



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

Preparation:

Name: TOPCOAT 320/360 Durcisseur - Hardener
SEACOAT 320/360 Durcisseur - Hardener

Product code: 12100000D.

Company/business:

Registered company name: MAP YACHTING.

Address : ZI ATHELIA IV – 296 Av de la Tramontane – 13705 LA CIOTAT - France.

Telephone : 33 (0)4 42 98 14 50 Fax :33 (0)4 42 98 14 51. Email : sales@map-yachting.com

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Association/Organisation: ORFILA.

2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous substances present on their own.

(present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state)

INDEX 601-021-00-3 CAS 108-88-3 CE 203-625-9 TOLUENE | Concentration $\geq 25.00\%$ and $< 50.00\%$. Symbol: Xn F R: 11-20

Other substances representing a hazard:

INDEX 601-022-00-9 CAS 1330-20-7 CE 215-535-7 O-XYLENE | Concentration $\geq 2.50\%$ and $< 10.00\%$. Symbol: Xn R: 10-38-20/21

INDEX 601-023-00-4 CAS 100-41-4 CE 202-849-4 ETHYLBENZENE | Concentration $\geq 0.00\%$ and $< 2.50\%$. Symbol: Xn F R: 11-20

INDEX 607-022-00-5 CAS 141-78-6 CE 205-500-4 66-67 ETHYL ACETATE | Concentration $\geq 25.00\%$ and $< 50.00\%$. Symbol: Xi F R: 11-36-

INDEX 607-195-00-7 CAS 108-65-6 CE 203-603-9 2-METHOXY-1-METHYLETHYL ACETATE | Concentration $\geq 2.50\%$ and $< 10.00\%$. Symbol: Xi R: 10-36

INDEX 615-011-00-1 CAS 822-06-0 CE 212-485-8 HEXAMETHYLENE-DI-ISOCYANATE | Concentration $\geq 0.00\%$ and $< 2.50\%$. Symbol: T R: 23-36/37/38-42/43

Substances present at a concentration below the minimum danger threshold.

INDEX 607-025-00-1 CAS 123-86-4 CE 204-658-1 N-BUTYL ACETATE | Concentration $\geq 2.50\%$ and $< 10.00\%$. Symbol: R: 10-66-67

Other substances with occupational exposure limits.

No known substance in this category present.

May produce an allergic reaction:

INDEX 615-011-00-1 CAS 822-06-0 CE 212-485-8 HEXAMETHYLENE-DI-ISOCYANATE | Concentration $\geq 0.00\%$ and $< 2.50\%$. Symbol: T R: 23-36/37/38-42/43

INDEX 615-012-00-7 CAS 4083-64-1 CE 223-810-8 TOSYL ISOCYANATE | Concentration $\geq 0.00\%$ and $< 2.50\%$. Symbol: Xn R: 14-36/37/38-42

3 - IDENTIFICATION OF HAZARDS

This product is classed: Highly flammable liquid.

Possibility of irritation to the eyes.

Possibility of noxious effects with symptoms of slight poisoning by inhalation.

May produce an allergic reaction.

Repeated exposure may cause skin dryness or cracking.

4 - FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing in an unconscious person.

In the event of exposure by inhalation.

If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.



Do not give the patient anything orally.

In the event of splashes or contact with eyes.

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin.

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

DO NOT use solvents or thinners.

In the event of swallowing.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep still. DO NOT induce vomiting.

Call a doctor immediately and show him the label.

5 - FIRE-FIGHTING MEASURES

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

In the event of fire, the recommended extinguishing agents are:

Carbon dioxide, chemical powders, foams, and other extinguishing gases.

In the event of fire, use specifically suitable extinguishing agents. Never use water.

Extinguishing agents not to be used

Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to the fire and to disperse fumes.

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Special equipment for fire-fighting personnel.

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

6 - ACCIDENTAL RELEASE MEASURES

Safety precautions:

Eliminate any possible source of ignition and ventilate the premises.

On account of the organic solvents contained in the preparation, eliminate sources of ignition and ventilate the premises.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

Consult the safety measures listed under headings 7 and 8.

Environmental safety precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatom earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Cleaning methods:

Clean preferably with a detergent, do not use solvents.

Contaminated areas must be cleaned very quickly.

A possible decontaminant for flammable products may be: (expressed by volume) water (45 parts), ethanol or isopropanol (50 parts), concentrated ammonia (d-0.880) (5 parts). For non-flammable products: sodium carbonate (5 parts), water (95 parts).

These residues must be stored for disposal in accordance with applicable regulations (see 13).

7 - HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Handling:

Handle in well-ventilated areas.



The vapors are denser than air. They can spread along the ground and form explosive mixtures with air
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Fire prevention:

- Prevent the accumulation of electrostatic charges with connections to earth
- The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes and clothes and make floors of conductive materials.
- Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment
- Keep packages tightly closed and away from sources of heat, sparks and naked flames.
- Do not use tools which may produce sparks. Do not smoke.
- Prevent access by unauthorised personnel.

Recommended equipment and procedures

- For personal safety, see §8.
- Observe precautions stated on label and also industrial safety regulations
- Avoid inhaling solvent vapors and spray-gun aerosols
- Packages which have been opened must be reclosed carefully and stored in an upright position
- Avoid inhaling vapors.
- Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.
- It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.
- Avoid contact of product with the eyes

Prohibited equipment and procedures.

- Smoking, eating and drinking are prohibited in premises where the preparation is used
- Never open the packages under pressure

Storage.

- Keep the container tightly closed in a dry, well-ventilated place
- Keep away from all sources of ignition - do not smoke.
- Keep well away from all sources of ignition, heat and direct sunlight
- The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Anyone with a history of skin sensitisation, asthma, allergies, chronic or periodic respiratory problems must on no account use these preparations

Technical measures.

- Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.
- If this ventilation is insufficient to maintain the concentration of solvent vapors below the exposure limits, wear breathing apparatus

Exposure limits per INRS ND 2098-174-99 and ND 2114-176-99:

France	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP N°:
822-06-0	0,01	0,075	0,02	0,15	AR	62
108-65-6	-	-	-	-	-	-
123-86-4	150	710	200	940	-	84
141-78-6	400	1400	-	-	-	84
100-41-4	100	435	-	-	-	84
1330-20-7	100	435	150	650	-	4bis, 84
108-88-3	100	375	150	550	-	4bis, 84
Germany	Class:	MAK-ppm:	MAK-mg/m3:	Notes:	Notes:	
822-06-0	I	0,005	0,035	Sens		
108-65-6	I	50	270	C		
123-86-4	I	100	480	D		
141-78-6	I	400	1500	C		
100-41-4	I	100	440	D,*		
1330-20-7	II,1	100	440	D,*		
108-88-3	II,2	50	190	C,*		



ACGIH(TLV)	TWA-ppm:	TWA-mg/m3:	STEL-ppm:	STEL-mg/m3:	Notes:	Notes:
822-06-0	0,005	0,034	-	-	-	-
108-65-6	-	-	-	-	-	-
123-86-4	150	713	200	950	-	S
141-78-6	400	1440	-	-	-	-
100-41-4	100	434	125	543	-	S
1330-20-7	100	434	150	651	A4	S
108-88-3	50	188	-	-	A4,*	-

Exposure limits per 2000/39/EC and 98/24/EC:

EC	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:
108-65-6	50	275	100	550	Peau
100-41-4	100	442	200	884	Peau
1330-20-7	50	221	100	442	Peau

Other values (2003):

UK/MEL	TWA:	STEL:	Ceiling:	Definition:	Criterion:
822-06-0	0.02 mg/m3	0.07 mg/m3	-	-	-
UK/OES	TWA:	STEL:	Ceiling:	Definition:	Criterion:
108-65-6	50 ppm	100 ppm	-	-	-
123-86-4	150 ppm	200 ppm	-	-	-
141-78-6	200 ppm	400 ppm	-	-	-
100-41-4	100 ppm	125 ppm	-	-	-
1330-20-7	50 ppm	100 ppm	-	-	-
108-88-3	50 ppm	150 ppm	-	-	-
Germany/MAK	TWA:	STEL:	Ceiling:	Definition:	Criterion:
822-06-0	0.005 ppm	0.005 ppm	0.01	-	-
108-65-6	50 ppm	50 ppm	-	-	-
123-86-4	100 ppm	200 ppm	-	-	-
141-78-6	400 ppm	800 ppm	-	-	-
1330-20-7	100 ppm	200 ppm	-	-	-
108-88-3	50 ppm	200 ppm	-	-	-

Safety breathing apparatus:

With this preparation, avoid in particular any inhalation of vapors.

Hand protection.

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.
 Protective creams may be used for exposed skin, but they should not be applied after contact with the product.
 Due to the solvents present, it is recommended that neoprene rubber or nitrile rubber gloves be worn

Eye and face protection.

Avoid contact with eyes.
 Wear safety goggles.
 Provide eye washes in workshops where the product is constantly handled

Skin protection.

Wear antistatic clothing made of natural fibre or synthetic fibre resistant to high temperatures.
 After contact with the product, any contaminated part of the body shall be washed
 For further information, see § 11 of S.D.S. - Toxicological information.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Density:	< 1
Acid/base character of preparation:	not relevant.
Solubility of preparation in water:	Insoluble.
Vapour tension at 50°C of volatile constituents:	Below 110 kPa (1.10 bar).
Physical state:	fluid liquid
Flash point interval:	Flash point: <= 21°C.



The pH is impossible to measure or its value is not relevant.
 Self-ignition temperature: 425 °C.
 Decomposition temperature: not relevant.
 Melting temperature interval: -82 °C.
 Average distillation temperature of solvents contained: 78 °C.

10 - STABILITY AND REACTIVITY

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide

It may also release hydrogen cyanide, amines and alcohols.

Keep away from oxidising agents and strongly acidic or basic materials to avoid exothermic reactions

Exothermic reactions occur with amines and alcohols. The preparations react slowly with water and give off carbonic gas which may produce pressure increases in closed packages

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

11 - TOXICOLOGICAL INFORMATION

No data is available regarding the preparation itself.

Exposure to vapors from solvents contained in the preparation beyond the exposure limits stated may produce effects harmful to health, such as: Irritation of mucous membrane and respiratory system, kidneys, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Prolonged or repeated contact with the preparation may strip the skin of its natural oil and thus cause non-allergic dermatitis on contact and absorption through the epidermis.

Splashes in the eyes may cause irritation and reversible damage

It is generally agreed that substances contained are likely to cause, when applied to the eye of an animal, the appearance of major lesions which persist for at least twenty-four hours

Based on the properties of isocyanates and taking into account toxicological data for similar preparations, this preparation may cause irritation and/or sensitisation of the respiratory system.

It may also lead to asthma, respiratory problems and angina

Those susceptible may display asthmatic symptoms when exposed to atmospheres with an isocyanate concentration well below those of the VLE: exposure limits.

Repeated exposure may cause permanent respiratory problems.

12 - ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

Other data:

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

13 - DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

14 - TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport

UN1263=PAINT RELATED MATERIAL (including paint thinning or reducing compound)

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.		
	3	F1	II	3	33	LQ6	163-640D		
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.			
	3	-	II	5 L	F-E,S-E	163 944			
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	
	3	-	II	305	5 L	307	60 L	A3, A72	
	3	-	II	Y305	1 L	-	-	-	

15 - STATUTORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 1999/45/EC and its adaptations

In addition directive 2001/59/EC with the 28° adaptation of directive 67/548/EC (Hazardous substances) have been taken into account.



Contains compounds with an isocyanate base - refer to the information supplied by the manufacturer. This information is found on this safety data sheet

Preparation classification.

Harmful. Highly flammable.

Contains:

601-021-00-3 TOLUENE

601-022-00-9 O-XYLENE

601-023-00-4 ETHYLBENZENE

Contains 615-011-00-1 HEXAMETHYLENE-DI-ISOCYANATE. May produce an allergic reaction.

Contains 615-012-00-7 TOSYL ISOCYANATE. May produce an allergic reaction.

Particular hazards associated with the preparation and safety recommendations:

- | | |
|------|--|
| R 36 | Irritating to eyes. |
| R 20 | Harmful by inhalation. |
| R 11 | Highly flammable. |
| R 66 | Repeated exposure may cause skin dryness or cracking.
Contains isocyanates. See information supplied by the manufacturer. |
| S 23 | Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). |
| S 16 | Keep away from sources of ignition - no smoking. |
| S 25 | Avoid contact with eyes. |
| S 26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| S 33 | Take precautionary measures against static discharges. |
| S 60 | This material and its container must be disposed of as hazardous waste. |
| S 9 | Keep container in a well-ventilated place. |
| S 29 | Do not empty into drains. |

Particular provisions:

Germany: WGK 2 (VwVwS vom 17/05/99, KBws)

16 - OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties