SAFETY DATA SHEETS (SDS)
Enviro 700X, 700X SL, 700X VG, 700X GC

Version: 9

Issued by: Envirosystems

Date of Issue: December 2024

Hazard Identifiers

SECTION 1 – IDENTIFICATION OF MATERIAL & SUPPLIER

1.1 **Product Name:** Enviro 700X, 700X SL, 700X VG, 700X GC
Manufacturer's Product Code: N/A
1.2 **Recommended Use:** Moisture Cure Single Pack Polyurethane
1.3 **Company:** Envirosystems
Address: 295 Princes Highway St Peters, NSW 2044.
Website: www.envirosystems.com.au
Telephone: +61 2 85958699 (business hours)
Fax: +61 2 85958660
1.4 **Emergency Telephone:** Poisons Centre – 131126

Other Information: All information in this SDS is to the best of our knowledge at time of publication. Users of this product should fully review this SDS prior to use to ensure best safety practices. Further information and or clarification can be obtained by contacting our technical department on the above telephone number.

SECTION 2 – HAZARDS IDENTIFICATION

2.1 **Hazard Classification:**

Classified as **Hazardous** according to WHS Regulations, Australian GHS criteria and a **Non-Dangerous Goods** according to the Australian Dangerous Goods Code.

Class	Category
Flammable liquids	4
Acute toxicity (Inhalation)	4
Skin corrosion/irritation	2
Eye Irritation	2
Skin sensitization	1
Respiratory sensitization	1
Carcinogenic	2
Specific target organ toxicity - single exposure	3

2.2 **Label Elements**

Signal word **Danger**

H-code	Hazard Statements
H227	Combustible liquid.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled

H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
P-Code	**Precautionary Statement - Prevention**
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surface – No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P-Code	**Precautionary Statement - Response**
P301, P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302, P352	IF ON SKIN: Wash with soap and water.
P303, P361, P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304, P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305, P351, P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P308, P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get Medical advice/attention if you feel unwell.
P321	Specific treatment (see first aid measures on this safety data sheet).
P331	Do NOT induce vomiting.
P332, P313	If skin irritation occurs: Get medical advice/attention.
P337, P313	If eye irritation persists get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370, P378	In case of fire: see fire-fighting measures on this safety data sheet.
P391	Collect spillage.
P-Code	**Precautionary Statement - Storage**
P405, P303, P235	Store locked up in a cool well-ventilated area
P407	Maintain air gap between stacks/pallets.
P420	Store away from other materials.
P-Code	**Precautionary Statement - Disposal**
P501	Dispose of contents / containers to hazardous or special waste collection point. In accordance with local regulation

2.3 Other Hazards None known

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

See section below for Mixtures

3.2 Mixtures

CAS No.	Material	Content %
9057-91-4	TDI Polyurethane Prepolymer	10-40
117-81-7	Di-Octyl Phthalate	1-10
1330-20-7	Xylene	1-10
26471-62-5	Toluene Diisocyanate (mixture of isomers)	<1
4083-64-1	p-Toluenesulfonyl isocyanate	<1
	Ingredients determined to be Non-Hazardous	Balance

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

General Advice:
Immediately remove contaminated clothing. If in danger of loss of consciousness, place patient in recovery position and transport accordingly. Apply artificial reparation if necessary. First aid personal should pay attention to the own safety.

Ingestion:
Do not induce vomiting. Observe the patient carefully. Wash mouth with water. Never give liquid to a person showing signs of being sleepy or with reduced awareness. Immediately call a poison center or doctor/physician and get medical attention. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Inhalation:
Keep patient calm and remove to fresh air. 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. Call a poison center or doctor/physician if you feel unwell.

Eye Contact:
While holding eyes open, gently flood with plenty of fresh water for 15 minutes. If pain persists or recurs seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.

Skin Contact:
Flush contacted area thoroughly with soap and plenty of water, shower if available. Seek medical attention if irritation occurs. Remove contaminated clothing including footwear. If skin irritation occurs: Get medical advice/attention. In case of burns: Immerse in cool water/wrap in wet bandages.

4.2 Most important symptoms and effects, both acute and delayed

Notify medical personnel of contaminated situations and have them take appropriate protective measures. If exposed or concerned, get medical attention/advice. Any relevant information can be found in other parts of this section and in sections 2 and 11.

4.3 Advice for doctor

Treat symptomatically

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:
Dry chemical powder, foam, BCF (where regulations permit) and alcohols stable foams. Water fog or fine spray for large fires only.

