

Safety Data Sheet



WESTOX PAVER SEALER

Date of Issue 01 Sept 2014
Date of Revision 13 Sept 2018


1 - IDENTIFICATION

Product Name	WESTOX PAVER SEALER	
Recommended Use	Sealer for pavers and various substrates.	
Company Details	Westgate Pty Ltd	
Address	16 Frost Road Campbelltown NSW 2560 Australia	
Phone	61 2 4628 5010	
Fax	61 2 4628 5020	
Email	info@westox.com	
Website	www.westox.com	
Emergency Contact Point	Australian Poisons Information Centre	
	24 Hour Service	13 11 26
	Police, Fire Brigade or Ambulance	000
	New Zealand Poisons Information Centre	
	24 Hour Service	0800 764 766
	NZ Emergency Services	111

2 - HAZARD(S) IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO WORK SAFE AUSTRALIA CRITERIA

Globally Harmonised System

Hazard Classification	Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of chemicals (GHS).
Hazard Categories	Flammable Liquid - Category 3 Acute Toxicity (Dermal) - Category 4 Acute Toxicity (Inhalation) - Category 4 Skin Corrosion/ Irritation - Category 2 Eye irritation - Category 2A Specific Target Organ Toxicity - Single Exposure Category 3 (narcotic effects) Acute Aquatic Hazard Category 3
Pictograms	 
Signal Word	WARNING
Hazard Statements	H226: Flammable liquid and vapour H312: Harmful in contact with skin H332: Harmful if inhaled H315: Causes skin irritation H319: Causes serious eye irritation H336: May cause drowsiness or dizziness H402: Harmful to aquatic life
Precautionary Statements	P210: Keep away from heat/ sparks/ open flames/ hot surfaces - No smoking. P271: Use only outdoors or in a well-ventilated area. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ ventilating/ lighting/ intrinsically safe equipment P242: Use only non-sparking tools P243: Take precautionary measures against static discharge P261: Avoid breathing mist/ vapours/ spray P273: Avoid release to the environment P280: Wear protective gloves/ protective clothing/ eye protection/ face protection P362: Take off contaminated clothing and wash before reuse. P370+P378: In case of fire: Use alcohol resistant foam or normal protein foam for extinction P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

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P312: Call a POISON CENTER or doctor/ physician if you feel unwell
 P337+P313: If eye irritation persists; get medical advice/ attention
 P302+P352: IF ON SKIN; wash with plenty of 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.
 P332+P313: If skin irritation occurs; get medical advice/ attention
 P403+P235: Store in a well-ventilated place. Keep cool
 P405: Store locked up
 P501: Dispose of contents/ container in accordance with local regulations

Dangerous Goods Classification Dangerous goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code).

Poisons Schedule Number S6

3 - COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS Number	Content %
Xylene	1330-20-7	>60
Acrylic Polymer	N/A	1-30
Acrylic Resin	9065-11-6	1-30

4 - FIRST AID MEASURES

Eye 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 the 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 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 if possible) 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 patients head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically. For acute or short term repeated exposures to xylene: Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal. Pulmonary absorption is rapid with about 60-65% retained at rest. Primary threat to life from ingestion and/or inhalation, is respiratory failure. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ < 50 mm Hg or pCO₂ > 50 mm Hg) should be intubated. Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance. A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax. Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Methylhippu-ric acids in urine	1.5 gm/gm creatinine. 2 mg/min	End of shift Last 4 hrs of shift	

5 - FIREFIGHTING MEASURES

Extinguishing Media Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide, water spray or fog - large fires only

Fire Incompatibility Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire Fighting Alert Fire Brigade and tell them location and nature of hazard
 May be violently or explosively reactive
 Wear breathing apparatus plus protective gloves
 Prevent, by any means available, spillage from drains or water course

If safe, switch off electrical equipment until vapour fire hazard removed
Use water delivered as a fine spray to control fire and cool adjacent area
Avoid spraying water onto liquid pools
DO NOT approach containers suspected to be hot
Cool fire exposed containers with water spray from a protected location
If safe to do so, remove containers from path of fire

Fire/ Explosion Hazard

Liquid and vapour are flammable
Moderate fire hazard when exposed to heat or flame
Vapour forms and explosive mixture with air
Moderate explosion hazard when exposed to heat or flame
Vapour may travel a considerable distance to source of ignition
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), other pyrolysis products typical of burning organic material.
Contains low boiling substance: closed containers may rupture due to pressure build-up under fire conditions.

