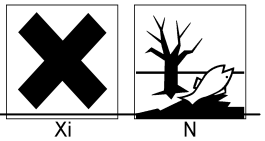

Safety Data Sheet dated 15/3/2006, version 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade name:	MARINE PRIMER
Colour:	grey
Trade code:	12227.030
Product type and use:	Two-pack epoxy primer

Company:

ATTIVA S.p.A. - BRAND BOERO BARTOLOMEO S.p.A -
Pozzolo Formigaro (AL) - Tel. +39 0143/318711 - Sede GENOVA Tel. +39 010/53361 - FAX +39 010/5336310

Emergency telephone number of the company and/or of an authorised advisory centre:

Centro Antiveleni - Ospedale "San Martino" - Genova - Tel.010/352808

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:

15% - 20% epoxy resin (number average molecular weight > 700)
N.67/548/CEE: 603-074-00-8 CAS: 25068-38-6 EINECS: 500-033-5
Xi R36/38 R43

15% - 20% zinc ortophosphate
N.67/548/CEE: 030-011-00-6 CAS: 7779-90-0 EINECS: 231-944-3
N R50/53

7% - 10% solvent naphtha
N.67/548/CEE: 649-356-00-4 CAS: 64742-95-6 EINECS: 265-199-0
N Xn R51/53 R66 R67 R10 R65

5% - 7% xylene [4]
N.67/548/CEE: 601-022-00-9 CAS: 1330-20-7 EINECS: 215-535-7
Xn R10 R20/21 R38

5% - 7% 1-methoxy-2-propanol
N.67/548/CEE: 603-064-00-3 CAS: 107-98-2 EINECS: 203-539-1

3% - 5% 1,2,4-trimethylbenzene
N.67/548/CEE: 601-043-00-3 CAS: 95-63-6 EINECS: 202-436-9
N Xn R10 R20 R36/37/38 R51/53

3% - 5% 4-methylpentan-2-one
N.67/548/CEE: 606-004-00-4 CAS: 108-10-1 EINECS: 203-550-1
F Xn R11 R20 R36/37 R66

1% - 3% 2-methylpropan-1-ol
N.67/548/CEE: 603-108-00-1 CAS: 78-83-1 EINECS: 201-148-0
Xi R10 R37/38 R41 R67

1% - 3% 1,3,5-trimethylbenzene
N.67/548/CEE: 601-025-00-5 CAS: 108-67-8 EINECS: 203-604-4
N Xi R10 R37 R51/53

0.5% - 1% propylbenzene [2]
N.67/548/CEE: 601-024-00-X CAS: 103-65-1 EINECS: 203-132-9
N Xn R10 R37 R51/53 R65

3. HAZARDS IDENTIFICATION

The product is a liquid that can catch fire at temperatures in excess of 21 °C if exposed to an ignition source.
If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema.
If brought into contact with the skin, the product may cause sensitisation of the skin.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Contact with skin:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Contact with eyes:

Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. OBTAIN A MEDICAL EXAMINATION.
Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).

Swallowing:

DO NOT INDUCE VOMITING: risk of chemical pneumonitis caused by possible aspiration of liquid hydrocarbons. SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety-data sheet.
A suspension of activated charcoal in water, or liquid paraffin may be administered.

Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION.

5. FIRE-FIGHTING MEASURES

Recommended extinguishers:

CO_2 or Dry chemical fire extinguishe.

Extinguishers not to be used:

None in particular.

Risks arising from combustion:

Avoid inhaling the fumes.

Protective equipment:

Use protection for the respiratory tract.
Cool the containers exposed to the fire with water.

6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:

Use a mask, gloves and protective clothing.

Environmental measures:

Limit leakages with earth or sand.
Eliminate all unguarded flames and possible sources of ignition. Do not smoke.
If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning methods:

Rapidly recover the product. To do so, wear a mask and protective clothing.
If the product is in a liquid form, stop it from entering the drainage system.
Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.
After the product has been recovered, rinse the area and materials involved with water.

