



SAFETY DATA SHEET
P101 2 PACK POLYURETHANE MARINE VARNISH - RESIN BASE

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME P101 2 PACK POLYURETHANE MARINE VARNISH - RESIN BASE
PRODUCT NO. 507/P101/1 - LACQUER BASE
APPLICATION HARDENER FOR TWO COMPONENT CLEAR VARNISH
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2 HAZARDS IDENTIFICATION

Flammable. Irritating to eyes. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xi;R36. R10, R52/53.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
1,2,4-TRIMETHYLBENZENE	202-436-9	95-63-6	1-5%	R10 Xn;R20 Xi;R36/37/38 N;R51/53
2-METHOXY-1-METHYLETHYL ACETATE	203-603-9	108-65-6	30-60%	R10 Xi;R36
2-METHOXYPROPYL ACETATE	274-724-2	70657-70-4	<1%	R10 Repr2;R61 Xi;R37
MESITYLENE	203-604-4	108-67-8	<1%	R10 Xi;R37 N;R51/53
SOLVENT NAPHTHA (PETROLEUM)	265-199-0	64742-95-6	1-5%	Xn;R65. N;R51/53. R10,R66,R67.
XYLENE	215-535-7	1330-20-7	<1%	R10 Xn;R20/21 Xi;R38

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious.

INHALATION

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. Place unconscious person on the side in the recovery position and ensure breathing

INGESTION

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and take these instructions.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes and get medical attention.

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5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

SPECIAL FIRE FIGHTING PROCEDURES

Be aware of danger for fire to re-start. Water spray should be used to cool containers. Cool containers exposed to flames with water until well after the fire is out. Do not allow runoff to sewer, waterway or ground.

UNUSUAL FIRE & EXPLOSION HAZARDS

FLAMMABLE. Solvent vapours may form explosive mixtures with air.

SPECIFIC HAZARDS

By heating and fire, toxic vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Exclude non-essential personnel. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Do not smoke, use naked flames or other sources of ignition. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Contain spillages with sand, earth or any suitable adsorbent material. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Should be prevented from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Observe workplace exposure limits and minimise the risk of inhalation of vapours and mist. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not eat, drink or smoke when using the product. The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

USAGE DESCRIPTION

Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container

STORAGE PRECAUTIONS

Store in closed original container at temperatures between 5°C and 25°C. Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep upright. Store in locked, well ventilated room and isolated from acids. Store separated from: Oxidising material. Alkalies. Acids.

STORAGE CLASS

Flammable liquid storage. The storage and use of this product is subject to the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR. Up to 50 litres of liquids with a flashpoint below 32C may be kept in a workroom provided they are kept in closed containers in a marked, fire-resisting cupboard or bin. Larger quantities must be kept in a separate, marked storeroom conforming to the structural requirements contained in the HSE guidance note Storage of Flammable Liquids in Containers.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
1,2,4-TRIMETHYLBENZENE	WEL				
2-METHOXY-1-METHYLETHYL ACETATE	WEL	50 ppm(Sk)	274 mg/m3(Sk)	100 ppm(Sk)	548 mg/m3(Sk)
SOLVENT NAPHTHA (PETROLEUM)	SUP		mg/m3		
XYLENE	WEL	50 ppm(Sk)	220 mg/m3(Sk)	100 ppm(Sk)	441 mg/m3(Sk)

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Recommended Workplace Exposure Limit.

HAND PROTECTION

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION

Wear appropriate clothing to prevent reasonably probable skin contact.

HYGIENE MEASURES

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear Colourless liquid		
ODOUR	Characteristic of solvents		
RELATIVE DENSITY	1.05 - 1.07 @ 20 C	VAPOUR PRESSURE	400 Pa @20 C
FLASH POINT (°C)	25 CC (Closed cup).	AUTO IGNITION TEMPERATURE (°C)	314 C (Methoxy Propanol Acetate)
FLAMMABILITY LIMIT - UPPER(%)	10.6% (Methoxy Propanol Acetate)		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances. Avoid exposure to high temperatures or direct sunlight.

MATERIALS TO AVOID

Strong alkalis. Strong acids. Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION

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INHALATION

Irritating to respiratory system. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Central nervous system depression.

INGESTION

Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting.

SKIN CONTACT

Irritating to skin. Harmful: possible risk of irreversible effects in contact with skin.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

Prolonged exposure to the preparation may cause serious health effects. Solvent vapours are hazardous and may cause nausea, sickness and headaches.

ROUTE OF ENTRY

Inhalation. Skin absorption. Ingestion. Skin and/or eye contact.

MEDICAL SYMPTOMS

Extreme irritation of eyes and mucous membranes, including burning and tearing. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

MEDICAL CONSIDERATIONS

Skin disorders and allergies.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

MOBILITY

Mobile. The product contains volatile substances, which may spread in the atmosphere.

BIOACCUMULATION

The product does not contain any substances expected to be bioaccumulating.

DEGRADABILITY

The product is expected to be biodegradable.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Do not allow to enter drains, sewers or watercourses.

DISPOSAL METHODS

Incinerate with provision for removal of effluent gases by scrubber. Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS

When this coating, in its liquid state, as supplied, becomes a waste, it is categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). Part-used containers, not drained and/or rigorously scraped out and containing dried residues of the supplied coating, are categorised as hazardous waste, with code 08 01 11* (SOLVENT BASED LIQUID WASTE). If mixed with other wastes, the above waste code may not be applicable. Used containers, drained and/or rigorously scraped out and containing dry residues of the supplied coating, are categorised as non-hazardous waste, with code 15 01 02 (plastic packaging) or 15 01 04 (metal packaging).

14 TRANSPORT INFORMATION



UK ROAD CLASS

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P101 2 PACK POLYURETHANE MARINE VARNISH - RESIN BASE

PROPER SHIPPING NAME	PAINT PRODUCT		
UN NO. ROAD	1993	UK ROAD PACK GR.	III
ADR CLASS NO.	1263	ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	III	UN NO. SEA	1263
IMDG CLASS	3	IMDG PACK GR.	III
EMS	F-E, S-E	MARINE POLLUTANT	



15 REGULATORY INFORMATION

LABELLING



Irritant

RISK PHRASES

R10	Flammable.
R36	Irritating to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S2	Keep out of the reach of children
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of water.
S29	Do not empty into drains.
S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

UK REGULATORY REFERENCES

Chemicals (Hazard Information & Packaging) Regulations. The Control of Substances Hazardous to Health Regulations 1988. Health and Safety at Work Act 1974.

ENVIRONMENTAL LISTING

Control of Pollution Act 1974. Rivers (Prevention of Pollution) Act 1961.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. Dangerous Substances and Explosive Atmospheres Regulations 2002 [L138]

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Workplace Exposure Limits 2005 (EH40) Health and Safety at Work Act (As Amended) 1974 Control of Substances Hazardous to Health Regulations 2002 (as amended) The Carriage of Dangerous Goods and use of transportable pressure equipment regulations 2004. Dangerous Substances and Explosive Atmospheres Regulations 2002 [SI 2002: 2776] The Manual Handling Operations Regulations 1992 [SI 1992:2793]

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16 OTHER INFORMATION

REVISION COMMENTS

Major revision (CHIP3) Revisions to sections: (1), (2), (3), (8), (14), (15), and (16) Revision for WEL(Workplace Exposure Limit) section 8. Addition of references to Manual Handling Regulations and Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) in Section 7; Classification of Wastes in Section 13; associated Regulatory References in Section 15.

ISSUED BY

Technical Dept. (P.E.)

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SAFETY DATA SHEET STATUS

Approved.

DATE Date Printed _____

SIGNATURE Initials _____

RISK PHRASES IN FULL

R10	Flammable.
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.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R61	May cause harm to the unborn child.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.