reactions
 - No hazardous reactions known if used for its intended purpose
- 10.4 Conditions to avoid
 - Avoid contact with acids and alkalis
 - Avoid contact with moist air
- 10.5 Incompatible materials
 - Contact with acids and alkalis may form toxic gases
- 10.6 Hazardous Decomposition Products
 - Decomposition products may include toxic and irritant fumes

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - The product is harmless as it is. Dangers when used: · UV and infrared radiation · Fumes and dust · Electric shocks can kill.
 - Inhalation

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

- Contact with skin
 - May cause blistering of the skin
 - May cause allergic reaction in susceptible people
- Contact with eyes
 - Can cause damage to the eyes
- Ingestion
 - Not applicable
- Carcinogenicity
 - No information available
- Teratogenicity
 - No information available
- Mutagenicity
 - No information available
- 11.2 Contact with eyes
 - Can cause damage to the eyes
- 11.3 Contact with skin
 - May cause blistering of the skin
 - May cause allergic reaction in susceptible people
- 11.4 Ingestion

SECTION 11 Toxicological information (....)

- Not applicable
- 11.5 Inhalation
 - Inhalation of fumes formed during welding and or cutting may be harmful.

SECTION 12 Ecological information

- 12.1 Toxicity
 - On available data, substance is not harmful to aquatic life
- 12.2 Persistence and degradability
 - No information available
- 12.3 Bioaccumulation Potential
 - Bioaccumulation of the components in this product is insignificant.
- 12.4 Mobility in soil
 - Sinks in water
- 12.5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
- 12.6 Other Adverse Effects
 - No environmental problems are expected when the product is used / handled correctly. In its intended use, the product will not be released into the environment.

SECTION 13 Disposal considerations

- 13.1 Waste treatment methods
 - Do not discharge into drains or the environment, dispose to an authorised waste collection point
 - Disposal should be in accordance with local, state or national legislation

SECTION 14 Transport information

Not classified as hazardous for transport

- 14.1 UN
 - UN No.: Not applicable
 - Proper Shipping Name: Not applicable
 - Hazard Class: Not applicable
 - Packing Group: Not applicable
- 14.2 Environmental hazards
 - Not Classified
 - Presents no hazard to the environment
- 14.3 Special precautions for user
 - Not classified as hazardous for transport
- 14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not Classified
 - Not applicable
- 14.5 Road/Rail (ADR/RID)
 - ADR UN No.: Not applicable
 - Proper Shipping Name: Not applicable
 - ADR Hazard Class: Not applicable
 - ADR Packing Group: Not applicable

SECTION 14 Transport information (....)

14.6 Sea (IMDG)

- IMDG UN No.: Not applicable

Proper Shipping Name: Not applicableIMDG Hazard Class: Not applicable

- INDG Hazaru Class. Not applicable

- IMDG Pack Group.: Not applicable

- IMDG EmS: Not applicable

14.7 Air (ICAO/IATA)

- ICAO UN No.: Not applicable

- Proper Shipping Name: Not applicable

- ICAO Hazard Class: Not applicable

- ICAO Packing Group: Not applicable

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: Not applicable

- DOT Proper Shipping Name: Not applicable

- DOT Labels: Not applicable

- Product RQ (lbs): Not applicable

SECTION 15 Regulatory information

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

 This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010

15.2 Chemical Safety Assessment

- None

SECTION 16 Other information

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/shipsservice

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

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SECTION 16 Other information (....)

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The product consists out of a core wire with extruded coating, the wire consists out of

