



# SAFETY DATA SHEET

Release date : 15/02/2007

Version : 01

## 1. IDENTIFICATION OF THE SUBSTANCES AND OF THE COMPANY

- 1.1 Identification of the substance : **ANTIFOULING PERFORMANCE**  
Colours : RED, BLEU, NAVY BLUE, BLACK, GREY  
Use : Antifouling paint
- 1.2 Identification of the company : PLASTIMO  
15 rue Ingénieur Verrière  
B.P. 435  
56325 LORIENT CEDEX - FRANCE  
Tel. : 02 97 87 36 36  
Fax : 02 97 87 36 49
- 1.3 Emergency telephone number : INRS (33) 1.45.42.59.59

## 2. COMPOSITION / DATA OF COMPONENTS

Substances presenting a health hazard within the meaning of the Chemicals (Hazard Information & Packaging) Regulations 67/548 EEG:

Designations	Concentration range	Symbols	Risks Phrases	EG Nr.
◆ CUPROUS(I)OXIDE	25 < c < 50 %	Xn, N	R22-R50/53	215-270-7
◆ XYLENE	10 < c < 25 %	Xn	R10-R20/21-R38	215-535-7
◆ CYCLOHEXANONE	10 < c < 25 %	Xn	R10-R20	203-631-1
◆ ZINC OXIDE	5 < c < 10 %	N	R50/53	215-222-5
◆ ROSIN GUM	5 < c < 10 %	Xi	R43	232-475-7
◆ DICHLOFLUANID	1 < c < 5 %	Xn, N	R20-R36-R43- R50/53	214-118-7
◆ TRICRESYL PHOSPHATE	0 < c < 1 %	Xn, N	R21/22-R51/53	201-105-6
◆ EPOXY RESIN MWT<700	0 < c < 1 %	Xi, N	R43-R36/38- R51/53	500-033-5

## 3 - HAZARDS IDENTIFICATION

3.1. Health hazards :

- ◆ Harmful by inhalation, in contact with skin and if swallowed.
- ◆ Irritating to skin.
- ◆ May cause sensitisation by skin contact.

3.2. Environmental hazards :

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

### 3.3. Physico-chemical hazards :

- ◆ Flammable.

Extended details regarding health and environment, see section 11 & 12.

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## **4 - FIRST AID MEASURES**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

### 4.1 After inhalation :

- ◆ Remove to fresh air, keep the patient warm and at rest.
- ◆ If breathing is irregular or stopped, administer artificial respiration.
- ◆ If unconscious, place in the recovery position and seek medical advice.

### 4.2 After skin contact :

- ◆ Remove contaminated clothing.
- ◆ Wash skin thoroughly with soap and water or use a proprietary skin cleaner.
- ◆ Do NOT use solvents or thinners.

### 4.3 After eye contact :

- ◆ Contact lenses should be removed.
- ◆ Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart, and seek medical advice.

### 4.4 After ingestion:

- ◆ Rinse mouth and give water. If accidentally swallowed obtain immediate medical attention. Keep patient at rest.
  - ◆ Do not induce vomiting.
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## **5 - FIRE FIGHTING MEASURES**

### 5.1 Suitable extinguishing agents:

- ◆ Alcohol resistant foam, CO<sub>2</sub>, powder, water spray/mist.

### 5.2 Extinguishing agents which must not be used :

- ◆ Water jet. Zincdust containing products should not be extinguished with water.

### 5.3 Safety measures :

- ◆ Fire will produce dense black smoke containing hazardous products of combustion (see Section 10)..
- ◆ Decomposition products may be a hazard to health.
- ◆ Appropriate self-contained breathing apparatus may be required.
- ◆ Cool closed containers exposed to fire with water spray.
- ◆ Do not allow run-off from fire fighting to enter drains or water courses.

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## **6 - ACCIDENTAL RELEASE MEASURES**

### 6.1 Personal precautions :

- ◆ Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours.
- ◆ Refer to protective measures listed in Sections 7 and 8.

### 6.2 Environmental precautions :

- ◆ Do not allow to enter drains or water courses.
- ◆ If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.

### 6.3 Cleaning procedure :

- ◆ Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in suitable container for disposal in accordance with the waste regulations (see Section 13).
  - ◆ Clean preferably with a detergent; avoid the use of solvents.
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## **7 - HANDLING AND STORAGE**

### 7.1 Handling :

- ◆ Vapours are heavier than air and may spread along floors. They may form explosive mixture with air.
- ◆ When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.
- ◆ Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.
- ◆ Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
- ◆ Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Non-sparking tools should be used.
- ◆ Avoid skin and eye contact.
- ◆ Avoid inhalation of vapour and spray mist.
- ◆ Smoking, eating and drinking should be prohibited in areas of storage and use.
- ◆ For personal protection, see Section 8. Never use pressure to empty: the container is not a pressure vessel.
- ◆ Always keep in containers made of the same material as the supply container.
- ◆ Good housekeeping standards and regular safe removal of waste materials will minimize risks of spontaneous combustion and other fire hazards.
- ◆ The product may charge electrostatically. Use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be electrically conductive.
- ◆ The Manual Handling Operations Regulations may apply to the handling of containers of this product.
- ◆ Refer to the guide weight indicated on the container when carrying out assessments.