5.2	**Special hazards arising from the substance or mixture**	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.
5.3	**Advice for firefighters**	Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include:, carbon dioxide (CO2), phenolics products typical of burning organic material. Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions. Vapor or gas is burned at distant ignition sources can be spread quickly. The extremely low flash point made by fire-fighters may be less effective at digesting weeks.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1	**Personal precautions, protective equipment and emergency procedures**	Secure the area, isolate hazard area and deny entry. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material. Do not direct water at spill or source of leak. Avoid skin contact and inhalation. Cleanup and disposal under expert supervision is advised. Keep unauthorized people away.
6.2	**Environmental precautions**	Do not discharge into sewers or waterways and soil. If large amounts have been spilled, inform the relevant authorities.
6.3	**Methods and material for containment and cleaning up**	Small spills should be absorbed with dry, inert filler (soil or sand) which then can be shoveled into appropriately labeled drums for disposal. Disposal of this material should be undertaken by a registered chemical disposal company. Wear breathing apparatus plus protective gloves. Treat isocyanate spills with sufficient amounts of isocyanate decontaminant preparation ("neutralising fluid"). Isocyanates and polyisocyanates are generally not miscible with water. Liquid surfactants are necessary to allow better dispersion of isocyanate and neutralising fluids/ preparations. Alkaline neutralisers react faster than water/surfactant mixtures alone. Typically, such a preparation may consist of: Sawdust: 20 parts by weight Kieselguhr 40 parts by weight plus a mixture of ammonia (s.g. 0.880) 8% v/v non-ionic surfactant 2% v/v water 90% v/v} Let stand for 24 hours Three commonly used neutralising fluids each exhibit advantages in different situations. Formulation A : liquid surfactant 0.2-2% sodium carbonate 5-10% water to 100% Formulation B liquid surfactant 0.2-2% concentrated ammonia 3-8% water to 100%

Formulation C
ethanol, isopropanol or butanol 50%
concentrated ammonia 5%
water to 100%
After application of any of these formulae, let stand for 24 hours.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7 – HANDLING & STORAGE

7.1 Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Handle in accordance with good industrial hygiene and safety practice. When using do NOT eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Protection against fire and explosion: The product is combustible. Prevent electrostatic charge - sources of ignition should be kept well clear – fire extinguishers should be kept handy. Avoid all personal contact, including inhalation. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Do NOT allow clothing with this material to stay in contact with skin. Should be stored under cover, out of direct sunlight, protected from rain, protected from physical damage and well away from moisture, acids and alkalis.
Do NOT enter confined spaces until atmosphere has been checked.
Do NOT use plastic buckets.

7.2 Conditions for safe storage

Storage Requirements:
Store in a cool, dry area away from incompatible materials.
Incompatible materials:
Avoid reaction with water, alcohols and detergent solutions. Isocyanates are incompatible with many classes of compounds, reacting exothermically to release toxic gases. Reactions with amines, strong bases, aldehydes, alcohols, alkali metals, ketones, mercaptans, strong oxidisers, hydrides, phenols, and peroxides can cause vigorous releases of heat. Acids and bases initiate polymerization reactions in these materials.
Temperature Conditions:
Up to 40º C
Protection from weather:
Store undercover and away from frost and moisture. Avoid reaction with oxidising agents.

7.3 Specific end use(s)

Once applied, produces a polyurethane coating.

7.4 Regulations and standards (Australia):

Classified as Hazardous Liquid which should be stored and handled in accordance with regulations

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits:

Ingredient	TWA	STEL
Di-Octyl Phthalate	5 mg/m3	
Toluene diisocyanate (mixed isomers)	0.02 mg/m3	0.07 mg/m3

XYLENE	100 ppm	150 ppm

Emergency limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Toluene diisocyanate (mixed isomers)	0.02 ppm	0.083 ppm	0.51 ppm

8.2 Exposure controls

General protection and hygiene measures:
Avoid exposure. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating. Keep working clothes separately. Remove contaminated, soaked clothing immediately. Clean work areas regularly.

1st monitor air quality should be checked regularly in accordance with AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment (AS/NZS 1715). Then use dilution ventilation systems to dilute and displace contaminated air with fresh air supplied to the work area by mechanical exhaust fans (make sure explosion and spark proof equipment as solvents are used) or natural air currents through doors, windows or other openings in the building.

