

SAFETY DATA SHEET

1. Identification of the preparation and of the company/undertaking

Product Name and/or Code : POLYGLOSS CURING AGENT 95370

Company name and address : Blakes Paints : Emergency phone: Swanwick Marina : 01489 864440

Southampton See section 4 First aid

Hampshire SO31 7EF measures. Telephone: 01489 864440

Product Type : isocyanate curing agent

Field of application : used only as part of two- or multi component products

Date of issue : 25-02-2004.

Date of previous issue : No Previous Validation.

2. Composition/information on ingredients

Substances presenting a health hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Ingredient Name	CAS no.	%	EC Number	Classification
prepolymer isocyanate HDI	*	50-75		R43
2-methoxy-1-methylethyl acetate	108-65-6	10-15	203-603-9	R10 Xi; R36
xylene	1330-20-7	10-15	215-535-7	R10 Xn; R20/21 Xi; R38
ethylbenzene	100-41-4	2-5	202-849-4	F; R11 Xn; R20
hexamethylene-di-isocyanate	822-06-0	0.5-1	212-485-8	T; R23 Xi; R36/37/38 R42/43

Notes

(*) See full text of phrases under Chapter 16 and * Occupational Exposure Limit(s), if available, are listed in Section 8

3. Hazards identification



Harmful

Flammable. Harmful by inhalation. May cause sensitisation by inhalation and skin contact.

4. First-aid measures

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

Inhalation : Move the person into fresh air and keep the person under surveillance. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory

person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

Eye Contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all

cases of doubt, or when symptoms persist, seek medical attention.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

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Ingestion

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting unless directed to do so by medical personnel. Lower the head so that the vomit will not reenter the mouth and throat.

Notes to physician

If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed.

5. Fire-fighting measures

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Fire-fighters should wear proper protective equipment. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

Extinguishing Media Recommended: alcohol resistant foam, CO₂, powders, water spray.

Not to be used: waterjet.

Fire Degradation Products These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

6. Accidental release measures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area.

Avoid all direct contact with the spilled material. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth, and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses.

Clean preferably with a detergent; avoid use of solvents. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulation

7. Handling and storage

Handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Care should be taken when re-opening partly used containers.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

Storage

Store in accordance with local regulations for flammable liquids. Observe label precautions. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids as well as of amines, alcohols and water. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure controls/personal protection

Engineering measures

: Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hygiene measures

Wash hands, forearms, and face thoroughly after handling compounds and before

eating, smoking, using lavatory, and at the end of day.				
Ingredient Name	Occupational Exposure Limits			
2-methoxy-1-methylethyl acetate xylene	EH40-OES (United Kingdom (UK), 2002). Skin Notes: OES STEL: 100 ppm 15 minute(s). STEL: 548 mg/m³ 15 minute(s). TWA: 50 ppm 8 hour(s). TWA: 274 mg/m³ 8 hour(s). EH40-OES (United Kingdom (UK), 2002). Skin Notes: OES STEL: 441 mg/m³ 15 minute(s). STEL: 100 ppm 15 minute(s). TWA: 220 mg/m³ 8 hour(s). TWA: 50 ppm 8 hour(s).			

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ethylbenzene EH40-OES (United Kingdom (UK), 2002). Skin Notes: OES

STEL: 552 mg/m³ 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 441 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).

hexamethylene-di-isocyanate EH40-MEL (United Kingdom (UK), 2002). Notes: MEL

STEL: 0.07 mg/m³ 15 minute(s). TWA: 0.02 mg/m³ 8 hour(s).

Personal protective equipment

General : Gloves must be worn for all work that may result in soiling.

Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the

product.

Skin and body : Wear suitable protective clothing. Always wear protective clothing when spraying.

Hands : Wear suitable gloves. Barrier creams may help to protect the exposed areas of

the skin, but should not be applied once exposure has occurred. Barrier creams

may not be used under or instead of gloves.

It is not possible to specify precise type of gloves, since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate

type.

Eyes : Use safety eyewear designed to protect against splash of liquids.

9. Physical and chemical properties

Physical state : Liquid.

Melting point : -67.17°C based on data for: prepolymer isocyanate HDI

Density : 1.06 g/cm³

Solubility : Very slightly soluble in cold water, hot water.

Flash point : Closed cup: 40°C (104°F).

Explosion Limits : 1 - 10.8 vol %

% by Weight : Weighted average: 26 % % by Weight : Weighted average: 0 %

VOC Content : Weighted average: 275 g/l (CEPE)

TOC Content : Weighted average: 192 g/l

10. Stability and reactivity

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

Reactive with oxidising agents.

Slightly reactive to reactive with reducing agents, organic materials, acids.

Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

When exposed to high temperatures (i.e. in case of fire) hazardous decomposition products may be formed:

These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

11. Toxicological information

Effects and symptoms

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Isocyanate containing products have characteristics that include producing acute irritation and/or sensitisation when breathing, subsequent asthmatic problems and lung contractions. Sensitised people can, as a result from this, show asthmatic symptoms wi

Sensitization : Contains (prepolymer isocyanate HDI, hexamethylene-di-isocyanate). May produce an allergic reaction.

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12. Ecological information

The product must not be drained into water courses or drainage system.

Ingredient Name	Species	Period	Result
ethylbenzene	Daphnia magna (EC50) Selenastrum capricornutum (EC50)	48 hour(s) 48 hour(s)	8.2 mg/l 2.93 mg/l 7.2 mg/l 9.09 mg/l

13. Disposal considerations

This product is listed as Hazardous by the EU Directive on hazardous waste. Dispose of according to all national and local applicable regulations.

Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) and national waste group, catalogue, code or number is given below.

EWC no. : 08 01 11

14. Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea.

The transport classification is according to ADR 2003, IMDG edition 2002 (incl. Amdt. 31-02).

	UN-no.	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	UN1866	RESIN SOLUTION	3	III	<u>b</u>	<u>Remarks</u> H-35
IMDG Class	U N1866	RESIN SOLUTION	3	III	<u>&</u>	EmS F-E, S-E

Regulatory information 15.

Classification and labelling according to EU-Directives (the Preparations directive etc.).

Classification Harmful

- hexamethylene-di-isocyanate **Contains**

Risk Phrases R10- Flammable.

R20- Harmful by inhalation.

R42/43- May cause sensitisation by inhalation and skin contact.

Safety Phrases S2- Keep out of the reach of children.

S23- Do not breathe vapor/spray. S24- Avoid contact with skin. S37- Wear suitable gloves.

S45- In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible). S51- Use only in well-ventilated areas.

S63- In case of accident by inhalation: remove casualty to fresh air and keep at

rest.

Additional Warning Phrases Contains isocyanates. See information supplied by the manufacturer.

Other EU regulations

Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC, including amendments and the intended use.

- Consumer applications, Industrial applications, Used by Spraying.

Tactile warning of danger Yes, applicable.

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16. Additional Information

Full text of R phrases referred to in Sections 2 and 3 - United Kingdom (UK)

: R11- Highly flammable. R10- Flammable.

R23- Toxic by inhalation. R20- Harmful by inhalation.

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

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.

Full text of classifications referred to in Sections 2 and 3 - United Kingdom (UK)

: F - Highly flammable

T - Toxic Xn - Harmful Xi - Irritant

Notice to Reader

Modified data or content compared with the previous version are maked with a triangular marker in the upper-left corner within the Safety Data Sheet.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications. It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

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