Hazchem

3Y

6 - ACCIDENTAL RELEASE MEASURES

Minor Spills

Remove all ignition sources.
Clean up all spills immediately
Avoid breathing vapours and contact with skin and eyes
Control personal contact with the substance, by using protective equipment
Contain and absorb small quantities with vermiculite or other absorbent material
Wipe up
Collect residues in a flammable waste container

Major Spills

Clear area of personnel and move upwind
Alert Fire Brigade and tell them location and nature of hazard.
May be violently or explosively reactive
Wear breathing apparatus plus protective gloves
Prevent, by any means available, spillage from entering drains or water course
Consider evacuation (or protect in place)
No smoking, naked lights or ignition sources
Increase ventilation
Stop leak if safe to do so
Water spray or fog may be used to disperse/ absorb vapour
Contain spill with sand, earth or vermiculite
Use only spark-free shovels and explosion proof equipment
Collect recoverable product into labelled containers for recycling.
Absorb remaining product with sand, earth or vermiculite
Collect solid residues and seal in labelled drums for disposal
Wash area and prevent runoff into drains
If contamination of drains or waterways occurs, advise emergency services

7 - HANDLING AND STORAGE

Precautions for Safe Handling

Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. **Contains low boiling substance:** Storage in sealed containers may result in pressure build-up causing violent rupture of containers not rated appropriately. Check for bulging containers. Vent periodically. Always release caps or seals slowly to ensure slow dissipation of vapours. **DO NOT allow clothing wet with material to stay in contact with skin.** Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. **DO NOT enter confined spaces until atmosphere has been checked.** Avoid smoking, naked lights or ignition sources. Avoid generation of static electricity. **DO NOT use plastic buckets.** Earth all lines and equipment. Use spark-free tools when handling. Avoid contact with incompatible materials. **When handling, DO NOT eat, drink or smoke.** Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. **DO NOT store in pits, depressions, basements or areas where vapours may be trapped.** No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. In addition, for tank storages (where appropriate): Store in grounded, properly designed and approved vessels and away from incompatible materials. For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up. Storage tanks should be above ground and diked to hold entire contents.

Conditions for Safe Storage

Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks. For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23 deg C). For manufactured product having a viscosity of at least 250 cSt. (23 deg. C) Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used. Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages. In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient

inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

Storage Incompatibility

Avoid reaction with oxidising agents

8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

General

Occupational Exposure Limits

Ingredient	Material	TWA (ppm)	TWA (mg/m ³)	STEL (ppm)	STEL (mg/m ³)
Xylene	Xylene (o-, m-, p- isomers)	80	350	150	655

Appropriate Engineering Controls

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace varying "escape" velocities which, in turn, determine the "capture velocities" of fresh air circulating air required to effectively remove the contaminant.

Type of Contaminant

Air Speed

Solvent, vapours, degreasing etc, evaporating from tank (in still air) 0.25-0.5 m/s (50-100 f/min)

Aerosols, fumes from pouring operations, intermittent container filling, low speed conveyor transfers, welding, spray drift, plating acid fumes, pickling, (released at low velocity into zone of active generation) 0.5-1 m/s (100-200 f/min)

Direct spray, spray painting in shallow booths, drum filling, conveyor loading, crusher dusts, gas discharge (active generation into zone of rapid motion) 1-2.5 m/s (200-500 f/min)

Within each range the appropriate value depends on:

Lower end of range

Upper end of range

1. Room air currents minimal or favourable to capture
2. Contaminants of low toxicity or of nuisance value only
3. Intermittent, low production
4. Large hood or large air mass in motion

1. Disturbing room air currents
2. Contaminant of high toxicity
3. High production, heavy use
4. Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of crusher dusts generated 2 metres distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal Protective Equipment

Eye and face protection

Safety glasses with side shields. Chemical goggles.

Contact lenses may pose a special hazard; soft lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.

Hands/ feet protection

Wear chemical protective gloves, e.g. PVC. Wear safety footwear or gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include; frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity.

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/

NZS 2161.10.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long term use. Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gloves are rated as; excellent when breakthrough time > 480min, good when breakthrough time > 20min; fair when breakthrough time > 20min or poor when glove material degrades. For general applications, gloves with a thickness typically greater than 0.35mm are recommended. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturer's technical data should always be taken into account to ensure selection of the most appropriate glove for the task. Note: depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1mm or less) may be required where a high degree of manual dexterity is needed. However these gloves are only likely to give a short duration protection and would normally be just for single use applications, then disposed of. Thicker gloves (up to 3mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential. Gloves must be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Neoprene gloves.

Body/ other protection

Overalls, PVC apron, PVC protective suit may be required if exposure severe, eyewash unit, ensure there is ready access to a safety shower.

Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

Glove selection index Glove selection is based on a modified presentation of the "Forsberg Clothing Performance Index". The effects(s) of the following substances(s) are taken into account in the computer generated selection:

Material	CPI
PE/EVAL/PE	A
PVA	A
TEFLON	A
VITON	A
BUTYL	C
BUTYL / NEOPRENE	C
HYPALON	C
NAT+NEOPR+NITRILE	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE / NATURAL	C
NITRILE	C
NITRILE+PVC	C
PVA	C
PVDC/PE/PVDC	C

*CPI - Chemwatch performance index

A - best selection, B - satisfactory; may degrade after 4 hours continuous immersion, C - Poor to dangerous choice for other short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation.

*Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory Protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/ particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face piece and class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-face Respirator	Powered Air-Respirator
Up to 10 x ES	A-AUS / Class 1	-	A-PAPR-AUS / Class 1
Up to 50 x ES	Air-line*	-	-
Up to 100 x ES	-	A-3	-
100+ x ES	-	Air-line**	-

* - Continuous-flow; ** - Continuous-flow or positive pressure demand

A (All classes) = Organic vapours, B AUS or B1 = Acid gases, B2 = Acid gas or hydrogen cyanide (HCN), B3 = Acid gas or hydrogen cyanide (HCN), E = Sulfur dioxide (SO₂), G = Agricultural chemicals, K = Ammonia (NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide =, AX = Low boiling point organic compounds (below 65 deg C).

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

9 - PHYSICAL AND CHEMICAL PROPERTIES

General Information

Appearance	Clear to light straw coloured flammable liquid with aromatic solvent odour; does not mix with water
Odour	Aromatic solvent
Colour	Clear to light straw

Vapour Pressure (kPa)	0.5 @ 15 deg C
Vapour Density (air = 1)	>1
Boiling Point (°C)	138
Solubility in water	Immiscible
Flash Point (°C)	24 (COC)
Relative Density (water = 1)	0.80 - 0.99
Upper Explosive Limit	7.7 xylene
Lower Explosive Limit	1.1 xylene
Volatile Component (%vol)	>60

10 - STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

11 - TOXICOLOGICAL INFORMATION

Inhaled

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.

Inhalation hazard is increased at higher temperatures. Central nervous system (CNS) depression may include nonspecific discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression - characterised by headache and dizziness, increased reaction time, fatigue and loss of coordination.

Headache, fatigue, lassitude, irritability and gastrointestinal disturbances (e.g. nausea, anorexia and flatulence) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers. Transient memory loss, renal impairment, temporary confusion and some evidence of disturbance of liver function was reported in three workers overcome by gross exposure to xylene (10000 ppm). One worker died and autopsy revealed pulmonary congestion, oedema and focal alveolar haemorrhage. Volunteers inhaling xylene at 100 ppm for 5 to 6 hours showed changes in manual coordination reaction time and slight ataxia. Tolerance developed during the workweek but was lost over the weekend. Physical exercise may antagonise effect. Xylene body burden in humans exposed to 100 or 200 ppm xylene in air depends on the amount of body fat with 4% to 8% of total absorbed xylene accumulating in adipose tissue. Xylene is a central nervous system depressant. Central nervous system (CNS) depression may include nonspecific discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Inhalation of aerosols (mists, fumes) generated by the material during the course of normal handling, may be harmful.

Ingestion

Accidental ingestion of the material may be damaging to the health of the individual. Considered an unlikely route of entry in commercial/ industrial environments. The liquid may produce considerable gastrointestinal discomfort and may be harmful or toxic if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Skin Contact

Skin contact with the material may be harmful; systemic effects may result following absorption. The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either; produces moderate inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant, but moderate, inflammation when applied to the healthy intact skin of animals (for up to four hours), such inflammation being present twenty four hours or more after the end of the exposure period.

Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye

Evidence exists, or practical experience predicts, that the material may cause serious 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. Eye contact may cause significant inflammation with pain. Corneal injury may occur; permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause inflammation characterised by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ ulceration may occur.

The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

Chronic

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.

Paver Sealer	TOXICITY	IRRITATION
	Not Available	Not Available
Xylene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >1700 mg/kg[2] Inhalation (rat) LC50: 4994.295 mg/l/4h[2] Oral (rat) LD50: 4300 mg/kg[2]	Eye (human): 200 ppm irritant Eye (rabbit): 5 mg/24h SEVERE Eye (rabbit): 87 mg mild Skin (rabbit):500 mg/24h moderate
Acrylic Resin	TOXICITY	IRRITATION
	Not Available	Not Available

XYLENE

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. The substance is classified by IARC as Group 3: **NOT** classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats.

ACRYLIC RESIN

No significant acute toxicological data identified in literature search. **CAUTION:** The chronic health effects of acrylic monomers are under review. Use good occupational work practices to avoid personal contact.

12 - ECOLOGICAL INFORMATION

Toxicity

WESTOX PAVER SEALER	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
XYLENE	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	2.6mg/L	2
	EC50	48	Crustacea	>3.4mg/L	2
	EC50	72	Algae or other aquatic plants	4.6mg/L	2
	NOEC	73	Algae or other aquatic plants	0.44mg/L	2
ACRYLIC RESIN	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available

Harmful to aquatic organisms.