Personal protection equipment:
Respiratory protection
Avoid breathing of vapors/gases. When engineering controls are not effective in controlling airborne exposure then respiratory equipment should be used to protect against airborne contaminant. The appropriate respiratory equipment can be determined based upon actual airborne concentration and can vary depending on individual circumstances. Select and use respirators in accordance with AS/NZS 1715/1716.

Eye protection
Safety glasses with side shields or chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Hand protection
Suitable materials for safety gloves; Laminated and Nitrile rubber >=0.35mm , contaminated gloves should be disposed of.

Skin protection
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. For small amounts a long sleeve shirt and full length pants should be sufficient. Take care to make sure no static build up occurs.

8.3 Further information for system design and engineering measures

Ventilation is recommended under normal use conditions. State regulations on speed and direction of airflow away from operators must be observed. Keep containers closed when not in use.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

9.1 Odour: Slightly musty
Odour Threshold No test data available

	Colour:	Coloured
	Physical State:	Smooth flowing liquid
	Flash Point:	>74℃ Pensky-martens closed cup (ASTM D-93)
	Boiling Point:	>138℃
	Melting Point:	Not Available
	Specific Gravity:	1.40±0.05 (@25℃)
	Viscosity:	45,000±15,000cps (@25℃)
	pH (5% solution):	Not Available
	Solubility in Water (g/L):	Insoluble
	Flammability:	Yes
	Explosive Lower Limit:	N/A
	Explosive Higher Limit:	N/A
	Vapour Pressure:	N/A
	Vapour Density (Air = 1)	Heavier than air
	Volatile component	Not Available
	Auto-ignition temperature (°C)	N/A
	Partition coefficient of n-octanol/water:	N/A
	Decomposition temperature:	N/A
	Molecular weight:	N/A
9.2	**Other information**	None available

SECTION 10 – STABILITY AND REACTIVITY

10.1 -3	**Reactivity; Chemical stability; Possibility of hazardous reactions**	If stored and handled in accordance with standard industrial practices not hazardous reactions are known. Unstable in the present of incompatible material. May vent and release flammable gas at high temperature. May explode when exposed to high temperature or heated.
10.4	**Conditions to avoid**	Avoid contact with incompatible materials and condition. Avoid all sources of ignition: heat, sparks, open flame. See SDS section 7 - Handling and storage.
10.5	**Incompatible materials**	Flammable materials. Reducing agents
10.6	**Hazardous decomposition products**	May emit flammable vapour, fume, hazardous gas if involved in fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity/Effects

Oral
Di-Octyl Phthalate: LD50, 30,000mg/kg, Rat
XYLENE: LD50, 3,500mg/kg, Rat
Toluene diisocyanate (mixed isomers): LD50: 4,130 mg/kg (rat, female)

Dermal
Di-Octyl Phthalate: LD50, 25,000mg/kg, Rabbit
XYLENE: LD50, ≥4,350mg/kg, Rabbit
Toluene diisocyanate (mixed isomers): LD50: > 9,400 mg/kg (rabbit)

Inhalation
Di-Octyl Phthalate: Mist, LC50, >10.62mg/ℓ, Rat
XYLENE: Steam, LC50, 6,700ppm, 4hr, Rat (Equivalents: 29.09mg/L)
Toluene diisocyanate (mixed isomers): LC50: 0.107 mg/l, 4 h(rat, male/female) (OECD Test Guideline 403)

Skin corrosion/irritation

XYLENE: Causes skin irritation.
Toluene diisocyanate (mixed isomers): rabbit, Draize, Exposure Time: 24 h, Moderately irritating

Serious eye damage/irritation:
XYLENE: Causes eye irritation.
Toluene diisocyanate (mixed isomers): rabbit, severe irritant

Respiratory sensitization:
Toluene diisocyanate (mixed isomers): May cause allergic respiratory reactions. Re-exposure to a very small concentration of isocyanate may cause respiratory allergic reactions

Skin sensitization:
Toluene diisocyanate (mixed isomers): Causes skin pain and allergies such as eczema.

Chronic Toxicity/Effects

Carcinogenicity: IARC
Di-Octyl Phthalate: Group 2B
XYLENE: Group 2B
Toluene diisocyanate (mixed isomers): Group 2B
rat, Male/Female, inhalation, 113 w, 6 hrs/day 5 days/week negative
rat, Male/Female, oral, 106 w, daily Positive, however the study validity is questioned due to the dose exceeding maximum tolerated dose and irregularities in compound storage and analysis

Germ cell mutagenicity:
XYLENE: Negative
Toluene diisocyanate (mixed isomers): Positive and negative results were seen in various in vitro studies. Questionable validity of studies due to rapid hydrolysis in solvents.

Reproductive toxicity:
Toluene diisocyanate (mixed isomers): No effects on Reproductive parameters observed at doses tested.

Developmental Toxicity/Teratogenicity:
Toluene diisocyanate (mixed isomers): No Teratogenic effects observed at doses tested., Fetotoxicity seen only with maternal toxicity.

STOT-single exposure:
XYLENE: May cause damage to organs.
Toluene diisocyanate (mixed isomers): May cause irritation in the respiratory system.

STOT-repeated exposure:
No data available

Aspiration hazard:
No data available

Long Term Effects:

Practical evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a substantial number of individuals at a greater frequency than would be expected from the response of a normal population. Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such

as automobile exhaust, perfumes and passive smoking. Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals. There is sufficient evidence to provide a strong presumption that human exposure to the material may result in developmental toxicity. Clear results in appropriate animal studies where effects have been observed in the absence of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not secondary non-specific consequences of the other toxic effects. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

Fish:
Di-Octyl Phthalate: LC50, 0.3mg/ℓ, 96hr
XYLENE: LC50, 3.3mg/ℓ, 96hr
Toluene diisocyanate (mixed isomers): LC50: 133 mg/l (Rainbow (Donaldson)Trout (Oncorhynchus mykiss), 96 h)

Crustaceans:
Di-Octyl Phthalate: EC50, 0.133mg/ℓ, 48hr, Daphnia pulex
XYLENE: LC50, 190mg/ℓ, 96hr
Toluene diisocyanate (mixed isomers): EC50: 12.5 mg/l (Water flea (Daphnia magna), 48 h)

Algae:
Toluene diisocyanate (mixed isomers): EC50: 3,230 - 4,300 mg/l, End Point: growth (other: algae,96 h)

Microorganisms/Effect on sludge

Toluene diisocyanate (mixed isomers): EC50: > 100 mg/l, (Activated sludge microorganisms, 3 h

Persistence and degradability

Di-Octyl Phthalate: log Kow 5.03

Bioaccumulative potential

Di-Octyl Phthalate: BCF 840
Toluene diisocyanate (mixed isomers): Cyprinus carpio (Carp), Exposure time: 56 d, < 1 BCF Not expected to bio-accumulate.

Biodegration:

Di-Octyl Phthalate: 62(%), 28days
XYLENE: 39(%)
Toluene diisocyanate (mixed isomers):0 %, Exposure time: 28 d Not readily biodegradable

Mobility in soil

XYLENE: log Kow = 3.12(Measured)(Ortho), 3.2(Measured)(Meta), 3.15(Measured)(p) (5)

Additional Information

Do NOT discharge into sewer or waterways

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Material Recommendation:
Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility.

Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration. Do **NOT** allow wash water from cleaning or process equipment to enter drains.

Uncleaned packaging Recommendation:
Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

SECTION 14 – TRANSPORT INFORMATION

Transport Information

Is **NOT** classified Dangerous Good according to the Australian Code for the Transportation of Dangerous Goods by Road and Rail.

U.N. Number:	N/A
DG Class:	N/A
EPG card:	N/A
Hazchem Code:	N/A
Proper Shipping Name:	N/A
Packing Group:	N/A
Poison Schedule	N/A

Classification for SEA transport (IMO-IMDG)

U.N. Number:	N/A
DG Class:	N/A
Proper Shipping Name:	N/A
Packing Group:	N/A
Marine Pollutant:	NO

Classification for AIR transport (IATA/ICAO)

U.N. Number:	N/A
DG Class:	N/A
Proper Shipping Name:	N/A
Packing Group:	N/A

Label

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National and local regulations must be observed. For information on labeling please refer to section 2 of this document.

Poisons Schedule Number: N/A

Australian Inventory: Listed
Controlled Schedule Not listed substances
Carcinogenic Substances:

SECTION 16 – OTHER INFORMATION

Safety Data Sheets are updated regularly. Please ensure you have a current copy. SDS can be obtained from our website: www.envirosystems.com.au
The SDS should be used to assist in the Risk Management. Many other factors determine whether the reported Hazards are risks in any given workplace.
Specific Risks may be determined by reference to various Exposure Scenarios, Scale of use, Frequency of use and current or available engineering controls must be considered.

Emergency Telephone: Poisons Centre – 131 126