

SDS. SAFETY DATA SHEET - NAVY STEEL Aqueous Rust Converter and Primer for steel.

Conforms to Regulation (EC) No 1907/2006 (REACH) Annex 11 as amended by Regulation (EU) No. 453/2010-United Kingdom

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

1.1 Product identifier

Product name:

Navy Steel

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Product use:

Rust converter and primer coating for steel.

1.3 Details of the supplier of the safety data sheet

Supplier:

D Adam & Associates

1 West End Units Charlesfield Industrial Estate

St Boswells, Melrose, TD6 0HH, Scotland U.K.

Tel.: +44(0) 1835 268120

www.navysteel-rust-converter.co.uk

e-mail address of person responsible for this SDS:

dougadam70@gmail.com

1.4 Emergency telephone number:

+44(0)1835 268120

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Eye Irrit. 2, H319

Ingredients of unknown toxicity : 0%

Ingredients of unknown ecotoxicity : 0%

See Section 16 for the full text of the H statements declared above.

See Section 16 for the full text of the R-phrases declared above.

Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

2.2 Label elements

Hazard pictograms

Signal word : Warning

Hazard statements :

H319 - Causes serious eye irritation

H315 - Causes skin irritation.

Precautionary statements

Prevention:

P280 - Wear protective gloves: < 1 hour (breakthrough time): nitrile rubber (0.4 mm). Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

Response:

P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water.

Take off contaminated clothing and wash it before reuse. P332 + P313 -

If skin irritation occurs: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.

Storage:

Not applicable.

Disposal:

Not applicable.

Hazardous ingredients

2-butoxyethanol:

2.3 Other hazards

Other hazards which do not result in classification

Not available.

SECTION 3: Composition/information on ingredients

3.1 Substance / mixture:

Hazardous components	Amount %	Index No.	CAS No.	EC- No No.	Classification Reg (EC) No 1272/2008 Hazard class/category	Hazard statements	Classification (67/548/EEC)
2-butoxyehanol	3%	603-14-00-0	111-76-2	203-905-0	Acute tox 4, Eye Irrit 2 Skin Irrit 2	H312, H302 H309, H315	Xn, R20/21/22

Other ingredients, in the percentages present, are not classed as dangerous in the finished product formulation.

For the full test of the R- phrases mentioned see Section 16

For the full test of the H- Statements phrases mentioned see Section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General:

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

If unconscious, place in recovery position and seek medical advice

Eye contact:

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Loosen tight clothing such as a collar, tie, belt or waistband

Ingestion:

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest.

Do NOT induce vomiting.

Skin contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser.

Do NOT use solvents or thinners.

Protection of first-aiders :

No action shall be taken involving any personal risk or without suitable training.

It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested.

Ingestion:

No specific data

Inhalation:

No specific data

Eye contact:

Eye irritation causing pain, watering or redness

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Potential acute health effects

Inhalation :

No known significant effects or critical hazards.

Ingestion :

Irritating to mouth, throat and stomach.

Skin contact :

May cause skin irritation.

Eye contact :

Causes serious eye irritation.

Over-exposure signs/symptoms

Skin contact

irritation and redness

Ingestion

no specific data

Inhalation

No specific data.

Eye contact

Adverse symptoms may include irritation, pain, watering or redness.

4.3 Indication of any immediate medical attention and special treatment needed.

Notes to physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested.

Specific treatments:

No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing material

Suitable extinguishing media:

Use an extinguishing agent suitable for the surrounding fire

Unsuitable extinguishing media:

None known

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst

Hazardous thermal decomposition products

Aldehydes, organic acids, nitrogen oxides, ammonia, amines, hydrogen chloride, chlorine, chlorine compounds.

5.3 Advice for firefighters

Special protective actions for fire-fighters

Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.

Refer to protective measures listed in sections 7 and 8.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel"

6.2 Environmental Precautions

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13).

Preferably clean with a detergent. Avoid using solvents.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibility

Store in original container between the following temperatures: 5 to 30°C (41 to 86°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight.

Do not store in metal containers, Sensitive to frost and can freeze.

High storage temperatures can lead to accelerated settling, and should be avoided.

7.3 Specific end use(s)

Recommendations :

Not available

Industrial sector specific solutions:

Not available

Remarks :

During storage, detectable concentrations of residual monomers may build up in the head space of enclosed vessels.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker or exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures

Exposure limits

None

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. < 1 hour (breakthrough time): nitrile rubber (0.4 mm)

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

No special protection is required.

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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Physical state	Liquid
Colour:	Milky white.
Odour	Practically odourless
Odour threshold :	Not available
pH	1 to 2
Melting point/freezing point :	-3 °C
Initial boiling point and boiling range	100 °C
Softening range :	Not available.
Flash point	>100 °C (estimate)
Evaporation rate :	Not available.
Burning rate :	Not applicable.
Burning time :	Not applicable.
Flammability (solid, gas) :	Not available
Vapour pressure :	Not available.
Vapour density	
Flammability (solid, gas) :	Not available
Flammability (solid, gas) :	Not available
Relative density :	1.29 (Water = 1)
Density (g/cm ³) :	1.29 g/cm ³ (20°C)
Bulk density:	Not available.
Solubility in water	Not available
Solubility :	Partially soluble in the following materials: cold water and hot water
Viscosity :	Dynamic (room temperature): 50 mPa·s (50 cP)
Upper/lower flammability explosive limits	Not available
Auto-ignition temperature :	Not available
Explosive properties :	Not available.

Oxidising properties : Not available.

Partition coefficient:

noctanol/Water

Not available

Decomposition temperature :

Not available

9.2 Other information

Remarks :

Miscible in water.

SECTION 10: Stability and reactivity

10.1 Reactivity :

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

No specific data.

10.5 Incompatible materials :

Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air

Reactive or incompatible with the following materials:

Alkalis strong oxidizing materials

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced..

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available

Irritation/Corrosion:

Not available

Sensitization

Not available

Mutagenacy

Not available.

Carcinogenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Not available

Specific target organ toxicity (repeated exposure)

Not available

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available

Potential acute health effects**Inhalation :**

No known significant effects or critical hazards.

Ingestion :

Irritating to mouth, throat and stomach.

Skin contact :

Causes skin irritation.

Eye contact :

Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics**Eye contact :**

Adverse symptoms may include the following: pain or irritation, watering redness.

Inhalation

No specific data.

Skin contact :

Adverse symptoms may include the following: irritation redness

Ingestion:

No specific data

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential delayed effects :

Not available.

Potential immediate effects :

Not available.

Long term exposure

Potential delayed effects :

Not available.

Potential immediate effects :

Not available

Potential chronic health effects

Not available

General :

No known significant effects or critical hazards.

Carcinogenicity :

No known significant effects or critical hazards.

Mutagenicity :

No known significant effects or critical hazards.

Teratogenicity :

No known significant effects or critical hazards.

Developmental effects :

No known significant effects or critical hazards.

Fertility effects :

No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not known

SECTION 12: Ecological information

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil Soil/water partition coefficient (KOC)

Not available

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

This material and its container must be disposed of in a safe way.

Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Empty containers or liners may retain some product residues.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	TDG classification	DOT classification	ADR/RID	ADN	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

14.2 UN proper shipping name

Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
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14.3 Transport

hazard classes Not regulated Not regulated Not regulated Not regulated Not regulated Not regulated

packing group Not regulated Not regulated Not regulated Not regulated Not regulated Not regulated

14.5 Environmental

hazards No No No No No No

Additional information

No No No No No No

14.6 Special precautions for User

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

None of the components are listed.

Substances of very high concern

None of the components are listed

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

None of the components are listed

National regulations

15.2 Chemical safety Assessment

No chemical safety has been carried out.

SECTION 16: Other information

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification justification

Skin Irrit 2 H315 On basis of test data

Eye Irrit 2 H318 On basis of test data

Full text of abbreviated H-Statements

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled

Full text of abbreviated R phrases

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R36/38- Irritating to eyes and skin.

Full text of classifications

Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 [CLP/GHS]

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 [CLP/GHS]

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard state ment

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

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