For Aromatic Substances Series: Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs. Atmospheric Fate: PAHs are "semi-volatile substances" which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus. The order of most toxic to least in a study using grass shrimp and brown shrimp was dimethylnaphthalenes > methylnaphthalenes > naphthalenes. Anthracene is a phototoxic PAH. UV light greatly increases the toxicity of anthracene to bluegill sunfish. Biological resources in strong sunlight are at more risk than those that are not. PAHs in general are more frequently associated with chronic risks. For Xylenes: log Koc : 2.05-3.08; Koc : 25.4-204; Half-life (hr) air : 0.24-42; Half-life (hr) H2O surface water : 24-672; Half-life (hr) H2O ground : 336-8640; Half-life (hr) soil : 52-672; Henry's Pa m3 /mol : 637-879; Henry's atm m3 /mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125 : BCF : 23; log BCF : 1.17-2.41. Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces. The extent of the degradation is expected to depend on its concentration, residence time in the soil, the nature of the soil, and whether resident microbial populations have been acclimated. Xylene can remain below the soil surface for several days and may travel through the soil profile and enter groundwater. Soil and water microbes may transform it into other, less harmful compounds, although this happens slowly. It is not clear how long xylene remains trapped deep underground in soil or groundwater, but it may be months or years. Atmospheric Fate: Xylene evaporates quickly into the air from surface soil and water and can remain in the air for several days until it is broken down by sunlight into other less harmful chemicals. In the ambient atmosphere, xylenes are expected to exist solely in the vapour phase. Xylenes are degraded in the atmosphere with an estimated atmospheric lifetime of about 0.5 to 2 days. Xylene may contribute to photochemical smog formation. p-Xylene has a moderately high photochemical reactivity under smog conditions, higher than the other xylene isomers. The photooxidation of p-xylene results in the production of carbon monoxide, formaldehyde, glyoxal, methylglyoxal, 3-methylbenzyl nitrate, m-tolualdehyde, 4-nitro-3-xylene, 5-nitro-3-xylene, 2,6-dimethyl-p-benzoquinone, 2,4-dimethylphenol, 6-nitro-2,4-dimethylphenol, 2,6-dimethylphenol, and 4-nitro-2,6-dimethylphenol. Aquatic Fate: p-xylene may adsorb to suspended solids and sediment in water and is expected to volatilise from water surfaces. Estimated volatilisation half-lives for a model river and model lake are 3 hours and 4 days, respectively. Measurements taken from goldfish, eels and clams indicate that bioconcentration in aquatic organisms is low. Photo-oxidation in the presence of humic acids may play an important role in the abiotic degradation of p-xylene. p-Xylene is biodegradable and has been observed to degrade in pond water however; it is unclear if it degrades in surface waters. p-Xylene has been observed to degrade in anaerobic and aerobic groundwater; however, it is known to persist for many years in groundwater, at least at sites where the concentration might have been quite high. Ecotoxicity: Xylenes are slightly toxic to fathead minnow, rainbow trout and bluegill and not acutely toxic to water fleas. For Photobacterium phosphoreum EC50 (24 h): 0.0084mg/L. and Gammarus lacustris LC50 (48 h): 0.6 mg/L.

DO NOT discharge into sewer or waterways.

Persistence/ Degradability	Xylene	Water/ Soil - HIGH (Half life = 360 days)	Air - LOW (Half life 1.83 days)
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Mobility No data available

Bioaccumulation Potential Xylene MEDIUM (BCF = 740)

13 - DISPOSAL CONSIDERATIONS

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise; If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate; Reduction, Reuse, Recycling, Disposal (if all else fails). This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. **DO NOT allow wash water from cleaning or process equipment to enter drains.** It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

14 - TRANSPORT INFORMATION

Land Transport (Australia) - ADG Code

Proper Shipping Name RESIN SOLUTION, flammable
DG Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
UN Number 1866
Hazchem 3Y
Packing Group III
Marine Pollutant NO



Sea Transport - IMDG Code

Proper Shipping Name RESIN SOLUTION, flammable
DG Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
UN Number 1866
Hazchem 3Y
Packing Group III
Marine Pollutant NO

Air Transport - IATA DGR

Proper Shipping Name RESIN SOLUTION, flammable
DG Class 3 Flammable Liquids
Subsidiary Risk(s) No Data Available
UN Number 1866
Hazchem 3Y
Packing Group III
Marine Pollutant NO

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification Dangerous goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code).

15 - REGULATORY INFORMATION

Poisons Schedule (Aust) S6

16 - OTHER RELEVANT INFORMATION

Date of Issue 01 Sept 2014
Date of Revision 13 Sept 2018