



## Safety Data Sheet

NAU703 Eroding Antifouling Navy

Version No. 8 Date Last Revised 16/04/13

Conforms to the requirements of Regulation (EC) No.1907/2006 (REACH), Annex II

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

**1.1. Product identifier** Eroding Antifouling Navy  
 Product Code NAU703  
 Registration Number HSE No. 9618, PCS No. 97178, MSA 2013-02-05-B01

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

Intended use Antifouling  
 For professional and amateur use.  
 Application Method See Technical Data Sheet.

**1.3. Details of the supplier of the safety data sheet**

**Supplier** AKZO NOBEL COATINGS  
 S.P.A.  
 Via De Marini 61/14  
 16149 Genova  
 Italia

**Telephone No.** +39 010 6595 71  
**Fax No.** +39 010 6595 759

**1.4. Emergency telephone number**

**Supplier** +31-(0)570-679211 (24 h)

**Official Advisory Body Telephone No.:**  
**Advice for Doctors and Hospitals**

+39 10 352 808

**Email** nauticalsds@akzonobel.com

### SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

Mixture NOT yet classified according to Regulation (EC) No. 1272/2008

**Classification according to 67/548/EEC or 1999/45/EC.**

Xn Harmful.

N Dangerous for the environment.

R10 Flammable.

R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 2.2. Label elements

According to 1999/45/EC



Harmful



Dangerous for the environment

**Contains:** Rosin, Copper (I) oxide ,

R10 Flammable.

R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S2 Keep out of the reach of children.

S23 Do not breathe vapour/spray.

S24 Avoid contact with skin.

S29 Do not empty into drains.

S37/39 Wear suitable gloves and eye/face protection.

S46 If swallowed, seek medical advice immediately and show this container or label.

S51 Use only in well-ventilated areas.

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

### P. Phrases;

### 2.3. Other hazards

This product contains no PBT/vPvB chemicals.

## SECTION 3: Composition/information on ingredients

If the product contains substances that present a health hazard within the meaning of the Dangerous Substances Directive 67/548/EC, or have occupational exposure limits detailed in EH40, these substances are listed below.

Ingredient/Chemical Designations	Weight %	67/548/EEC Classification	EC No. 1272/2008 Classification	Notes
Copper (I) oxide CAS Number: 0001317-39-1 EC No. 215-270-7 Index No.: 029-002-00-X REACH Reg. No.:	10 - < 25	Xn;R22 N;R50-53	Acute Tox. 4;H302 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Rosin CAS Number: 0008050-09-7 EC No. 232-475-7 Index No.: 650-015-00-7 REACH Reg. No.: 01-2119480418-32-xxxx	10 - < 25	R43	Skin Sens. 1;H317	[1][2]
Solvent naphtha (petroleum), light aromatic CAS Number: 0064742-95-6 EC No. 265-199-0 Index No.: 649-356-00-4 REACH Reg. No.:	10 - < 25	Xn;R65 N; R51/53 (Self Classification)	Asp. Tox. 1;H304 Aquatic Chronic 2;H411 (Self Classification)	H; P [1]
Zinc oxide CAS Number: 0001314-13-2	2.5 - < 10	N;R50/53	Aquatic Acute 1;H400 Aquatic Chronic	[1][2]

EC No. 215-222-5 Index No.: 030-013-00-7 REACH Reg. No.: 01-2119463881-32-xxxx			1;H410	
Xylene CAS Number: 0001330-20-7 EC No. 215-535-7 Index No.: 601-022-00-9 REACH Reg. No.:	2.5 - < 10	R10 Xn;R20/21 Xi;R38	Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315	C [1][2]
1,2,4-trimethylbenzene CAS Number: 0000095-63-6 EC No. 202-436-9 Index No.: 601-043-00-3 REACH Reg. No.:	2.5 - < 10	R10 Xn;R20 Xi;R36/37/38 N;R51-53	Flam. Liq. 3;H226 Acute Tox. 4;H332 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Aquatic Chronic 2;H411	[1][2]
1,3,5-trimethylbenzene CAS Number: 0000108-67-8 EC No. 203-604-4 Index No.: 601-025-00-5 REACH Reg. No.:	1 - < 2.5	R10 Xi;R37 N;R51-53	Flam. Liq. 3;H226 STOT SE 3;H335 Aquatic Chronic 2;H411	[1]
Ethylbenzene CAS Number: 0000100-41-4 EC No. 202-849-4 Index No.: 601-023-00-4 REACH Reg. No.:	1 - < 2.5	F;R11 Xn;R20	Flam. Liq. 2;H225 Acute Tox. 4;H332	[1][2]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in 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.

#### Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

#### Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognised skin cleanser. Do NOT use solvents or thinners.

#### Eye

Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

#### Ingestion

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

No data available

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

No data available

## **SECTION 5: Fire-fighting measures**

### **5.1. Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sup>2</sup>. powder, water spray.

Do not use; water jet.

### **5.2. Special hazards arising from the substance or mixture**

Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Avoid exposure and use breathing apparatus as appropriate.

### **5.3. Advice for fire-fighters**

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapour levels are below the Lower Explosive Limit before re-entering.

### **6.2. Environmental precautions**

Do not allow spills to enter drains or watercourses.

### **6.3. Methods and material for containment and cleaning up**

Ventilate the area and avoid breathing vapours. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Handling**

This coating contains solvents. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

#### **In Storage**

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

### **7.2. Conditions for safe storage, including any incompatibilities**

Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

Avoid skin and eye contact. Avoid inhalation of vapours and spray mists. Observe label precautions. Use personal protection as shown in section 8.

Smoking, eating and drinking should be prohibited in all preparation and application areas.

Never use pressure to empty a container; containers are not pressure vessels.

Store in a well ventilated, dry place away from sources of heat and direct sunlight.

Store on concrete or other impervious floor, preferably with bunding to contain any spillage. Do not stack more than 3 pallets high.

Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in the original container or one of the same material.

Prevent unauthorised access.

### 7.3. Specific end use(s)

There are no exposure scenarios, see details in section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The following workplace exposure limits have been established by the Health and Safety Executive as published in EH40.

Material	Short term (15 min. ave)		Long term (8hr TWA)		Comments
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
1,2,4-trimethylbenzene			25	125	
1,3,5-trimethylbenzene			25	125	
Ethylbenzene	125	552	100	441	+
Xylene	100	441	50	220	+

For Key to entries in 'Comments' column see Section 16

### DNEL/PNEC values

No Data Available

### 8.2. Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour below occupational exposure limits suitable respiratory protection must be worn.

#### Eye/face protection

Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids. Eyewear should meet the requirements of standard EN 166.

#### Skin protection

For prolonged or repeated contact use protective gloves. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Skin should be washed after contact.

Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended gloves: Viton® or Nitrile  
Breakthrough Time: 480 min

When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30

minutes according to EN 374) is recommended.

**NOTICE:** The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

#### **Other**

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

#### **Respiratory protection**

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators. For maximum protection when spraying this product it is recommended that a multi layer combination type filter, such as ABEK1, is used. In confined spaces use compressed air or fresh air respiratory equipment.

#### **Thermal hazards**

No Data Available

### **SECTION 9: Physical and chemical properties**

<b>Appearance</b>	Blue Liquid
<b>Odour</b>	Smell of Solvent
<b>Odour threshold</b>	Not Measured
<b>pH</b>	Not Measured
<b>Melting point / freezing point (°C)</b>	Not Measured
<b>Initial boiling point and boiling range (°C)</b>	110
<b>Flash point (°C)</b>	39
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
<b>Vapour pressure (Pa)</b>	Not Measured
<b>Vapour density</b>	Heavier than air.
<b>Relative density</b>	1.44
<b>Solubility(ies)</b>	Immiscible
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature (°C)</b>	Not Measured
<b>Decomposition temperature (°C)</b>	Not Measured
<b>Viscosity (cSt)</b>	106

#### **9.2. Other information**

No further information

### **SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions.

**10.3. Possibility of hazardous reactions**

May react exothermically with: oxidising agents, strong alkalis, strong acids.

**10.4. Conditions to avoid**

Stable under recommended storage and handling conditions (see section 7).

**10.5. Incompatible materials**

Keep away from the following materials: oxidising agents, strong alkalis, strong acids.

**10.6. Hazardous decomposition products**

Fire will produce dense black smoke. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Avoid exposure and use breathing apparatus as appropriate.

<b>SECTION 11: Toxicological information</b>
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**Acute toxicity**

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr
1,2,4-trimethylbenzene - (95-63-6)	3,400.00, Rat	3,160.00, Rabbit	18.00, Rat	Not Available
1,3,5-trimethylbenzene - (108-67-8)	Not Available	Not Available	24.00, Rat	Not Available
Copper (I) oxide - (1317-39-1)	470.00, Rat	2,000.00, Rabbit	Not Available	50.00, Rat
Ethylbenzene - (100-41-4)	3,500.00, Rat	15,433.00, Rabbit	17.20, Rat	Not Available
Rosin - (8050-09-7)	7,600.00, Rat	2,500.00, Rabbit	Not Available	Not Available
Solvent naphtha (petroleum), light aromatic - (64742-95-6)	6,800.00, Rat	3,400.00, Rabbit	Not Available	Not Available
Xylene - (1330-20-7)	4,299.00, Rat	1,548.00, Rabbit	20.00, Rat	Not Available
Zinc oxide - (1314-13-2)	5,000.00, Rat	Not Available	Not Available	2.50, Mouse

## SECTION 12: Ecological information

### 12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

There are no data available on the product itself.

The product should not be allowed to enter drains or water courses.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Copper (I) oxide - (1317-39-1)	0.075, Danio rerio	0.042, Daphnia similis	0.03 (96 hr), Pseudokirchneriella subcapitata
Rosin - (8050-09-7)	1.00, Danio rerio	10.00, Daphnia magna	100.00 (72 hr), Selenastrum capricornutum
Solvent naphtha (petroleum), light aromatic - (64742-95-6)	9.22, Oncorhynchus mykiss	6.14, Daphnia magna	19.00 (72 hr), Selenastrum capricornutum
Zinc oxide - (1314-13-2)	1.10, Oncorhynchus mykiss	0.098, Daphnia magna	0.042 (72 hr), Pseudokirchneriella subcapitata
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
1,2,4-trimethylbenzene - (95-63-6)	7.72, Pimephales promelas	3.60, Daphnia magna	Not Available
1,3,5-trimethylbenzene - (108-67-8)	12.52, Carassius auratus	6.00, Daphnia magna	25.00 (48 hr), Scenedesmus subspicatus
Ethylbenzene - (100-41-4)	4.20, Oncorhynchus mykiss	2.93, Daphnia magna	3.60 (96 hr), Pseudokirchneriella subcapitata

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.



The European Waste Catalogue Classification of this product, when disposed of as waste is 08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances. If mixed with other wastes this code may no longer apply and the appropriate code should be assigned. For further information contact your local waste authority.

#### SECTION 14: Transport information

<b>14.1. UN number</b>		1263
<b>14.2. UN proper shipping name</b>		PAINT
<b>14.3. Transport hazard class(es)</b>		
<b>ADR/RID/ADN</b>		UN1263 Paint, 3, III
<b>IMDG</b>	<b>class/div 3</b>	<b>Sub Class -</b>
	<b>Segregation Group</b>	No segregation group appropriate
	<b>EmS</b>	F-E,S-E
<b>ICAO/IATA</b>	<b>Air class 3</b>	<b>Sub Class -</b>
<b>14.4. Packing group</b>		III
<b>14.5. Environmental hazards</b>		
<b>ADR/RID/ADN</b>	Environmentally Hazardous: Yes	
<b>IMDG</b>	Marine Pollutant: Yes ( Copper (I) oxide )	
<b>14.6. Special precautions for user</b>	No further information	
<b>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not Applicable	

#### SECTION 15: Regulatory information

##### EU Legislation

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

##### National Legislation

UKSI 2009 No. 716 CHEMICALS (HAZARD INFORMATION AND PACKAGING FOR SUPPLY) REGULATIONS 2009.

#### SECTION 16: Other information

This product complies with IMO Antifouling Systems Convention (AFS 2001).

Antifouling Type - Organotin-free ablative.

Active Ingredients -

Dicopper oxide (1317-39-1)

**IMPORTANT NOTE:** the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

**MANUFACTURER'S DISCLAIMER:** the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws. Unless we have agreed to the contrary, all products are supplied by us subject to our standard terms and conditions of business, which include limitations of liability. Please make sure to refer to these and / or the relevant agreement which you have with AkzoNobel (or its affiliate, as the case may be). © AkzoNobel

The information in this Health & Safety Data Sheet is required pursuant to EC Regulation 1907(2006) and the Chemicals (Hazard Information & Packaging for Supply) Regulations 2009.

Key to 'Comments' column in Section 8.

- (+) There is a risk of absorption through unbroken skin.
- (C) Capable of causing cancer and/or heritable genetic damage.
- (R) Suppliers recommended limit.
- (S) Capable of causing occupational asthma.

The full text of the R, H & EUH phrases appearing in section 3 is:

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

R10 Flammable.

R11 Highly flammable.

R20 Harmful by inhalation.

R20/21 Harmful by inhalation and in contact with skin.

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

**This is the first revision of this SDS format, changes from previous revision not applicable.**

End of document



Your attention is drawn to the disclaimer on the Product Data Sheet which with this Safety Data Sheet and the package labelling comprise an integral information system about this product. Copies of the Product Data Sheet are available on from our Internet site : [www.nauticalpaint.com](http://www.nauticalpaint.com).