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SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: SPANGAS OXYGEN / METHANE / HYDROGEN SULFIDE 15-25PPM / CARBON MONOXIDE 50-250PPM IN NITROGEN
 - Product Part Number: 741306 734722 710087 758722 778175
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/mixture:
 - Span gas
- 1.3 Details of the supplier of the safety data sheet
 - Name of Supplier: Wilhelmsen Ships Service AS
 - Address of Supplier: Willem Barentszstraat 50, 3165AB Rotterdam, The Netherlands
 - Telephone: +31 4877 777 Fax: +31 4877 888
 - Head office: Wilhelmsen Ships Service AS
 - Strandveien 20, N1324 Lysaker
 - Norway, Tel: (47) 6349 440 35

 - Other suppliers SEE SECTION 16!!!
 - For quotations contact your local Customer Services
 - Responsible Person: Product HSE Manager,
 - Email: Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com
 - Telephone: Tel.: +31 10 4877775
- 1.4 Emergency telephone number
 - ****ONLY TO BE USED IN CASE OF AN INCIDENT****
 - International 24hrs Emergency NCEC:+ 44 1865 407333 - American Chemistry Council 24hrs +1 703 527 3887
 - Greece: Poisoning emergency center, +30 210 7793777

 - Norway: Poison information centre, +47 22591300
 - Sweden: Poison information centre, +46 08 33 12 31
 - Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998

SECTION 2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Dangerous Substances Directive (67/548/EEC). Classification, packaging and labelling of dangerous substances
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - Not Classified
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Signal Word: Warning
 - Symbols: GHS04
 - Contains gas under pressure; may explode if heated (H280).
 - Press. Gas
- 2.2 Label elements

Datasheet Number 741306-r - v2.0.0 Prometheus version 1.4.0.8

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SECTION 2 Hazards identification (....)



- Signal Word: Warning
- Pressurized container

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- Contains:
- OxygenMethane
- MethaneH
- Hydrogen Sulfide
- Carbon Monoixde
- Nitrogen

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- Hazard phrases

Contains gas under pressure; may explode if heated (H280).

- Precautionary Phrases

Store in a well-ventilated place (P403).

2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- oxygen

Concentration: 18 %
CAS Number: 7782-44-7
EC Number: 231-956-9
R/H Phrases: H270, R8
Symbols: GHS03,GHS04, O
Categories: Ox. Gas 1 Press. Gas

- methane

Concentration: 2.5 %
CAS Number: 74-82-8
EC Number: 200-812-7
R/H Phrases: H220, R12
Symbols: GHS02,GHS04, F+
Categories: Flam. Gas 1 Press. Gas

- hydrogen sulphide

Concentration: 15-25 PPM CAS Number: 7783-06-4 EC Number: 231-977-3

R/H Phrases: H220,H330,H400, R12,R26,R50 Symbols: GHS02,GHS04,GHS06,GHS09, F+, T+, N

Categories: Flam. Gas 1 Press. Gas Acute Tox. 2 Aquatic Acute 1

- carbon monoxide

Concentration: 50-250 PPM CAS Number: 630-08-0 EC Number: 211-128-3

R/H Phrases: H220,H360D ***,H331,H372 **, R61,R12,R23,R48/23

Symbols: GHS02,GHS04,GHS06,GHS08, F+, T

Categories: Flam. Gas 1 Press. Gas Repr. 1A Acute Tox. 3 STOT RE 1

- Nitrogen

Concentration: >80 %

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SECTION 3 Composition/information on ingredients (....)

CAS Number: 7727-37-9 EC Number: 231-783-9 R/H Phrases: -Symbols: GHS04 Categories: Press. Gas

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - Contact with eyes: In cases of severe exposure, redness may develop
 - Contact with skin: Not applicable
 - Ingestion: Not regarded as a potential route of exposure.
 - Inhalation: Not applicable
- 4.2 Most important symptoms and effects, both acute and delayed
 - Not hazardous
- 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
 - Inform Fire Brigade of potential danger of exploding and rocketing cylinders
- 5.3 Advice for firefighters
 - Keep container(s) exposed to fire cool, by spraying with water
 - Inform Fire Brigade of potential danger of exploding and rocketing cylinders
 - Wear Breathing Apparatus

SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Shut off source of leak if safe to do so
- 6.2 Environmental Precautions
 - No special precautions are required for this product
- 6.3 Methods and material for containment and cleaning up
 - Shut off source of leak if safe to do so
 - Ventilate area
- 6.4 Reference to other sections
 - See Section 13

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - No special precautions are required for this product
- 7.2 Conditions for safe storage, including any incompatibilities
 - Keep in a cool, dry, well ventilated place
 - Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 deg C
- 7.3 Specific end use(s)

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SECTION 7 Handling and storage (....)

- Contact supplier for further information

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - Hydrogen sulfide TLV (TWA) 1,6 mg/m3 ()
 - Carbon monoxide TLV (TWA) 25 mg/m3 ()
- 8.2 Exposure controls
 - No special precautions are required for this product
- 8.3 Occupational exposure controls









- No special precautions are required for this product
- Wear plastic or rubber gloves
- Wear goggles giving complete eye protection

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Smells of sulphur
 - Appearance: Compressed gas
 - pH not applicable
 - Boiling point not known
 - Vapour pressure not known
 - Melting point not applicable
- 9.2 Other information
 - None

SECTION 10 Stability and reactivity

- 10.1 Reactivity
 - This article is considered stable under normal conditions
- 10.2 Chemical stability
 - 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 overheating
 - Keep away from naked flames, incandescent or hot surfaces
- 10.5 Incompatible materials
 - None
- 10.6 Hazardous Decomposition Products
 - Decomposition products may include toxic and irritant fumes

SECTION 11 Toxicological information

11.1 Information on toxicological effects

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SECTION 11 Toxicological information (....)

- No information available
- 11.2 Contact with eyes
 - Not hazardous
 - In cases of severe exposure, irritation may develop
- 11.3 Contact with skin
 - Not hazardous
 - In cases of severe exposure, irritation may develop
- 11.4 Ingestion
 - Not regarded as a potential route of exposure.
- 11.5 Inhalation
 - In cases of severe exposure, headache may develop

SECTION 12 Ecological information

- 12.1 Toxicity
 - On available data, substance is not harmful to aquatic life
- 12.2 Persistence and degradability
 - Degrades rapidly on exposure to air
- 12.3 Bioaccumulation Potential
 - No information available
- 12.4 Mobility in soil
 - This substance is volatile
- 12.5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
- 12.6 Other Adverse Effects
 - On available data, substance is not harmful to the environment

SECTION 13 Disposal considerations

- 13.1 Waste treatment methods
 - Disposal should be in accordance with local, state or national legislation
 - Disposal should be in accordance with manufacturer's instructions
 - No special precautions are required for this product
- 13.2 Classification
 - EU Waste class: -

SECTION 14 Transport information



14.1 UN

- UN No.: UN1956
- Proper Shipping Name: COMPRESSED GAS, N.O.S (CARBON MONOXIDE , HYDROGEN SULFIDE , METHANE , OXYGEN IN NITROGEN MIXTURE)
- Hazard Class: 2.2
- Packing Group: Not applicable
- 14.2 Environmental hazards
 - Presents no hazard to the environment

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SECTION 14 Transport information (....)

- 14.3 Special precautions for user
 - Gas cylinders must be equipped with valve protection caps during transport.
- 14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not applicable
- 14.5 Road/Rail (ADR/RID)
 - ADR UN No.: UN1956
 - Proper Shipping Name: COMPRESSED GAS, N.O.S (CARBON MONOXIDE , HYDROGEN SULFIDE , METHANE , OXYGEN IN NITROGEN MIXTURE)
 - ADR Hazard Class: 2.2
 - ADR Packing Group: Not applicable

14.6 Sea (IMDG)

- IMDG UN No.: UN1956
- Proper Shipping Name: COMPRESSED GAS, N.O.S (CARBON MONOXIDE , HYDROGEN SULFIDE , METHANE , OXYGEN IN NITROGEN MIXTURE)
- IMDG Hazard Class: 2.2
- IMDG Pack Group.: Not applicable
- IMDG EmS: F-C, S-V

14.7 Air (ICAO/IATA)

- ICAO UN No.: UN1956
- Proper Shipping Name: COMPRESSED GAS, N.O.S (CARBON MONOXIDE , HYDROGEN SULFIDE , METHANE , OXYGEN IN NITROGEN MIXTURE)
- ICAO Hazard Class: 2.2
- ICAO Packing Group: N/A
- 14.8 DOT / CFR (US Department of Transportation)
 - Identification Number: UN1956
 - DOT Proper Shipping Name: Compressed gas, N.O.S. (Nitrogen, Oxygen mixture)
 - DOT Labels: 2.2
 - Product RQ (lbs): -

SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - This Safety Data Sheet has been prepared in accordance with article 31 and annex II in REACH and Directive 453/2010/EU.
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Refer to The Dangerous Substances Directive (67/548/EEC)
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- 15.2 Chemical Safety Assessment
 - None

SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H220: Extremely flammable gas. H270: May cause or intensify fire; oxidiser. H330: Fatal if inhaled. H331: Toxic if inhaled. H360D: May damage the unborn child. H372: Causes damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life. R12: Extremely Flammable. R23: Toxic by inhalation. R26: Very toxic by inhalation. R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation. R50: Very toxic to aquatic organisms. R61: May cause harm to the unborn child. R8: Contact with combustible material may cause fire.

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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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