

1. Identification of Substance & Company

Product

Product name	JM TPO Membrane Cleaner
Product code	NA
HSNO approval	HSR002528
Approval description	Cleaning Products (Flammable) Group Standard 2006
UN number	1307
Proper Shipping Name	XYLENES
DG class	3
Packaging group	III
Hazchem code	3Y
Uses	Cleaner

Company Details

Company	Allco Waterproofing Solutions	
Address	5 Te Kia Place	PO Box 101-903
	Albany North Shore City	
	Auckland	0745
	New Zealand	New Zealand
Telephone	+64 9 448 1185	
Website	www.allco.co.nz	

Emergency Telephone Number: 021 441 329

2. Hazard Identification

Approval

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002528, Cleaning Products (Flammable) Group Standard 2006), and is classified as follows:

Classes

Hazard Statements

3.1C	H226 - Flammable liquid and vapour.
6.1D (oral)	H302 - Harmful if swallowed.
6.1E (aspiration)	H304 - May be fatal if swallowed and enters airways.
6.1E (dermal)	H313 - May be harmful in contact with skin.
6.1D (inhalation)	H332 - Harmful if inhaled.
6.3A	H315 - Causes skin irritation.
6.4A	H320 - Causes eye irritation.
6.7B	H341 - Suspected of causing cancer.
6.8B	H361 - Suspected of damaging fertility or the unborn child.
6.9B	H371 - May cause damage to organs through prolonged or repeated exposure.
9.1D	H402 - Harmful to aquatic life.

SYMBOLS

DANGER



Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

P101 - If medical advice is needed, have product container or label at hand.
 P102 - Keep out of reach of children.
 P103 - Read label before use.
 P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P210 - Keep away from ignition sources. No smoking.
 P233 - Keep container tightly closed.
 P240 - Ground/bond container and receiving equipment.
 P241 - Use explosion-proof electrical equipment.
 P242 - Use only non-sparking tools.
 P243 - Take precautionary measures against static discharge.
 P260 - Do not breathe vapours.
 P264 - Wash hands 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*.
 P308+P313 - IF exposed or concerned: Get medical advice/ attention.
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
 P331 - Do NOT induce vomiting.
 P304+P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTRE or doctor/physician if you feel unwell.
 P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
 P332+P313 - If skin irritation occurs: Get medical advice/ attention.
 P362 - Take off contaminated clothing and wash before re-use.
 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.
 P403+P235 - Store in a well-ventilated place. Keep cool.
 P405 - Store locked up

3. Composition / Information on Ingredients

Component	CAS/ Identification	Conc (%)
Xylene	1330-20-7	50-70%
Ethylbenzene	100-41-4	30-50%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

Exposure

Swallowed Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor. If conscious, give plenty of water to drink. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTRE or doctor/physician if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before re-use.

Inhaled IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	Vapours may form an explosive mixture in air which can be ignited by many sources such as pilot lights, open flames, electrical motors, switches and static electricity.
Suitable extinguishing substances:	Carbon dioxide, extinguishing powder, foam.
Unsuitable extinguishing substances:	Unknown.
Products of combustion:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.
Hazchem code:	3Y

6. Accidental Release Measures

Containment	If greater than 1000L is stored, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to storm water.
Emergency procedures	In the event of spillage alert the fire brigade to location and give brief description of hazard. Stop the source of the leak, if safe to do so. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Do not use sawdust. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
Clean-up method	Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10. Location test certificates must be available if storing >500L (containers >5L), 1500L (containers ≤5L), 250L (in use). Containers (and outer packaging) must bear the prescribed labelling, including the Hazchem code, UN number, flammability warning and name of contents.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds (2016)	Ingredient	WES-TWA	WES-STEL
	Xylene	50ppm, 217mg/m ³	data unavailable
	Ethylbenzene	100ppm, 434mg/m ³	125ppm, 543mg/m ³

* These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes



Protect eyes with goggles, safety glasses or full face mask. Avoid wearing contact lenses.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile gloves are recommended. Replace frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking.

Respiratory



A respirator when airborne concentrations approach the WES (section 8). Use a respirator with an organic vapour cartridge with a dust mist filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

WES Additional Information

Not applicable

9. Physical & Chemical Properties

Appearance	colourless liquid
Odour	mild aromatic
pH	no data
Vapour pressure	10.65227 hPa (25 °C)
Viscosity	no data
Boiling point	no data
Volatile materials	no data
Freezing / melting point	-47°C
Solubility	insoluble in water
Specific gravity / density	0.86g/cm ³
Flash point	27°C
Danger of explosion	no data
Auto-ignition temperature	no data
Upper & lower flammable limits	LEL: 1.0%, UEL: 7.0%
Corrosiveness	non corrosive

10. Stability & Reactivity

Stability	Stable
Conditions to be avoided	Flammable substance. Keep away from sources of ignition at all times. Containers should be kept closed in order to avoid contamination.
Incompatible groups	Oxidisers, strong acids.
Substance Specific Incompatibility	none known
Hazardous decomposition products	Oxides of carbon.
Hazardous reactions	none known

11. Toxicological Information

Summary

IF SWALLOWED: may cause nausea, diarrhoea, vomiting, gastro-intestinal irritation and chemical pneumonia.

