



SAFETY DATA SHEET for INDURO

Issued by Morrells Woodfinishes Ltd,

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND THE COMPANY/UNDERTAKING

PRODUCT NAME - INDURO RANGE OF WATERBORNE FLOOR LACQUERS

INTENDED USE - Application to Timber Substrate

For Professional Use only

SUPPLIER - Morrells Woodfinishes Ltd, - Wellington Works, - Mill Lane, - Woodley, - Stockport. SK6 1RN. Tel 0161 406 5300.

Emergency Tele -

2. COMPOSITION/INFORMATION OF INGREDIENTS

A mixture of water, resin and organic solvent as required.

Substance Name	EINECS No.	CAS No.	% Conc Range	Hazard Symbols	Risk Phrases
DIPROPYLENE GLYCOL METHYL ETHER		34590-94-8	>2.5% & =<10%		

for full text of Risk Phrases see Section 16 'Other Information'

3. HAZARDS IDENTIFICATION

The product is not classified as dangerous according to the CHIP Regulations.

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 - Remove to fresh air, keep patient warm and at rest. If breathing is irregular or has stopped administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

EYE CONTACT - Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 mins, 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 - If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA - Carbon dioxide, Dry Powder, Alcohol Resistant Foam, Water Spray Mist.

NOT TO BE USED - Water Jet.

SPECIAL INSTRUCTIONS FOR FIRE FIGHTING PERSONNEL - Fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to 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 & 8. Contain and collect spillages with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (see sect 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid use of solvents. If the product enters drains or sewers, immediately contact the local water company; in the case of contamination of streams, rivers or lakes the relevant environment agency.

7. STORAGE & HANDLING

Prevent airborne concentrations higher than the OEL. Keep the container tightly closed. Exclude sources of heat, sparks & open flames. Avoid skin & eye contact and the inhalation of vapour and mist. Smoking, eating & drinking should be prohibited in storage and use areas. For Occupational Exposure Controls measures, 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, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Observe the label precautions. Store between 5 & 25°C in a dry well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store separately from oxidising agents and strongly alkaline and strongly acidic materials. The principles contained in the HSE's guidance notes Chemical Warehousing - Storage of Packaged Dangerous substances and the Storage of Flammable liquids in containers should be observed when storing this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures - 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 Limit Values, suitable respiratory protective equipment must be worn (See Occupational Exposure Controls below)

Substance Name	Occupational Exposure Limits 8hr LTEL	Occupational Exposure Limits 15min STEL	Notation
DIPROPYLENE GLYCOL METHYL ETHER	50.00ppm 308.00mg/m ³		Sk OES

NOTES

Notations = Sk - risk of absorption through skin Sen - respiratory sensitizer.

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Monitoring may be appropriate (see Biological Monitoring Guidance Value in EH40 Table 3)

OEL's are from EH40 except where marked SUP which are assigned by the supplier of the substance.

General Protection - All ppe, including rpe, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH regulations.

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 OELV and engineering controls and methods cannot reasonably be improved.

Hand Protection - When skin exposure may occur, advice should be sought from glove suppliers on appropriate types and usage times for this product. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Barrier creams may help to protect exposed areas of 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 & water or a proprietary skin cleaner. DO NOT USE SOLVENTS OR THINNERS AS SKIN CLEANING AGENTS. Regular skin inspection of users of this product is recommended. ALWAYS WASH YOUR HANDS BEFORE EATING, SMOKING OR USING THE TOILET.

9. PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE

Viscous liquid

SPECIFIC GRAVITY

1.015 gms/cc Method Calculation

VAPOUR DENSITY

HEAVIER than Air

LOWER EXPLOSION LIMIT

.8 % Vol.

SOLUBILITY IN WATER

MISCIBLE

10. STABILITY & REACTIVITY

Stable under the recommended storage & handling conditions (see Sect.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 and strongly alkaline and strongly acidic materials to prevent the possibility of an exothermic reaction.

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself. Exposure to organic solvent vapours in excess of the stated occupational exposure limit may result in adverse health effects such as irritation of the mucous membrane and respiratory system and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness. Splashes in the eyes may cause irritation and reversible local damage. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the product may cause removal of natural fats from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eye may cause irritation and reversible local damage. The product has been assessed following the conventional method in CHIP and is classified for toxicological hazards accordingly. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short term and long term exposure by oral, inhalation and dermal routes of exposure and eye contact. See sections 3 & 15 for details of the resulting hazard classification.

12. ECOLOGICAL INFORMATION

There is no data available on the product itself. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. LAPC/LAPPC/IPPC requirements of regulations made under the Environmental Protection Act/Pollution Prevention and Control Act may apply to this product.

13. DISPOSAL CONSIDERATIONS

Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act & Environmental Protection Act. Using information provided in this data sheet, advice should be obtained from the relevant environment agency whether the special waste regulations apply.

14. TRANSPORT INFORMATION

		Road/Rail
<i>Designation</i>	Not Classified	
		Sea
<i>Shipping Name</i>	Not Classified	
		Air
<i>Shipping Name</i>	Not Classified	
		International Road/Rail
<i>Shipping Name</i>	Not Classified	

15. REGULATORY INFORMATION

The product is classified and labelled for supply in accordance with the Chemicals (Hazard Information & Packaging) Regulations as follows.

Classification **Contains**

Risk Phrases

Safety Phrases

'P' Phrases

Do not breathe Vapour or Spray

16. OTHER INFORMATION

Date of Origination 24/04/09

Date of last revision 24/04/09

The information contained in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information & Packaging) Regulations. The product should not be used for purposes other than those shown in sect.1 without first referring to the supplier and obtaining written instructions. As the specific conditions of use of the product are outside of the suppliers control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

Further information and relevant advice can be found in:-

- The Control of Substances Hazardous to Health Regulations 1999.(SI 1999:437) TSO. COSHH Essentials:easy steps to control chemicals (HSG 193) HSE Books
- The Manual Handling Operations Regulations 1992 (SI 1992:2793) TSO. Chemical Warehousing: Storage of flammable liquids in Containers (HSG51) HSE Books
- Storage of Packaged Dangerous Substances (HSG71) HSE books. The Environmental Protection Duty of Care) Regs 1992 (SI 1992:2839) TSO. A guide to Working with Solvents (INDG 272) HSE Books
- Dangerous Substances and Explosive Atmospheres Regs 2002 (SI 2002:2776) TSO.

Produced by a MICRORISK automated Data Sheet system **Sheet Ref:** **Issue No.:** **Date of Issue:** 24-04-
INDURO **1** **2009**

Product Data Sheet



Induro Waterborne Sealers

Code	Description	Code	Description
Induro GP Seal	General Purpose Sealer	Induro EB Seal	Anti Edge Bond Sealer

Technical Data	<p>State of the art 'wood warming' ('Anfuerung') waterborne sealers specifically formulated to :</p> <ul style="list-style-type: none"> ○ Enhance the natural appearance and grain structure of all solid and veneered timbers, particularly oak and mahogany. ○ Provide a "key" for the application of the Induro XL1 and XL2 Topcoats. ○ The Edge Bonding Sealer minimises splitting of the coating along joints due to movement.
Properties	<p>When used with Morrells Induro XL1 and XL2 Waterborne Flooring Lacquers extremely strong but flexible coatings with excellent clarity offering outstanding chemical and mechanical resistance coating can be produced.</p> <p>Unlike other waterborne sealers available these products do not require the addition of an extra crosslinking additive, and thus avoids an extra mixing process and the health hazards associated with post-added external cross linkers.</p>
Mixing Guidelines	Supplied ready for use (RFU) and does not require further thinning.
Handling	<p>Touch Dry: 1.5 – 2 hours @ 18°C Recoatible: 2 hours minimum @ 18°C</p> <p>These times will be extended under conditions of low temperature and/or of high humidity.</p>
Cleaning	Application equipment should be cleaned with water immediately after use.
Coverage	Approximately 40m ² per 5Lts dependent upon the size, orientation and surface quality of the substrate.
System Guidelines	<p>Morrells recommends the following guidance for use of this product range:</p> <p>Typical Application: 1 coat at 130 - 150 mls/m² (Dry Film Thickness ~ 42µ), when dry this should be overcoated without sanding/denibbing with Morrells Induro XL1 or Induro XL2 Waterborne Flooring Lacquers</p> <p>Using these products in systems outside these guidelines can lead to immediate and latent problems with the integrity of the finish.</p>
Important Information	<ul style="list-style-type: none"> ➤ Do not use in areas of high humidity or condensation. ➤ Only Morrells standard range of LF stains are recommended under XL ranges.

For further technical information contact our Technical Support Team on 0161 406 5300

This information is provided in good faith and without prejudice

	<ul style="list-style-type: none"> ➤ Leave adequate time before overcoating. Do not sand/de-nib before applying topcoat lacquer. ➤ Excessive coating weights can lead to cracking or lifting. ➤ Do not overcoat with solvent borne products. ➤ Avoid contact with iron, copper, zinc, aluminum and platinum as these can attack the aqueous polymer. ➤ Waterborne products should have nominated finishing equipment. ➤ When coating darker timbers, such as walnut, mahogany or teak, slight bleaching may occur. ➤ Product should be stored above 5°C and protected from frost. ➤ Optimum application is achieved between 18°C and 22°C with good air movement and ventilation. ➤ Finished products should not be subjected to environments with temperatures of < 2°C. ➤ In scope of 2004/42/EC.
Health & Safety	<p>Reference should be made to the appropriate MSDS for this product range, which can be found at www.morrells.co.uk</p> <p>The use of appropriate personal protection equipment (PPE) is recommended.</p> <p>These products are intended for professional use only.</p>

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Product Data Sheet



Induro Iso Seal

Code	Description
Induro Iso Seal	Isolating Sealer

Technical Data	This product is formulated from Quality Shellacs and Ethyl Alcohol to produce a fast drying sealer with excellent clarity.
Properties	This product is particularly suitable for use on refurbished flooring, as it will seal any remaining contaminants in the substrate which may cause application, appearance and drying problems with Flooring Lacquers.
Mixing Guidelines	Supplied ready for use (RFU) and does not require further thinning.
Handling	<p>Touch Dry: 10 - 20 minutes @ 18°C Recoatable: 60 minutes minimum @ 18°C</p> <p>These times will be extended under conditions of low temperature and/or of high humidity.</p>
Cleaning	Application equipment should be cleaned with 3007/000 – Shellac Thinners or R034 – Methylated Spirits immediately after use.
Coverage	Approximately 40m ² per 5Lts dependent upon the size, orientation and surface quality of the item being coated.
Application Guidelines	<p>Morrells recommends the following guidance for use of this product :</p> <p>Typical Application: 1 coat at 130 - 150 mls/m² (Dry Film Thickness ~ 24µ), when dry this should be overcoated without sanding/denibbing with Morrells Induro XL Flooring Lacquers.</p> <p>The use of Induro Iso Seal is not recommended over LF Stains – consult Technical Support for further guidance.</p> <p>Using this product in systems outside these guidelines can lead to immediate and latent problems with the integrity of the finish.</p>
Important Information	<ul style="list-style-type: none"> ➤ Optimum application is achieved between 18°C and 22°C with good air movement and ventilation. ➤ Finished products should not be subjected to environments with temperatures of < 2°C. ➤ In scope under 2004/42/EC.
Health & Safety	<p>Reference should be made to the appropriate MSDS for this product, which can be found at www.morrells.co.uk</p> <p>The use of appropriate personal protective equipment (PPE) is recommended.</p> <p>This product is intended for professional use only.</p>

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