

GLASSTHANE HARDENER

SAFETY DATA SHEET

IDENTIFICATION OF MATERIAL AND SUPPLIER

Product Name: Glassthane Hardener
Other Names:
Description: PAINT HARDENER
Recommended Uses: Part B of a 2 pack polyurethane topcoat
Company Name: The Trade Place Pty Ltd **Address:** 72 Frederick Street
Northgate, QLD
Australia 4013
(07) 3009 0470

Phone: 1300 558 717 **Fax:**

Emergency Telephone:
Australia **Australian Poisons Information Centre 13 11 26**
Emergency Services 000

New Zealand **New Zealand Poisons Information Centre 0800 764 766**
Emergency Services 111

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.
Classified as Dangerous Goods for transport purposes.



Signal Word
DANGER

GHS Hazard Classification:
Flammable Liquids - Category 3
Acute Toxicity - Dermal - Category 4
Skin Corrosion/Irritation - Category 2
Sensitisation - Skin - Category 1, 1A, 1B
Acute Toxicity - Inhalation - Category 4
Specific Target Organ Toxicity (Single Exposure) - Category 3
Specific Target Organ Toxicity (Repeated Exposure) - Category 2
Aspiration Hazard - Category 1
Toxic to Reproduction - Category 1A, 1B
Skin Corrosion/Irritation - Category 1A to 1C
Serious Eye Damage/Irritation - Category 2A

Hazard Statement(s)

H226	Flammable Liquid and vapour
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H304	May be fatal if swallowed and enters airways
H360	May damage fertility or the unborn child
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation

Prevention Precautionary Statement(s)

P102 Keep out of reach of children

P103	Read label before use
P210	Keep away from all sources of ignition - No smoking
P233	Keep container tightly closed
P240	Ground/Bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting and all other equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P280	Wear protective clothing, gloves, eye/face protection and suitable respirator as required.
P264	Wash hands thoroughly after handling
P261	Avoid breathing mist, vapours or spray
P272	Contaminated work clothing should not be allowed out of the workplace
P271	Use only outdoors or in a well-ventilated area
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P281	Use personal protective equipment as required
P260	Do not inhale mists

Response Precautionary Statement(s)

P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P370+P378	In case of fire: Use foam for extinction
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P312	Call a POISON CENTRE or doctor/physician if you feel unwell
P322	Specific measures (see first aid instruction on label)
P363	Wash contaminated clothing before reuse
P321	Specific treatment (see first aid instructions on label)
P332+P313	If skin irritation occurs. Get medical advice/attention
P362	Take off contaminated clothing and wash before use
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P314	Get medical advice/attention if you feel unwell
P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
P331	Do NOT induce vomiting
P308+P313	If exposed or concerned: Get medical advice/attention
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P310	Immediately call a POISON CENTRE or doctor/physician
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313	If eye irritation persists: Get medical advice/attention

Storage Precautionary Statement(s)

P403+P235	Store in a well-ventilated place. Keep cool
P403+P233	Store in a well-ventilated place. Keep container tightly closed
P405	Store locked up

Disposal Precautionary Statement(s)

P501	Dispose of contents/container in accordance with local, regional, national and international regulations
------	--

Poisons Schedule (Aust): S5

DANGEROUS GOODS CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Class: 3 Flammable Liquid

COMPOSITION/INFORMATION OF INGREDIENT

Ingredients	CAS No.	%
Xylene	1330-20-7	5%-20%
Ethyl Benzene	100-41-4	<20%
Aliphatic Polyisocyanate	28182-81-2	50%-70%
Organo Silane Ester	2530-83-8	10-30%
TOTAL		100%

4. FIRST AID MEASURES

Australian Poisons Information Centre 13 11 26 Emergency Services 000
New Zealand Poisons Information Centre 0800 764 766 Emergency Services 111