## 7.2 Storage :

- ◆ Store in accordance with the conditions of the licence which is necessary under the Petroleum (Consolidation) Act. Further guidance is contained in the HSE guidance note Storage of Flammable Liquids in Containers.
- ◆ Observe the label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.
- ◆ No smoking. Prevent unauthorised access. Store between 0°C and 40°C.
- ◆ Containers which are opened should be properly resealed and kept upright to prevent leakage.
- ◆ The principles contained in the HSE's guidance note Storage of Packaged Dangerous Substances should be observed when storing this product.
- ◆ Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

## **8 - EXPOSURE CONTROL / PERSONAL PROTECTION**

Exposure limits		(NL)	(GB)	(E)	(F)	(D)	(S)	(I)	SA
CUPROUS(I)OXIDE	8hr ppm/mg/m <sup>3</sup>	-/1	-/-	-/-	-/-	-/-	-/1	-/-	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
XYLENE	8hr ppm/mg/m <sup>3</sup>	50/210	50/220	50/221	100/435	100/435	50/200	100/440	H
	15m ppm/mg/m <sup>3</sup>	100/442	100/441	100/442	200/870	200/870	100/450	150/661	H
CYCLOHEXANONE	8hr ppm/mg/m <sup>3</sup>	-/-	-/-	10/41	25/100	25/100	25/100	20/78	H
	15m ppm/mg/m <sup>3</sup>	12,5/50	-/-	20/82	50/200	50/200	50/200	50/195	H
ZINC OXIDE	8hr ppm/mg/m <sup>3</sup>	-/5	-/-	-/5	-/3	-/3	-/5	0,59/2	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/3	-/3	-/-	2,96/10	-
ROSIN GUM	8hr ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
DICHLOFLUANID	8hr ppm/mg/m <sup>3</sup>	-/10	-/-	-/-	-/-	-/-	-/-	-/-	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
TRICRESYL PHOSPHATE	8hr ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
EPOXY RESIN MWT<700	8hr ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
	15m ppm/mg/m <sup>3</sup>	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-

The Netherlands - TGG=Tijd Gewogen Gemiddelde (8u/15 min.) MAC-waarden, U.K. - TWA=Time Weighted Average (8h/15 min.) HSE EH40 Exposure Limits, España - VLA=Valores de Exposición Diaria (ED-8hr) & Exposición de Corta duración (CD-15m) La Comisión de Higiene y Seguridad, France - VME=Valeur Moyenne d'Exposition (8hr) & VLE=Valeur Limite d'Exposition calculée sur une courte durée (15m) le Ministère du Travail, Deutschland - Aussetzung - 8 Std/15 min.)MAK-Grenzwerten, Sverige - NGV=Nivågränsvärde (8t) & KTV=Korttidsvärde (15m) Arbetarskyddsstyrelsens Hygieniska Gränsvärd, Italia - TLV=Threshold Limit Value (Lungo termine 8 ore/Breve Termine 15 m) Commissione ACGIH-American Conference of Governmental Industrial Hygienists.

SA=Skin Absorption; H: indicates a risk of absorption through the skin.

### 8.1 Engineering measures :

- ◆ 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/or solvent vapours below the relevant occupational exposure limits, suitable respiratory protective equipment should be worn. (see "Personal protection")

### 8.2 Respiratory protection :

- ◆ Air-fed respiratory protective equipment should be worn when this product is sprayed if the exposure of the sprayer or other people nearby cannot be controlled to below the occupational exposure limit and engineering controls and methods cannot reasonably be improved. This can be done by e.g. compressed air or half-mask with appropriate filters, A2 for organic vapours (combined with dustfilter P3).
- ◆ Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible.
- ◆ If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

### 8.3 Hand protection :

- ◆ At repeated or prolonged contact; gloves. Viton-gloves offer good protection for intense contact with most solvents, e.g. complete immersion in solvent. Nitrile gloves offer good protection during spray application. Dependent on application intensity of contact with the product, manufacturer, the gloves they need to be replaced; consult the supplier of the gloves for details. Breakthroughtime nitrile gloves: Methylketone 7 min, Toluene 25 min, Xylene 53 min, White Spirit>480 min, IsobutylMethylKetone 4 min and Isopropyl alcohol>480 min. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

### 8.4 Eye protection :

- ◆ Eye protection designed to protect against liquid splashes should be worn..

### 8.5 Skin protection :

- ◆ Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- ◆ Grossly contaminated clothing should be removed and the skin washed with soap and water.

## **9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical state: Liquid	Specific Gravity: 1,68 g/cm <sup>3</sup>	Flashpoint: 32°C	Solubility in water: Not Soluble
Viscosity ISO Cup 6: >60s	Viscosity Ford Cup 4: >200s	Explosion limits	
CUPROUS(I)OXIDE		N.A.	Persistence and biodegradability in water: No data available
XYLENE		1.0-7.0%	
CYCLOHEXANONE		1,1 - 9,4 %	
ZINC OXIDE		N.A.	Bioaccumulation: No data available
ROSIN GUM		N.A.	
DICHOLOFLUANID		N.A.	
TRICRESYL PHOSPHATE		N.A.	
EPOXY RESIN MWT<700		N.A.	

