

UNIVERSAL SEALANTS (UK) LIMITED

NUFINS DIVISION

Kingston House, 3 Walton Road, Pattinson North,
Washington, Tyne & Wear. NE38 8QA
Telephone No: 0191 416 8360 Fax No: 0191 415 5966

1. Product Identification

Trade Name: CLEARSEAL

Description: Moisture curing solvent borne polyurethane weather resistant coating.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
Solvent Naptha	64742-95-6	30-55%	F,Xn,N	10,65,66,67,51/53
1,2,4-Trimethylbenzene (all isomers or mixtures)	25551-13-7	10-20%	F,Xn,N	10,20,36/37/38,51/53
Methoxypropylacetate	108-65-6	5-15%	F,Xi	10,36
Mesitylene	108-67-8	5-10%	Xi	37
n&isopropylbenzenes	103-65-1	1-5%	Xi	37

NOTE: Benzene (CAS No. 71-43-2) will normally be present in trace amounts but will always be less than 0.1% w/w marker level in the 21st ATP to the Dangerous Substances Directive. This product is NOT CLASSIFIED as a carcinogen under the CHIP3 regulations.

3. Hazard Identification

May cause irritation of the respiratory system, and can cause sensitisation following inhalation of vapours, mists or fumes. May cause lung damage if swallowed. Toxic to aquatic organisms.

4. First Aid Measures

Inhalation: In case of drowsiness or sickness remove to fresh air, keep patient warm and at rest. If unconscious, turn to the recovery position. Seek medical assistance.

Skin Contact: NOTE: Effects may be delayed. Promptly remove contaminated clothing and wash the affected area with plenty of soap and water to ensure all traces of product are removed, then rinse thoroughly. Any contaminated clothing must be thoroughly cleaned before re-using. Seek medical advice if irritation persists.

Eye Contact: Flush with copious amounts of clean water for at least 15 minutes, with the eye lids held open. Seek medical attention.

Ingestion: Wash out mouth with water. Keep patient at rest and obtain medical attention. DO NOT INDUCE VOMITING.

5. Fire Fighting Measures

Suitable Extinguisher Media: Alcohol-resistant foam, dry powder, carbon dioxide or sand.

Unsuitable Extinguishing Media: Water.

Exposure Hazards: May give off toxic fumes if heated or involved in a fire, including carbon dioxide, carbon monoxide and hydrogen cyanide.

Special Protective Equipment: Full face, positive pressure, self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Personal Precautions: Wear protective equipment as specified in Section 8. Do not eat, drink or smoke. Avoid contact with skin and eyes. Eliminate all ignition sources.

Environmental Precautions: Eliminate all ignition sources. Keep people and animals away. Prevent entry into drains, sewers and watercourses. If spillage enters drains leading to sewerage works inform the local water company. If spillage enters rivers or watercourses inform the Environment Agency.

Spillages: Cordon off area. Absorb/contain spillage using inert absorbent granules, sand or earth. Transfer collected material to heavy-duty plastic/steel drums and keep in a well ventilated place for subsequent safe disposal. See Section 13.

7. Handling and Storage

Handling: No specific precautions required when handling unopened containers; follow any relevant manual handling guidance. Avoid contact with water, alcohols, amines and other materials that may react with isocyanates. Refer to Sections 6 and 8 if exposure to product is possible. Wash thoroughly with soap and water before eating, drinking or smoking, and after work.

Storage: Store in original containers in a well ventilated area away from heat, ignition sources or open flame. Do not store near acids. Isocyanates react with water to liberate carbon dioxide. Any ingress of moisture into an isocyanate container, whether full or empty, can lead to a pressure build-up and subsequent explosion.

8. Exposure Controls / Personal Protection

Occupational Exposure Standards: Isocyanates (as -NCO):
8 Hour TWA 0.02mg/m³, 15 min STEL 0.07mg/m³
MEL (Sens).
These exposure limits must not be exceeded at any time during the exposure period.
Hydrocarbon Solvent (from raw material composition):
8 Hour TWA 150mg/m³ OEL (calculated).
Methoxypropyl acetate:
8 Hour TWA 50ppm, 15 min STEL 150ppm OES
(Indicative Limit Value).

Engineering Control Measures: Refer to any applicable COSHH assessments. Engineering controls should be used where practicable in preference to personal protection and may include physical containment and good ventilation.

Respiratory protection:	If levels of isocyanate or solvents exceed the above limits use an approved respirator fitted with an appropriate gas cartridge (organic substance). All items must conform to EN149 and should be suitable for the levels of contamination present in the workplace.
Hand Protection:	Wear Neoprene or Nitrile gloves or gauntlets. These must be manufactured to EN374. The material breakthrough time should be stated by the glove manufacturer, and must be observed at all times.
Eye Protection:	If splashing of the product is likely chemical resistant goggles conforming to BS 2092 should be worn.
Body Protection:	Wear suitable impervious, chemical resistant overalls.
Foot Protection:	Wear chemical resistant safety footwear.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance:	Clear liquid	Boiling Point:	Base	155-181°C
Odour:	Aromatic	Vapour Pressure @ 20°C:	(Air =1)	>1
pH:	N/A	Evaporation Rate (Butyl Acetate = 1):		0.21
Flash Point:	>41°C	Flammable Limits in Air:	Upper:	7.0%
			Lower:	0.8%
Solubility:	Immiscible in water (reacts)	Autoignition Temperature:		>450°C
Flammability:	Flammable liquid			
Specific Gravity:	0.90			

10. Stability and Reactivity

Stability:	Stable under normal conditions (see Section 7).
Materials to Avoid:	Alcohols, glycols, acids (organic and inorganic), oxidising agents, amines, water, steam, inorganic alkalis.
Hazardous Decomposition Products:	Toxic gases/vapours/fumes of: Carbon dioxide(CO ₂). Carbon monoxide (CO). Oxides of: Nitrogen. Hydrogen cyanide (HCN). Nitrous gases (NO _x).

11. Toxicological Information

There is no data available on the product itself.
Contains isocyanates which may cause allergic reaction and irritation of the respiratory system, however the low volatility of the product makes this unlikely during normal conditions of use.

Ref: HSD/C37
Issue No: 5
Date of Issue: 28th June, 2006

Inhalation: Harmful by inhalation. May cause sensitisation by inhalation. Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness and have other CNS effects.

Eye Contact: May cause Irritation.

Skin Contact: Irritant for skin and mucous membranes. May cause sensitisation.

Ingestion: May result in irritation to the gastro intestinal tract. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

Health Warnings: Can be hazardous when inhaled and/or following skin contact. May cause allergic reaction and irritation of the respiratory system. Prolonged inhalation of high concentrations may damage the respiratory system. Pulmonary sensitiser and severe pulmonary irritant. Recognised allergen. May also cause sensitisation by skin contact.

12. Ecological Information

There is no data available on the product itself.
Hazardous for water. Do not allow the product to reach ground water, water bodies or sewage systems. Must not reach sewage water or drainage ditch undiluted or unneutralised. The liquid product may be neutralised with a mixture of ammonia solution (190g/ltr), water and ethanol.

13. Disposal Considerations

Dispose of used containers and un-cured product as hazardous waste, in accordance with all applicable local and national regulations, and in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

14. Transport Information

UN Number:	1866	Packaging Group:	III
ROAD		AIR	
ADR Class:	Limited quantity	Air Transport Number:	3
ADR Hazard No:	in compliance with chapter 3.4 LQ7 less than 5 litres per inner package	Packaging Instruction:	310
SEA			
IMDG Class:	3.3		
Marine Pollutant:	P		

Proper Shipping Name: Resin solution, flammable.

15. Regulatory Information

EU Classification and Labelling Particulars:

Designated Name: CLEARSEAL

Classification: Flammable and Harmful - Contains isocyanates, see information supplied by the manufacturer. Also Solvent Naptha and 1,2,4-Trimethylbenzene

Indication(s) of Danger: F, Xn & N

Risk and Safety Phrases:

R10: Flammable.
R37: Irritating to respiratory system.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
S23: Do not breathe vapour or spray.
S24: Avoid contact with skin.
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 Guidance Publications: EH40; Occupational Exposure Limits, HSE. Revised annually.
EH44; Dust in the Workplace: General Principles of Protection, HSE.
EH26; Occupational Skin Diseases - Health and Safety Precautions, HSE.

UK Legislation: Health and Safety at Work, etc Act, 1974, and relevant Statutory Provisions.
Control of Substances Hazardous to Health Regulations, 1999.
The Manual Handling Operations Regulations, 1992.
The Personal Protective Equipment at Work Regulations, 1992.
Chemicals (Hazard Information and Packaging for Supply) Regulations, 2002 - CHIP 3.

16. Other Information

Full Text of R-Phrases Referred to above:

R10: Flammable.
R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.

Training Advice: Do not use unless trained to do so. Refer to the Technical Data Sheet for the product.

Ref: HSD/C37
Issue No: 5
Date of Issue: 28th June, 2006

Recommended Uses: For professional use only. This product is designed for use as a single pack moisture curing polyurethane coating.

Further Information: This Safety Data Sheet was compiled in accordance with EU Directives 67/548/EEC and 1999/45/EC. Reference was also made to the above legislation and guidance publications.

MSDS First Issued: 29th June, 1993

MSDS Revised: 28th June, 2006

Changes in this Version: Section 14 transport reclassification.

Prepared By: F. Stratton

Disclaimer: The information in this document is offered for general health and safety guidance only and is not intended to be a definitive source of advice, nor does it constitute a risk assessment, for which the user is responsible. All information provided in this document is believed to be accurate to the best of our knowledge. Users of the products referred to should observe the recommendations, conditions and instructions relating to any relevant product label, usage information, consent or approval in force at the time. Further and more specific information may be obtained from the supplier on request.