MATERIAL SAFETY DATA SHEET

MSDS

Last changed: 25/05/2000 Internal num.: 01 Replaces date:

ANTIFOULING SEAQUANTUM ULTRA

1. PRODUCT AND COMPANY

TRADE NAME	: ANTIFOULING SEAQUANTUM ULTRA
APPLICATION	: Antifouling paint
ART-No	: PM3328

PRODUCER/IMPORTER	:
Company	: JOTUN-HENRY CLARK LTD.
Address	: Flixborough, Scunthorpe
Zip && city	: North Lincolnshire DN15 8RR
Country	: UK
Telephone	: +44 1724 40 00 00
Fax	: +44 1724 40 01 00
Emergencyphones	: Contact the National Poison Center
Contactperson	: QA/Environm. dept., JOTUN A/S, NORWAY
Responsible	: QA/Environm. dept., JOTUN A/S, NORWAY

2. COMPOSITION OF PRODUCT

No	Ingredients name	CAS-NO	Weight%		Dangerclas./Cmnt.
1	DICOPPER OXIDE	1317-39-1	25-50	N	Xn,22
2	XYLENE, mixed isomers	1330-20-7	10-25	N	Xn,10-20/21-38
3	AROMATIC HYDROCARBONS, C9-C12	64742-95-6	1-2,5	N	XnN,10-37-65-51/53
4	ROSIN	8050-09-7	2,5-10	N	Xi;Sens,43
5	COPPER PYRITHIONE	14915-37-8	2,5-10	N	T+N,22-26-41-50

Legend: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, IK=No classification required, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Very flammable, Fo=Flammable, N=Dang. to the environment,

3. HAZARD IDENTIFICATION

Toxic

FLAMMABLE. HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED. TOXIC BY INHALATION. IRRITATING TO SKIN. MAY CAUSE SENSITIZATION BY SKIN CONTACT. For potential danger for the environment, see section 12.

4. FIRST AID

INHALATION

Keep the patient warm in a quiet place with fresh air. If breathing has stopped, administer artificial respiration. If unconscious place in the recovery position. Seek medical advice.

SKIN CONTACT

Remove contaminated clothing. Wash skin thoroughly with soap and water or use an appropriate skin cleaner. Do NOT use solvents or thinners.

EYE CONTACT

Remove any contact lenses. Hold the eyelids apart. Irrigate copiously with clean, fresh water for at least 10 minutes. Seek medical advice if symptoms persist.

INGESTION

DO NOT INDUCE VOMITING. If accidentally swallowed obtain immediate medical attention. Keep at rest. Seek medical advice.

MEDICAL INFORMATION

Risk of chemical pneumonia by aspiration. Keep attention: danger of lung damage. General health examination. Professional evaluation of the work station. Persons with rash are directed to skin expert for examination of allergic dermatitis.

5. FIRE FIGHTING MEASURES

PROPER FIREFIGHTING EQUIPMENT

Recommended: alcohol resistant foam, CO2, powders, water spray. Not to be used: water jet.

FIRE AND EXPLOSION HAZARDS

Decomposition products may be a hazard to health. Fire will produce dense black smoke containing hazardous products of combustion (see Section 10).

PERSONAL PROTECTION WHEN FIREFIGHTING

The personal protective equipment required is provided in section 8. Professional fire-fighters are required to use an air-fed system when dealing with major fires.

OTHER INFORMATION

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water.

6. ACCIDENTAL RELEASE MEASURES

OTHER INFORMATION

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8. Place in container for disposal according to local regulations (see section 13). Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite and diatomaceous earth. Do not allow to enter drains or watercourses. Clean preferably with a detergent; avoid use of solvents. 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 Environmental Agency.

7. HANDLING AND STORAGE

HANDLING ADVICE

The Manual Handling Operations Regulations may apply to the handling of containers of this product. Electrical equipment should be protected to appropriate standards. Never use pressure to empty the container, it is not a pressure vessel. Always keep in containers made of the same material as the supply container. For personal protective equipment see Section 8. Smoking, eating and drinking are forbidden in the work area. Avoid inhalation of vapour and spray mist. Avoid skin and eye contact. Use non-sparking tools. Keep container tightly closed. Exclude sources of heat, sparks and open flame. Floors should be electrically conductive. Personnel should wear anti-static clothing and footwear. Allways use earth (ground) wire when transferring from one container to another. The product may charge electrostatically. Use explosion-proof electrical equipment. The product should not be used in vicinity of open flames or other sources of ignition. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors.

STORAGE

Containers which are opened should be properly resealed and kept upright to prevent leakage. No smoking. Store separately from oxidising agents and strongly alkaline and strongly acidic materials. Store in a dry, cold and well ventilated place away from sources of heat, ignition and direct sunlight. Observe the label precautions. Store in accordance with the regulations for flammable materials.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OEL s

Ingredients name	CAS-no	OEL value	OEL
DICOPPER OXIDE	1317-39-1	1,0 mg/m3;(Cu)	
XYLENE, mixed isomers	1330-20-7	441,0 mg/m3 ;Sk 662,0 mg/m3;Sk	LTEL STEL
AROMATIC HYDROCARBONS, C9-C12	64742-95-6	125,0 mg/m3	LTEL
COPPER PYRITHIONE	14915-37-8	0,35 mg/m3	

EXPOSURE CONTROL

The OEL for copper pyrithione has been provided by the manufacturing supplier. The STEL value for copper pyrithione is prepared by the supplier: 1,0 mg/m3. Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Spray mist contains all substances of the product and must not be inhaled. OELs are taken from the current version of EH40 (by Health & Safety Executive, UK). This product may produce hazardous dust during generating working operations. Persons that carries out dust generating operations should wear self-contained breathing apparatus and suitable preventive working clothes. Appropriate preventive measures should be carried out to prohibit exposure and by-passers.

RESP. PROTECTION

Use respiratory protective mask with charcoal and dust filter (A2/P2) when spraying this product. When use of roller or brush, then charcoal filter is sufficient.

EYE PROTECTION

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

HAND PROTECTION

Use PVA/viton gloves. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. Never apply barrier ceam to contaminated skin.

SKIN PROTECTION

Wear anti-static clothing made of natural fibre or of heat resistant synthetic fibre. When spraying use suit covering the whole body.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid.
Colour:	Various.
Odour:	Organic solvent.
Solubility:	Organic solvent.

Melting point/range:	-	Density:	1,80
Expl. limit LEL-UEL%:	1 - 7 -	Boiling point/range:	138 - 177ºC
Flash point:	25ºC	pH concentrate:	-
Ignition temp.:	500ºC		

10. STABILITY AND REACTIVITY

STABILITY

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

MATERIALS TO AVOID

Keep away from oxidising agents, strongly alkaline and strongly acidic materials to prevent the exothermic reactions.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11. TOXICOLOGICAL INFORMATION

OTHER TOX. INFORMATION

The LC50 of copper pyrithione powder is 0.07 mg/l (4 h).

GENERAL

LC90: 1,17 mg (respirable particles/litre air). Dust from dust generating work on dry paint may be toxic. There are no toxicological data available on the product itself.

INHALATION

Inhalation of smoke (from a fire or from welding on dicopper oxide coated material) may give symptoms like influenza. Symptoms and signs include headache; dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. 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 system.

SKIN CONTACT

Repeated or prolonged contact with skin may cause sensitation. 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.

EYE CONTACT

Splashes in the eyes may cause irritation and reversible local damage.

INGESTION

Risk of chemical pneumonia. Accidental ingestion may cause vomiting and abdominal pains. May cause liver and kidney damage. Absorbed by the gastric intestinal system.

12. ECOLOGICAL INFORMATION

BREAKDOWN

Copper pyrithione: Rapid degradation.

ACCUMULATION

Copper pyrithione: Does not bioaccumulate.
Aromatic hydrocarbons C9-C12: Potential to bioaccumulate.

ECOTOXITY

Copper pyrithione:
EC50 (fresh water algae) = 0.035 mg/l (120h).
LC50 (fish) = 0.0043 mg/l (96h).
LC50 (Daphnia) = 0,022 mg/l (48h).
Aromatic hydrocarbons C9-C12: LC50 (fish) = 1-10 mg/l.

OTHER INFORMATION

The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. The product contains aromatic hydrocarbons C9-C12 labelled "Dangerous for the environment". The product contains copper pyrithione labelled "Dangerous for the environment".

13. DISPOSAL

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. Do not allow into drains or water courses. Waste must be disposed of at approved landfill/waste storage or traement facility.

WASTEGROUP

08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVE, SEALANTS AND PRINTING INKS. 08 01 02 Waste paints and varnish free of halogenated solvents.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME	COPPER-BASED PESTICIDE, LIQUID, TOXIC, FLAMMABLE (dicopper oxide 25-50%) Copper pyrithione 2,5-10,)		
	ADR (Road)		
UN No	3009	Class	6.1,72 b)
Label	6.1+3		
	IMDG (Sea)		
UN No	3009	Class	6.1
Label	6.1+3	Packaging Group	II
EmS	6.1-01	MFAG	150
Marine Pollutant	P	Sub Risk	3

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Transport only in accordance with ADR for road, RID for rail, IMDG for sea transport and IATA for airtransport.

15. REGULATORY INFORMATION

Classif.:

Toxic

COMPOSITION

DICOPPER OXIDE (25-50), XYLENE, mixed isomers (10-25), ROSIN (2,5-10), COPPER PYRITHIONE (2,5-10)

R-PHRASES

R10 Flammable. R21/22 - Harmful in contact with skin and if swallowed. R23 Toxic by inhalation. R38 Irritating to skin. R43 May cause sensitization by skin contact.

S-PHRASES

S23 Do not breathe vapour/spray. S28 After contact with skin, wash immediately with plenty of water. S36/37/39 Wear suitable protection clothing, gloves and eyes/face protection. S38 In case of insufficient ventilation, wear suitable respiratory equipment. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

REFERENCES

The product is labelled for supply in accordance with the current issue of CHIP Regulations, and latest version of the approved supply list.

16. OTHER INFORMATION

ISSUED:14/06/2000

INFORMATION SOURCES:

VENDOR NOTES

The selection, use and maintenance of respiratory protective equipment: A practical guide HS(G)53. Storage of Packaged Dangerous Substances, HS(G)71. Storage of Flammable Liquids in Containers, HS(G)51. The Manual Handling Operations Regulations 1992 (SI 1992:2793). The Highly Flammable Liquids and liquefied Petroleum Gases Regulations 197 (SI 1972:917). The Control of Substances Hazardous to Health Regulations 1988 (SI1988:1657). Further information and relevant advice can be found in: The Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839). and should not be construed as any guarantee of technical performance or suitability for particular applications. The information in this MSDS provides guidance on health, safety and environmental aspects of the product 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 compiled with. The information contained in this MSDS is based on the present state of knowledge and current national legislation. The use of the preparation is restricted to professional users.

USER NOTES