## **10 - STABILITY AND REACTIVITY**

### 10.1 Stability :

- ◆ Stable under the recommended storage and handling conditions. (See Section 7).

### 10.2 Reactivity - Materials to avoid :

- ◆ Keep away from oxidising agents, strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction.

### 10.3 Hazardous decomposition products :

- ◆ In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

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## **11 - TOXICOLOGICAL INFORMATION**

There is no experimental data available on the product itself.

This product contains epoxy constituents, taking into account information of comparative compounds, this product may cause sensitisation by skin contact and inhalation. This product causes irritation.

Epoxy compounds are irritating to eyes, mucous membranes and skin.

### 11.1 After inhalation :

- ◆ Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous systems.
- ◆ Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

### 11.2 After skin contact :

- ◆ Repeated or prolonged contact with the product may lead to removal of natural fats from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
- ◆ Repeated skin contact may cause irritation, sensitisation and over-sensitisation to other epoxies.
- ◆ May cause sensitisation by skin contact.

### 11.3 After eye contact :

- ◆ Splashes in the eyes may cause irritation and irreversible local damage.

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## **12 - ECOLOGICAL INFORMATION**

- ◆ There are no data on the preparation itself. The product should not be allowed to enter drains or water courses.
- ◆ The preparation has been assessed following the conventional method of the Dangerous Directive (99/45/EG) and is classified for eco-toxicological properties accordingly. See sections 2, 9 and 15 for details.

## **13 - DISPOSAL CONSIDERATIONS**

- ◆ Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act or consult EC disposal guide.
- ◆ The European Waste Catalogue classification of this product, when disposed of as waste is 08 11 11. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information contact your local waste authority.

PRODUCT : ANTIFOULING PERFORMANCE RED/ BLUE / NAVY  
 DATE OF ISSUE : 15/02/2007 BLUE / BLACK / GREY  
 RELEASE : 01



## **14 - TRANSPORT INFORMATION**

ADR/RID Class:	Carriage in accordance with 2.2.3.1.5 (<450L)		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263	Hazard Identification Number: -	
Proper Shipping Name: Paint			
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IMDG Class:	3		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263		
Proper Shipping Name: Paint			
Marine Pollutant:	P	Marine Pollutant Substance(s): TRICRESYL PHOSPHATE	
EMS:	F-E, S-E		
Special Provisions:	163, 223, 944, 955		
IATA Class:	3		
	The 'viscosity exemption' provisions do not apply to air transport.		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263	Special Provisions: A3, A72	
Proper Shipping Name: Paint			
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Transport in accordance with ADR/RID, IMDG and ICAO/IATA.  
 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.

## **15 - REGULATORY INFORMATION**

### 15.1 Labelling information :

This antifouling paint is registered for use in U.K. under H.S.E.8355.

The product is classified and labelled for supply in accordance with the Dangerous Preparations Directive (DPD) [Regulations 67/548/EEC and 1999/45/EC].

#### 15.1.1 Symbols of danger :

- ◆ Xn (Harmful).
- ◆ N (Dangerous for the environment).

#### 15.1.2 Contains :

- ◆ Cuprous(i)oxyde.
- ◆ Xylene
- ◆ Dichlofluaniid
- ◆ Rosin gum

#### 15.1.3. Risks phrases :

- ◆ R 10 : Flammable.
- ◆ R 20/21/22 : Harmful by inhalation, in contact with skin and if swallowed.
- ◆ R38: Irritating to skin
- ◆ R 43 : May cause sensitization by skin contact.
- ◆ R 50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 15.1.4. Safety advice :

- ◆ S 2 : Keep out of the reach of children.
- ◆ S 36/37 : Wear suitable protective clothing and gloves.

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PRODUCT :	ANTIFOULING PERFORMANCE	RED/ BLUE / NAVY
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- ◆ S 45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- ◆ S 51 : Use only in well-ventilated areas.
- ◆ S 29/56 : Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Spray application:

S23 Do not breath vapor/spray.

S38 In case of insufficient ventilation, wear suitable respiratory equipment.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

The provisions of the national health and safety at work regulations apply to the use of this product at work.

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## **16 - OTHER INFORMATION**

R10 : Flammable.

R20 : Harmful by inhalation.

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

R21/22: Harmful in contact with skin and if swallowed.

R22 : Harmful if swallowed.

R36 : Irritating to eyes.

R36/38 : Irritating to eyes and skin.

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.

This product does not contain organotin compounds acting as biocides and complies with the "International convention on the control of harmful Anti-fouling systems on ships as adopted by IMO in october 2001 (IMO document AFS/CONF/26)".

The information contained in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the products and should not be construed as any guarantee of technical performance of suitability for particular applications.

Date of last review :

12 September 2005