7. HANDLING AND STORAGE

Handling precautions:
Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.
Do not eat or drink while working.
Do not smoke while working.
Storage conditions:
Always keep the containers tightly closed.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Instructions as regards storage premises:
Cool and adequately ventilated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautionary measures:
Give adequate ventilation to the premises where the product is stored and/or handled.
Respiratory protection:
Use adequate protective respiratory equipment, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).
Protection for hands:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
Eye protection:
Use close fitting safety goggles and/or visor conforming to BS 2092 GRADE 1).
Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Exposure limit(s) (ACGIH):
xylene [4]
VLE 8h: 221 mg/m3 - 50 ppm VLE short: 442 mg/m3 - 100 ppm TLV TWA: 100 ppm, A4 - 434,19 mg/m3, A4 TLV STEL: 150 ppm, A4 - 651,29 mg/m3, A4
1-methoxy-2-propanol
VLE 8h: 375 mg/m3 - 100 ppm VLE short: 568 mg/m3 - 150 ppm TLV TWA: 100 ppm - 368,59 mg/m3
TLV STEL: 150 ppm - 552,88 mg/m3
1,2,4-trimethylbenzene
VLE 8h: 100 mg/m3 - 20 ppm
4-methylpentan-2-one
VLE 8h: 83 mg/m3 - 20 ppm VLE short: 208 mg/m3 - 50 ppm TLV TWA: 50 ppm - 204,83 mg/m3 TLV STEL: 75 ppm - 307,24 mg/m3
2-methylpropan-1-ol
TLV TWA: 50 ppm - 151,57 mg/m3
1,3,5-trimethylbenzene
VLE 8h: 100 mg/m3 - 20 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	liquid
Flash point:	24 °C
Relative density:	1.4633

10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions.

Substances to avoid:

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products:

It may catch fire on contact with powerful oxidising agents.

11. TOXICOLOGICAL INFORMATION

The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.
Set out below is the toxicological information relating to the main substances in the preparation.
The product does not contain toxicologically relevant substances.

Liquid epoxy resin contained in this material causes only minor skin irritation. However, all epoxy resins are capable of causing sensitizing of the skin. Susceptibility to skin irritation and sensitization varies from person to person.
In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact. Therefore, even though the skin irritation potential is slight, skin contact should be avoided.
Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

12. ECOLOGICAL INFORMATION

List of substances dangerous for the environment and corresponding classification:

15% - 20% zinc ortophosphate

N.67/548/CEE: 030-011-00-6 CAS: 7779-90-0 EINECS: 231-944-3

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

7% - 10% solvent naphtha

N.67/548/CEE: 649-356-00-4 CAS: 64742-95-6 EINECS: 265-199-0

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

3% - 5% 1,2,4-trimethylbenzene

N.67/548/CEE: 601-043-00-3 CAS: 95-63-6 EINECS: 202-436-9

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

1% - 3% 1,3,5-trimethylbenzene

N.67/548/CEE: 601-025-00-5 CAS: 108-67-8 EINECS: 203-604-4

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

0.5% - 1% propylbenzene [2]

N.67/548/CEE: 601-024-00-X CAS: 103-65-1 EINECS: 203-132-9

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

Adopt good working practices, so that the product is not released into the environment.
Waste and disposal have to be controlled and evaluated according to their possible polluting power and to the local law.

13. DISPOSAL CONSIDERATIONS

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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14. TRANSPORT INFORMATION

UN number:	UN 1263 Pitture
ADR-Class:	3, PG III
IMDG-Class:	3, PG III

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15. REGULATORY INFORMATION

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments. Commmission Directive 1999/45/CE (Classification, packaging and labelling of dangerous preparation) and subsequent amendments. Commission Directive 2001/58/CE (Safety data sheets). Commission Directive 98/24/CE (Protection of the health and safety of workers from the risk related to chemical agent). Commission Directive 2000/39/CE (Occupational exposure limit values).

Symbols:

Xi Irritant

N Dangerous for the environment

R Phrases:

R10 Flammable.

R36/38 Irritating to eyes and skin.

R43 May cause sensitization by skin contact.

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

S Phrases:

S23 Do not breathe vapour

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S24/25 Avoid contact with skin and eyes.

S51 Use only in well-ventilated areas.

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

S29 Do not empty into drains.

S36/37 Wear suitable protective clothing and gloves.

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

Special Provisions:

Contains epoxy constituents. See information supplied by the manufacturer.

Contents:

epoxy resin (number average molecular weight > 700)

Where applicable, refer to the following regulatory provisions :
Presidential Decree D.P.R. 303/56 (Health checks).
Law by Decree D.L. 626/94 (Health and safety for workers).

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16. OTHER INFORMATION

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

ACGIH - Treshold Limit Values - 1997 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely

to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This MSDS cancels and replaces any preceding release.
Text of R phrases referred to under heading 2:

R36/38 Irritating to eyes and skin.
R43 May cause sensitization 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.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
R10 Flammable.
R65 Harmful: may cause lung damage if swallowed.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.
R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R11 Highly flammable.
R36/37 Irritating to eyes and respiratory system.
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R37 Irritating to respiratory system.

Paragraphs modified from the previous revision:

2. COMPOSITION/INFORMATION ON INGREDIENTS
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
9. PHYSICAL AND CHEMICAL PROPERTIES
12. ECOLOGICAL INFORMATION
14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION