

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: UNITOR CASTIRON FLUX 236 F
 - Product Part Number: 764487
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Welding flux
- 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
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Not Classified

 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous
 - This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
 - Symbols: T
 - May impair fertility (R60)
 - May cause harm to the unborn child (R61)

SECTION 2 Hazards identification (....)

-

2.2 Label elements



- Contains:

- boric acid, disodium salt

-

- Risk Phrases

May impair fertility (R60)

May cause harm to the unborn child (R61)

- Safety Phrases

Avoid exposure - obtain special instructions before use (S53)

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)

Dispose of this material and its container at hazardous or special waste collection point (S56)

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Odour: Odourless
- Appearance: paste, white, partly miscible with water
- Contact with eyes: Looking into the welding / brazing flame with incorrect or insufficient eye
 protection may cause arc-eye.
- Inhalation: Inhalation of fumes formed during welding and or cutting may be harmful.

SECTION 3 Composition/information on ingredients

3.1 Mixtures

boric acid, disodium salt
 Concentration: 25-30%
 CAS Number: 1330-43-4
 EC Number: 215-540-4
 R/H Phrases: R60, R61 - H360

Symbols: T, GHS08

Categories: Repr. Cat. 2, Repr. 1B

***SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REACH.

ARTICLE 57***: CAS: 1330-43-4

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - In case of burns immediately cool affected skin as long as possible with cold water
 - Burns should be covered with a clean, dry non-fluffy material
 - 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
 - IF ON SKIN: Wash with plenty of soap and water (P302+P352).
 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).

_

SECTION 4 First aid measures (....)

- 4.2 Most important symptoms and effects, both acute and delayed
 - Inhalation of fumes formed during welding and or cutting may be harmful.
- 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
 - 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
 - See Section 13

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - Ensure adequate ventilation
 - Wear protective gloves/protective clothing/eye protection/face protection (P280).
- 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)
 - Contact supplier for further information

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)

SECTION 8 Exposure controls/personal protection (....)

- Wear suitable filter lenses when welding / cutting.
- In case of inadequate ventilation wear respiratory protection (P285).
- Where an air-purifying respirator is suitable, use EN143 type P-S or EN149 type FFP-S

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Characteristic odour
 - Appearance: powder, light, grey, partly soluble in water
 - Insoluble in water
- 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
 - 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
 - No special precautions are required for this product
- 10.5 Incompatible materials
 - None
- 10.6 Hazardous Decomposition Products
 - Hydrogen fluoride

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - Not applicable
- 11.2 Contact with eyes
 - May cause irritation
- 11.3 Contact with skin
 - Not applicable
- 11.4 Ingestion
 - Not regarded as a potential route of exposure.
- 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.

SECTION 12 Ecological information (....)

- 12.4 Mobility in soil
 - No information available
- 12.5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
- 12.6 Other Adverse Effects
 - No information available

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
- 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

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
- ADR subrisk: Not applicable
- ADR Flashpoint: Not applicable

14.6 Sea (IMDG)

- IMDG UN No.: Not applicable
- Proper Shipping Name: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable
- IMDG EmS: Not applicable
- IMDG subrisk: Not applicable
- IMDG Flashpoint: 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
- ICAO subrisk: Not applicable
- ICAO Flashpoint: Not applicable

Datasheet Number 764487 - v1.0.0

SECTION 14 Transport information (....)

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
- Hazardous Material: Not applicable
- Hazard Class: Not applicable
- DOT subrisk: Not applicable
- DOT Flashpoint: Not applicable

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.
- Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
- ***SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REACH, ARTICLE 57***: CAS:10043-35-3

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:- H360: May damage fertility or the unborn child. R60: May impair fertility. R61: May cause harm to the unborn child.

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

SECTION 16 Other information (....)

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

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

Wilhelmsen Ships Service Level 17, 636 St Kilda Road Melbourne Vic 3004 AUSTRALIA Tel: +61 3 9630 0900 Emergency 24hrs: +61 3 9630 0998

Wilhelmsen Ships Service INC 210 Edgewater Street US-10305 Staten Island New York United States Telephone daytime: (+1) 718 815 1310 Fax: (+1) 718 233 3268

Wilhelmsen Ships Service INC 2200 W. Pacific Coast Highway US-90810 Long Beach California, United States Tel (+1) 562 624 8888 Fax (+1) 562 624 1011

Wilhelmsen Ships Service INC 701 Ashland Ave. Ashland Center Two, Bay 12 US- 19032 Folcroft Pennsylvania United States Tel (+1) 610 586 7801 Fax (+1) 215 701 0646

Wilhelmsen Ships Service INC. 9400 New Century Drive US-77507 Pasadena Texas United States Telephone daytime: (+1) 281 867 2000 Fax: (+1) 281 867 2800

Wilhelmsen Ships Service Ltd. Unit 3A NewtonsCourt Crossways DA2 6QL Dartford, Kent United Kingdom Tel (+44) 1322 282 412 Fax (+44) 1322 284 774

Wilhelmsen Ships Service Ltda Rua Bispo Lacerda nos.61/67 Del Catilho BR 21051120 Rio de Janeiro Brazil Tel (+55) 21 25 82 8000 Fax (+55) 21 25 82 8001

Wilhelmsen Ships Service (S) Pte Ltd 186 Pandan Loop Singapore 128376 Tel (+65) 6395 4545 Wilhelmsen Ships Service Co., Ltd 12-31 Torihama-cho Kanazawa-ku Yokohama-shi JP-236 0002, Japan Tel (+81) 45 775 0012 Fax (+81) 45 775 0070

Wilhelmsen Ships Service Hellas SA 100, D. Moutsopoulou & Serifou str GR-185 41 Piraeus Greece Tel (+ 30) 210 4239100 Fax (+ 30) 210 4212480

Wilhelmsen Ships Service AS U.A.E. Fl 24 Executive Heights, Tecom C Sheikh Zayed Road (East) Dubai United Arab Emirates Tel (+971) 4 382 3888

Wilhelmsen Ships Service AS, Willem Barentszstraat 50 3165 AB Rotterdam-Albrandswaard, the Netherlands. Tel (+31) 10 4877 777

