



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

Trade name: DRAKE
Colour: all the colours
Trade code: 12193...
Product type and use: Antifouling paint
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:

30% - 40% copper (I) oxide

N.67/548/CEE: 029-002-00-X CAS: 1317-39-1 EINECS: 215-270-7
N Xn R22 R50/53

10% - 12.5% zinc oxide

N.67/548/CEE: 030-013-00-7 CAS: 1314-13-2 EINECS: 215-222-5
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

7% - 10% xylene [4]

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

7% - 10% Rosin

N.67/548/CEE: 650-015-00-7 CAS: 8050-09-7 EINECS: 232-475-7
Xi R43

5% - 7% 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% dichloro-N-[(dimethylamino)sulphonyl]fluoro-N-(p-tolyl)methanesulphenamide

N.67/548/CEE: 613-116-00-7 CAS: 731-27-1 EINECS: 211-986-9
N T R23 R36/37/38 R43 R48/20 R50/53

1% - 3% ethylbenzene

N.67/548/CEE: 601-023-00-4 CAS: 100-41-4 EINECS: 202-849-4
Xn F R20 R11

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

0.25% - 0.5% epoxy resin (number average molecular weight <= 700)
N.67/548/CEE: 603-074-00-8 CAS: 25068-38-6 EINECS: 500-033-5
N Xi R36/38 R43 R51/53

0.1% - 0.25% triphenyl phosphate
CAS: 115-86-6 EINECS: 204-112-2
N R50/53

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. The product is harmful following acute exposure to it and poses a serious health threat if inhaled or ingested. If brought into contact with the skin, the product may cause sensitisation of the skin. This product is harmful: serious harm (functional disorders or significant morphological changes that are toxicology-related) may be caused by repeated or prolonged exposure to the product by inhalation. This product is a threat to the environment; it is highly toxic for aquatic organisms following acute exposure. Very 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:

Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).
Wash immediately with water for at least 10 minutes.

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. Give liquid paraffin to drink; do not give milk or animal or vegetable fats of any kind.

Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. OBTAIN MEDICAL ATTENTION.

5. FIRE-FIGHTING MEASURES

Recommended extinguishers:

CO2 or Dry chemical fire extinguisher.

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.

Incompatible materials:

None in particular.

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):

zinc oxide

TLV TWA: 0,6 ppm - 2 mg/m³ TLV STEL: 3 ppm - 10 mg/m³

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

Rosin

TLV TWA: SEN TLV STEL: SEN

1,2,4-trimethylbenzene

VLE 8h: 100 mg/m³ - 20 ppm

ethylbenzene

VLE 8h: 442 mg/m³ - 100 ppm VLE short: 884 mg/m³ - 200 ppm TLV TWA: 100 ppm, A3 - 434,19

Safety Data Sheet
DRAKE

mg/m³, A3 Skin TLV STEL: 125 ppm, A3 - 542,74 mg/m³, A3 Skin
1,3,5-trimethylbenzene
VLE 8h: 100 mg/m³ - 20 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	liquid
Flash point:	36 °C
Relative density:	1.67/1.82

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:
None.

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.

12. ECOLOGICAL INFORMATION

List of substances dangerous for the environment and corresponding classification:

30% - 40% copper (I) oxide

N.67/548/CEE: 029-002-00-X CAS: 1317-39-1 EINECS: 215-270-7

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

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Safety Data Sheet
DRAKE

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

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0.5% - 1% propylbenzene [2]

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

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0.25% - 0.5% epoxy resin (number average molecular weight <= 700)

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

0.1% - 0.25% triphenyl phosphate

CAS: 115-86-6 EINECS: 204-112-2

R50/53 Very 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. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

UN number:

UN 1263

Road/rail (ADR/RID):

paint: trasporto in es. tot.secondo 2.2.3.1.5 ADR e 2.3.2.5 IMDG

IMDG-Class:

3, PG III

Marine pollutant:

(p)

15. REGULATORY INFORMATION

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments. Commission 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:

Xn Harmful

N Dangerous for the environment

R Phrases:

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R43 May cause sensitization by skin contact.

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

S Phrases:

S23 Do not breathe vapour

S24/25 Avoid contact with skin and eyes.

- S51 Use only in well-ventilated areas.
- S29 Do not empty into drains.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S36/37 Wear suitable protective clothing and gloves.

Notes:

PACK2 The packing must have tactile indications of danger for blind people.

Contents:

Rosin
dichloro-N-[(dimethylamino)sulphonyl]fluoro-N-(p-tolyl)methanesulphenamide
copper (I) oxide

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).

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:

- R22 Harmful if swallowed.
- 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.
- R43 May cause sensitization by skin contact.
- R20 Harmful by inhalation.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R23 Toxic by inhalation.
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R11 Highly flammable.
- R37 Irritating to respiratory system.
- R36/38 Irritating to eyes and skin.

Paragraphs modified from the previous revision:

- 2. COMPOSITION/INFORMATION ON INGREDIENTS
- 3. HAZARDS IDENTIFICATION
- 4. FIRST AID MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION