

MATERIAL SAFETY DATA SHEET

Velox Plus Antifouling



MSDS revision no. 040511 US

MSDS revision date 5-Apr-2011

1. Identification

Product name **Antifouling VELOX PLUS (white, gray, black)**
Product use **Antifouling paint for propellers, stern drives, trim tabs and other underwater metallic parts**

Company Name **MARLIN Srl**
Contact Information **Via Caduti sul Lavoro 4 (Noghere)
34015 Muggia (TS)
Trieste, Italy**

Tel: +39 040 232588
Fax: +39 040 232688
Email: information@marlinpaint.com

Emergency numbers **Poison Information**
Australia **Center 13 11 26**

Transport

Shipping Name **Paint** Packing Group **3**
Hazchem **3YE** ID No **UN 1263**

2. Hazards identification

Overview

Hazchem 3YE. Corrosive to the eye. May cause irreversible damage. Harmful if swallowed, inhaled or absorbed through the skin. Toxic to fish and aquatic invertebrates. Combustible liquid.

Potential Health Effects

Eyes Corrosive. May cause irreversible eye damage.
Ingestion Harmful if swallowed.
Inhalation Harmful if inhaled. May cause respiratory tract irritation.
Skin Harmful if absorbed through skin. May cause skin irritation
Target Organs Lungs, central nervous system, kidney, liver
Chronic Contains titanium dioxide which is a potential carcinogen (NIOSH)

HMIS Ratings

Health 3* Flammability 2 Reactivity 0

3. Hazardous ingredients

Ingredient	CAS No.	Weight %	Source	Exposure Limits
Propylene glycol monomethyl ether acetate	108-65-6	45-80	AIHA (WEEL)	50 ppm
Zinc pyrithione	13463-41-7	10-25	ACGIH NIOSH/OS	no established limit no established limit

Titanium dioxide	13463-67-7	0-15	ACGIH TLV OSHA	10 mg/m ³ 15 mg/m ³
Zinc oxide	1314-13-2	5-15	ACGIH NIOSH OSHA	2 mg/m ³ 5 mg/m ³ (dust) 15 mg/m ³ (total dust)
Carbon black	1333-86-4	0-5	ACGIH NIOSH OSHA PEL	3.5 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³
Rosin	0080-50-09-7	2,5-10	ACGIH NIOSH OSHA	no established limit no established limit no established limit

4. First aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. For emergency information on this product call Boat Paints, Gary Martin 0408 722 149. For poisons information contact Poison Information Centre 24 Hr hotline 13 11 26
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.
Eye contact	Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart. Seek medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

NOTE to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. Fire-fighting measures

103° F (39° C)

Flash Point

Alcohol resistant foam, CO₂ powder, water spray. Water jet

Recommended Do not use

NOTE: Fire will produce dense black smoke. Decomposition products may be hazardous to health and may include carbon monoxide, carbon dioxide, oxides of nitrogen and sulfur, and metal oxides. Avoid exposure and use breathing apparatus as appropriate. 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 waterways.

6. Accidental release measures

Remove all sources of ignition in the immediate area. Do not turn lights or unprotected electrical equipment on or off. Do not smoke.

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 (LEL)* before reentering. Ventilate the area and avoid breathing vapours. Wear the personal protective equipment 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 in accordance with local, state, and federal regulations.

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

Do not allow spills to enter drains or waterways. If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes, state and federal environmental agencies should also be informed.

*LEL of solvent is 1.5% (v/v)

7. Handling and storage

Handling **Hazchem category 3YE.** This coating contains solvents. Solvent vapors are heavier than air and may spread along floors. Vapors 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 vapor in air and avoid vapor concentrations higher than occupational exposure limits.

Handle containers carefully to prevent damage and spillage. Open flames and smoking should not be permitted in storage areas. Avoid skin and eye contact. Avoid inhalation of vapors 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; the containers are not pressure vessels. All sources of ignition (hot surfaces, sparks, open flames etc) should be excluded from areas of preparation and application. All electrical equipment (including torches) should be protected to the appropriate standard. The product may charge electrostatically. Always use grounded leads when pouring solvents and transferring product. Operators should wear clothing which does not generate static (at least 60% natural fiber) and antistatic footwear; floors should be of conducting type. Activities such as sanding, burning off etc. of paint films may generate dust and/or fumes hazardous to the skin and lungs. Work in well ventilated areas. Use local exhaust ventilation and personal skin and respiratory protective equipment as appropriate.

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

8. Exposure control and personal protection

Engineering Measures Provide adequate ventilation to prevent vapor and dust build-up. Where practical, this should be achieved by the use of local exhaust ventilation or open windows and doors to provide cross-ventilation. If these are not sufficient to maintain concentrations of particulates and vapors below occupational exposure limits, suitable respiratory protection must be worn. Emergency eye wash fountains should also be available.

Respiratory Protection Wear appropriate respirators approved for pesticides (MSHA/NIOSH T-23C or TC-14G) or in accordance with Directive 89/656/EEC and the Personal Protection Equipment Regulations.

Eye Protection Wear safety eyewear, e.g. safety glasses with side protection, goggles or face shield to protect against the splash of liquids.

Hand Protection Wear nitrile rubber gloves during mixing and application.

Skin Protection Wear overalls which cover the body, arms and legs. Skin should not be exposed.

9. Physical and chemical properties

Physical state	Liquid	Flash point	103° F (39° C)
Colour	White	Specific gravity	1.2-1.3
Odour	of solvents	Solubility in water	Insoluble
pH	non aqueous	Viscosity	72 KU
Boiling point	not determined	VOC content	695-700 g/L (5.80-5.85 lb/gal)

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7). Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions. When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and sulfur, and smoke.

11. Toxicological information

Acute Toxicities

Ingredient	Oral LD50	Dermal LD50	Inhalation LD50
Propylene glycol monomethyl ether acetate	8,532 mg/kg (rat)	>5,000 mg/kg (rabbit)	>10.8 mg/L (rat)
Zinc pyrithione	269 mg/kg (rat)	>2,000 mg/kg (rat, rabbit)	1.03 mg/L (rat, 4 hr)
Titanium dioxide	>10,000 mg/kg (rat)	>10,000 mg/kg (rabbit)	>6.8 mg/L (rat)
Zinc oxide	7,950 mg/kg (mouse)		2.5 mg/L (mouse)
Carbon black	>8,000 mg/kg (rat)		

Subchronic and Chronic Toxicity

Skeletal muscle atrophy has been observed from oral and dermal exposure in rats to pyrithione compounds.

Chronic exposure to fine dust particles of carbon black resulted in lung tumors in animals.

Carcinogenicity

Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). This classification is based on animal inhalation studies. Epidemiology studies do not suggest an increased risk of cancer in humans.

Carbon black has been classified by IARC as a Group 2B carcinogen (possibly carcinogenic to humans).

12. Ecological information

Aquatic Toxicities

Ingredient	Species	LC50
Zinc pyrithione	Daphnia Magna (48 hrs)	0.034 mg/L
	Rainbow Trout (96 hrs)	0.0032 mg/L
	Mysid Shrimp (96 hrs)	0.0023 mg/L
	Sheepshead Minnow (96 hr)	0.4 mg/L
Zinc oxide	Daphnia Magna (48 hrs)	0.098 mg/L
	Rainbow Trout (96 hrs)	1.1 mg/L

No information is available on the product itself, but it is assumed to be very toxic to aquatic organisms. Do not allow into drains or waterways. Wastes and empty containers should be disposed of in accordance with federal, state and local regulations.

13. Disposal considerations

14. Transport information

Hazchem Category 3YE In case of emergency contact 000

DOT Classification

Proper Shipping Name PAINT

ID Number

UN1263

Hazard Class 3

Packing group

III

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