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MARINE PAINTS
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SEAJET POLYURETHANE GLOSS VARNISH HARDENER



1. IDENTIFICATION OF THE COMPANY

CHUGOKU PAINTS B.V

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The Netherlands

INTENDED USE: Paint and/or related product.

Product nr: 575PZ0000

Printed: 23-02-2007
 Reviewed: 24-02-04
 EMERGENCY PHONE No.:
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2. COMPOSITION/INFORMATION ON INGREDIENTS

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

Name	EG-no.	conc.range	symbol	R-phrases
ALIPHATIC POLYISOCYANATE	-	50-100	Xi	43-
1-METHOXY-2-PROPANOL-ACETATE	203-603-9	25-50	Xi	10-36-
XYLENE	215-535-7	5-10	Xn	10-20/21-38-
ETHYLBENZENE	202-849-4	1-5	F,Xn	11-20-
HEXAMETHYLENE-DI-ISOCYANATE	212-485-8	0-1	T	42/43-23-36/37/38-

3. HAZARDS IDENTIFICATION

R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R36/38	Irritating to eyes and skin.
R42/43	May cause sensitisation by inhalation and skin contact.

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

4. FIRST AID

General:

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

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.

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.

Skin contact:

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

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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reviewed: 24-02-04**5. FIRE FIGHTING MEASURES****Extinguishing media:**

Recommended: Alcohol resistant foam, CO₂, powder, water spray/mist.

Not to be used: Water jet. Zincdust containing products should not be extinguished with water.

Recommendations:

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.

6. ACCIDENTAL RELEASE MEASURES

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. 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).

Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the 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 National Rivers Authority.

7. HANDLING AND STORAGE**Handling:**

Vapours are heavier than air and may spread along floors. They may form explosive mixtures 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.

Application: Airspray, brush, roller (See also the Technical Datasheet)

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.

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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").

Exposure limits		(NL)	(GB)	(E)	(F)	(D)	(S)	(I)	SA
ALIPHATIC POLYISOCYANATE	8hr ppm/mg/m ³	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
	15m ppm/mg/m ³	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-
1-METHOXY-2-PROPANOL-ACETATE	8hr ppm/mg/m ³	100/550	50/274	50/275	50/275	50/275	-/-	-/-	-
	15m ppm/mg/m ³	-/-	100/548	100/550	50/275	50/275	-/-	-/-	-
XYLENE	8hr ppm/mg/m ³	50/210	50/220	50/221	100/435	100/435	50/200	100/440	H
	15m ppm/mg/m ³	100/442	100/441	100/442	200/870	200/870	100/450	150/661	H
ETHYLBENZENE	8hr ppm/mg/m ³	50/215	100/441	100/441	100/435	100/435	50/200	100/440	H
	15m ppm/mg/m ³	100/430	125/552	200/884	100/435	100/435	100/450	125/551	H
HEXAMETHYLENE-DI-ISOCYANATE	8hr ppm/mg/m ³	0,005/0,04	-/0,02	0,005/0,035	0,005/0,02	0,005/0,02	0,005/0,03	0,005/0,03	-
	15m ppm/mg/m ³	0,02/0,14	-/0,07	-/-	0,005/0,02	0,005/0,02	-/-	-/-	-

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) Arbetsklyddstyrelsens 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.

Personal protection:**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. Under cool dry conditions, it is possible for the isocyanate to remain unreacted in the paint film for up to 30 hours after application.

If dry flapping is unavoidable air fed respiratory protective equipment should be used.

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. Breakthrough time nitrile gloves: Methyleneketone 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.

Eye protection:

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

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.

Protection of environment: see section 12

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Specific Gravity: 1,03 g/cm ³	Flashpoint: 38°C	Solubility in water: Not Soluble
Viscosity ISO Cup 6: 20s	Viscosity Ford Cup 4: 65s	Explosion limits	
ALIPHATIC POLYISOCYANATE		N.A.	Persistence and biodegradability in water: No data available
1-METHOXY-2-PROPANOL-ACETATE			
XYLENE		1.0-7.0%	
ETHYLBENZENE		1.0-6.7%	Bioaccumulation: No data available
HEXAMETHYLENE-DI-ISOCYANATE		0.9-9.5%	

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10. STABILITY AND REACTIVITY

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

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

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

11. TOXICOLOGICAL INFORMATION

There is no experimental data available on the product itself.

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

This product contains isocyanates. When exposed to isocyanates during spray application, without wearing the recommended protective equipment, irritation of skin, eyes, nausea and respiratory system can occur.

These effects can occur with a delay. Some people can get allergic reactions when exposed to isocyanates even when the concentration is below the MAC value.

May cause sensitisation by inhalation and skin contact.

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 not classified as dangerous for the environment.

13. DISPOSAL CONSIDERATION

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.

14. TRANSPORT INFORMATION

ADR/RID Class:	3		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263	Hazard Identification Number: 30	
Proper Shipping Name: Paint			
IMDG Class:	3		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263		
Proper Shipping Name: Paint			
Marine Pollutant:	No		
EMS:	F-E, S-E		
Special Provisions:	163, 223, 944, 955		
IATA Class:	3		
Subsidiar risc:	-	Packing group: III	
UN-number:	1263	Special Provisions: A3, A72	
Proper Shipping Name: Paint			

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.

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

Symbol Xn
Contains ALIPHATIC POLYISOCYANATE
HEXAMETHYLENE-DI-ISOCYANATE



R10 Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R36/38 Irritating to eyes and skin.
R42/43 May cause sensitisation by inhalation and skin contact.

S02 Keep out of the reach of children.
S51 Use only in well-ventilated areas.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37 Wear suitable protective clothing and gloves.
S63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

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.

16. OTHER INFORMATION

R10 Flammable.
R11 Highly Flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R23 Toxic by inhalation.
R36 Irritating to eyes.
R36/37/38 Irritating to eyes, respiratory system and skin.
R38 Irritating to skin.
R42/43 May cause sensitisation by inhalation and skin contact.
R43 May cause sensitisation by skin contact.