- Eyes Contact:** If this product comes in contact with the eyes:
- Wash out immediately with fresh running water;
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids;
- Seek medical attention without delay, if pain persists or recurs seek medical attention;
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
- Skin Contact:** If skin contact occurs:
Immediately remove all contaminated clothing, including footwear;
Flush skin and hair with running water (and soap if available);
Seek medical attention in the event of irritation.
- Inhalation:** If fumes or combustion products are inhaled remove from contaminated area;
Lay patient down, keep warm and rested;
Prostheses such as false teeth, which may block airway should be removed, where possible, prior to initiating first aid procedures;
Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device or pocket mask as trained, perform CPR if necessary;
Transport to hospital or doctor.
- Ingestion:** **If swallowed do NOT induce vomiting;**
If vomiting occurs, lean patient forward or place on left side (head-down position) to maintain open airway and prevent aspiration;
Observe the patient carefully;
Never give liquid to a person showing signs of being sleepy or with reduced awareness, i.e. becoming unconscious;
Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
Seek medical advice;
Avoid giving milk or oils;
Avoid giving alcohol;
If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
- PPE for First Aiders:** Wear overalls, safety glasses and impervious gloves;
Use with adequate ventilation;
If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZ 1715 and AS/NZ 1716;
Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact, however, due to variations in glove construction and local conditions, the user should make a final assessment;
Always wash hands before smoking, eating, drinking or using the toilet;
Wash contaminated clothing and other protective equipment before storing or re-using.

Advice to Doctor/Physician Treat Symptomatically

5. FIRE FIGHTING MEASURES

Hazchem Code 3[Y]

Suitable extinguishing media Foam

Specific hazards

Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice

Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool

with water spray. On burning may emit toxic fumes. Fire fighters to wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Keep spectators away and avoid breathing dust or vapours

Methods and materials for containment and clean up

Minor Spills

Wear protective clothing and breathing apparatus.
Use absorbent clean up materials, such as fire retardant treated sawdust or diatomaceous earth.
Keep spills (and as much as possible cleaning runoffs) out of municipal sewers and waterways.
Sweep up.
Place in separate container for disposal or recovery.
Clean up spills immediately.

Major Spills

Wear protective clothing and breathing apparatus.
Shut off all possible sources of ignition
Dike and contain spill with inert materials if safe to do so (eg. sand, soil)
Keep spills (and as much as possible cleaning runoffs) out of municipal sewers and open bodies of water.
Restrict access to area.
No smoking or naked lights/flames.
Clear area or personnel and move upwind.
Alert Fire Brigade and tell them location and nature of hazard.
Consider evacuation (or protect in place).
Stop leak if safe to do so.
Collect recoverable product into labeled containers for recycling.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid skin and eye contact and inhalation of vapour, mist or aerosols;
Avoid damaging containers;
Keep lids on containers when not in use;
Containers even those that have been emptied, may contain explosive vapours;

Conditions for safe storage

Store in cool, dry well-ventilated place and out of direct sunlight;
Store in approved flammable liquid storage area;
Store away from incompatible materials described in Section 10;
Store away from sources of heat or ignition;
Store away from foodstuffs;
Keep containers closed when not in use - check regularly for leaks.

Storage incompatibility

n-Butyl acetate:
- reacts with water on standing to form acetic acid and n-butyl alcohol;
- reacts violently with strong oxidisers and potassium tert-butoxide;
- is incompatible with caustics, strong acids and nitrates;
- dissolves rubber, many plastics, resins and some coatings.
Xylenes:
- may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride;
- attacks some plastics, rubber and coatings;
- may generate electrostatic charges on flow or agitation due to low conductivity.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Occupational exposure limits:

<u>Ingredient</u>	<u>TWA</u>		<u>STEL</u>		<u>CARCINOGEN CATEGORY</u>	<u>NOTICES</u>
	ppm	mg/m ³	ppm	mg/m ³		
xylene	80	350	150	655		
ethyl benzene	100	434	125	543		
aliphatic polyisocyanate	-	0.02	-	0.07		

As published by the Safe Work Australia or Department of Labour New Zealand

TWA: The time-weighted average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

STEL: (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use of the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Controls:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards.
Use with local exhaust ventilation or while wearing appropriate respirator.
Vapour heavier than air - prevent concentration in hollows or sumps.
DO NOT enter confined spaces where vapour may have collected.
Keep containers closed when not in use.

Personal Protection Equipment:

Overalls, Safety Shoes, Safety Glasses, Gloves, Respirator.

Eye: Safety eyewear with splash guards or side shields to prevent eye contact is recommended when using any paint.
Hands/Feet: Protective clothing. Gloves of neoprene or nitrile rubber - Industrial weight lined gauntlet recommended.
Other: Overalls, impervious clothing, barrier cream, eyewash unit, skin cleansing cream. Practice good caution and personal cleanliness to avoid skin contact. Avoid breathing vapours of heated materials. Wash hands thoroughly before handling food.
Respirator: Class AUS-1 half face respirator with type A organic filter.
Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking and smoking. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form/Colour/Odour	Coloured and clear, viscous liquid with a solvent odour.
pH	Not available
Melting Point/Freezing Point	Not available
Initial boiling point range (degC)	Not available
Flash point (degC)	28
Evaporation rate	Not available
Flammability	Flammable
Upper Explosive Limit (%)	Not available
Lower Explosive Limit (%)	Not available
Vapour pressure (kPa)	Not available
Solubility in water (g/L)	Immiscible
Vapour density (Air=1)	Not available
Relative density (Water+1)	Not available
Partition coefficient n-octanol/water	Not available
Auto-ignition temperature (degC)	Not available
Decomposition temperature	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical Stability	Unstable in the presence of incompatible materials
Hazardous Reactions	See section 7
Conditions to Avoid	See section 7
Incompatible Materials	See section 7
Hazardous decomposition product	See Section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

- Inhaled:** Inhalation of vapours or aerosols (mist, fumes) generated by the material during the course of normal handling, may be harmful.
- Ingestion:** Swallowing of the liquid may cause aspiration of vomit into the lungs with the risk of hemorrhaging, pulmonary edema, progressing to chemical pneumonitis; serious consequences may result.
- Skin contact:** Skin contact with the material may be harmful; systemic effects may result following absorption.
- Eye:** Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.
- Chronic:** Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems.

GLASSTHANE HARDENER	TOXICITY Not available	IRRITATION Not available
xylene	TOXICITY Inhalation (rat) LC50: 5000 ppm/4h Intraperitoneal (Mouse) LD50: 1548 mg/kg Intraperitoneal (Rat) LD50: 2459 mg/kg Oral (Mouse) LD50: 2119 mg/kg Oral (rat) LD50: 4300 mg/kg Subcutaneous (Rat) LD50: 1700 mg/kg Not available	IRRITATION Eye (human): 200ppm irritant Eye (rabbit): 5 mg/24h SEVERE Eye (rabbit): 87 mg mild Skin (rabbit): 500 mg/24h moderate Not available
ethyl benzene	TOXICITY Dermal (Rabbit) LD50: ca.15432.6 mg/kg Inhalation (Mouse) LC50: 35.5 mg/L/2H Inhalation (Rat) LC50: 55 mg/L/2H Oral (rat) LD50: 3500 mg/kg	IRRITATION Eye (rabbit): 500 mg - SEVERE Skin (Rabbit): 15 mg/24 h - mild
aliphatic polyisocyanate	TOXICITY dermal (rat) LD50: >7000 mg/kg Inhalation (Rat) LC50: 0.06 mg/L/4h Inhalation (Rat) LC50: 0.124 mg/L/4H Inhalation (Rat) LC50: 0.462 mg/L/4H Oral (Rat) LD50: 710 mg/kg	TOXICITY Not available
organo silane ester	TOXICITY Dermal (Rabbit) LD50: 2000 mg/kg Inhalation (Rat) LC50: 5.3 mg/l Inhalation (Rat) LC50: 390 ppm/4h	IRRITATION Eye (Rabbit): N/A Skin (Rabbit): No skin irritation

GLASSTHANE HARDENER

The following information refers to contact allergens as a group and may not be specific to this product.

- xylene** The material may produce severe irritation to the eye causing pronounced inflammation.
- ethyl benzene** The material may produce severe irritation to the eye causing pronounced inflammation.
- aliphatic polyisocyanate** Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. Particular attention is drawn to so-called atopic diathesis which is characterised by an increased susceptibility to allergic rhinitis, allergic bronchial asthma and atopic eczema (neurodermatitis) which is associated with increased IgE synthesis.
Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes)

may be involved. for 1,6-hexamethylene diisocyanate: Exposures to HDI are often associated with exposures to its prepolymers, especially to a trimeric biuretic prepolymer of HDI (HDI-BT), which is widely used as a hardener in automobile and airplane paints, and which typically contains 0.5-1% unreacted HDI. Isocyanate vapours/mists are irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis with wheezing, gasping and severe distress, even sudden loss of consciousness, and pulmonary oedema.

organo silane ester

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Acute Toxicity <input checked="" type="checkbox"/>	Carcinogenicity <input type="checkbox"/>
Skin Irritation/Corrosion <input checked="" type="checkbox"/>	Reproductivity <input checked="" type="checkbox"/>
Serious Eye Damage/Irritation <input checked="" type="checkbox"/>	STOT - Single Exposure <input checked="" type="checkbox"/>
Respiratory or Skin sensitisation <input checked="" type="checkbox"/>	STOT - Repeated Exposure <input checked="" type="checkbox"/>
Mutagenicity <input type="checkbox"/>	Aspiration Hazard <input checked="" type="checkbox"/>

Legend: - Date required to make classification available
 - Date available but does not fill the criteria for classification
 - Data not available to make classification

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways

Acute aquatic hazard: No information is available to complete an assessment
Long-term aquatic hazard: No information is available to complete an assessment
Ecotoxicity: No information available
Persistence and degradability: No information available
Bioaccumulative potential: No information available
Mobility: No information available

13. DISPOSAL CONSIDERATIONS

-Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8 Exposure Controls and Personal Protection" of this SDS.
 -Special precautions for landfill or incineration.
 -Consult manufacturer for recycling options and recycle where possible.
 -Decontaminate empty containers.
 -Containers may still present a chemical hazard/danger when empty.
 -Observe all labels safeguards until containers are cleaned and destroyed.
 - If material of container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Transport only in accordance with the following regulations

UN Number 1263
 Dangerous Goods Class 3 Flammable Liquid
 Proper Shipping Name Paint related product
 Packing Group III
 Class 3
 HAZCHEM Code 3[Y]

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
 The Stockholm Convention (Persistent Organic Pollutants)
 The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish.

International Convention for the Prevention of Pollution from Ships (MARPOL)

- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- The Standard for the *Uniform Scheduling of Medicines and Poisons (SUSMP)* established under the *Therapeutic Goods Act (Commonwealth)*.

- All the constituents of this material are listed on the *Australian Inventory of Chemical Substances (AICS)*.

Group Standard
Approved Handler

HSR002662 Surface Coatings & Colourants - Flammable
Not required

16. OTHER INFORMATION

Date of Preparation: 10 January 2019

Literature references SDS's for individual raw material

Abbreviations:

CAS Number Chemical Abstract Service registry number

Manufactured by The Trade Place Pty Ltd

72 Frederick Street
NORTHGATE QLD 4013

Telephone 1300 588 717
Fax: (03) 3009 0470

Safety data sheets are updated frequently. Please ensure that you have a current copy

The information contained herein is based on data considered accurate and reliable to the best of our knowledge and belief as of the date compiled. However no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from use hereof. The Trade Place Pty Ltd assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such users or vendors assume all risks associated with the use of the material. It is the users responsibility to satisfy themselves as to the suitability and completeness of the information for their own particular use. The users must determine whether the use of the information and data is in accordance with local laws and regulations.

End of SDS

Product Name: Glassthane Hardener