IF IN EYES: may cause serious eye irritation.

IF ON SKIN: may cause skin irritation. Some sensitised individuals may experience allergic skin reactions (e.g dermatitis).

IF INHALED: may cause respiratory irritation. Some sensitised individuals may experience allergic response such as asthma.

CHRONIC TOXICITY: Solvent vapours may cause reversible damage to kidneys and liver. Prolonged exposure can cause nerve damage (CNS). Xylene may affect the reproductive system. Ethylbenzene is a suspected carcinogen.

Supporting Data

Acute	Oral	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (oral, rat) for the mixture is 300 and 2000 mg/kg. Data considered includes: Xylene 1590 mg/kg (mouse), Ethylbenzene 3500mg/kg (rat).	
	Dermal	Using LD ₅₀ 's for ingredients, the calculated LD ₅₀ (dermal, rat) for the mixture is 2000-5000mg/kg. Data considered includes: Xylene >1700mg/kg, m-xylene: 3228 mg/kg/day (rabbits).	
	Inhaled	Using LC ₅₀ 's for ingredients, the calculated LC ₅₀ (inhalation, rat) for the mixture is 10and 20mg/L. Data considered includes: Xylene 27.6 mg/L (rat, vapour), Ethylbenzene 9.6mg/L (vapour, rat).	
	Eye	The mixture is considered to be an eye irritant, because some of the ingredients present are considered eye irritants in more concentrated form.	
	Skin	The mixture is considered to be a skin irritant, because some of the ingredients present are considered skin irritants in more concentrated form.	
	Chronic	Sensitisation	No ingredient present at concentrations > 0.1% is considered a sensitizer.
		Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
Carcinogenicity		Ethylbenzene is possibly carcinogenic to humans (Group 2B) – IARC and is classed 6.7B by EPA. Not classed as carcinogenic in EU.	
Reproductive / Developmental		The mixture is considered to be a suspected reproductive or developmental toxicant. Xylene, has been shown to cause foetal toxicity in animals at doses which are maternally toxic. Not expected to impair fertility. Ethylbenzene is classed 6.8B by EPA.	
	Systemic	The mixture is considered to be a suspected target organ toxicant. Xylene: affected organs: hepatic (liver), Neurological (nervous system), renal (urinary system or kidneys).	
	Aggravation of existing conditions	None known.	

12. Ecological Data

Summary

This mixture may be harmful in the aquatic environment, harmful in the soil environment and towards terrestrial vertebrates.

Supporting Data

Aquatic	Using EC ₅₀ 's for ingredients, the calculated EC ₅₀ for the mixture is between 1 and 100 mg/L. Data considered includes: Xylene 8.5mg/l (48hr, Palaemonetes pugio (Crustacea)), 3.3 mg/l (96hr, Oncorhynchus mykiss), 10mg/l (72hr, Skeletonema costatum), Ethylbenzene 4.6mg/L (72hr, Selenastrum capricornutum (Algae)), 4.2mg/L (96hr, Oncorhynchus mykiss (Fish, fresh water)), 2.1mg/L (48hr, Daphnia magna (Crustacea)).
Bioaccumulation	No data
Degradability	No data
Soil	This mixture is considered harmful towards terrestrial vertebrates, see acute toxicity.
Terrestrial vertebrate	No evidence of toxicity towards terrestrial invertebrates.
Terrestrial invertebrate	no data
Biocidal	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a dangerous good for transport.

UN number:	1307	Proper shipping name:	XYLENES
Class(es)	3	Packing group:	III
Precautions:	Flammable liquid	Hazchem code:	3Y

15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002528, Cleaning Products (Flammable) Group Standard 2006 .

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing > any quantity.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 1000L is stored.
Approved handler	Not required.
Tracking	This substance is required to be tracked if > not required is present.
Bunding & secondary containment	Required if > 1000L is stored.
Signage	Required if > 1000L is stored in any one location.
Location test certificate	Required if > 500L (containers >5L), 1500L (containers ≤5L), 250L (in use) is stored in any one location.
Flammable zone	Must be established if > 100L (closed containers), 25L (decanting), 5L (open occasionally), 1L (in use), stored in any one location is stored in any one location.
Fire extinguisher	If > 500L present.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR002528, Cleaning Products (Flammable) Group Standard 2006 Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit

UN Number United Nations Number
WES Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
EPA Transfer Gazettes WES 2013 Classifications and controls assigned for specific ingredients (consolidated gazette, 2004) The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
WES 2002 Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.
Other References: Suppliers SDS

Review

Date	Reason for review
October 2017	Not applicable – new SDS

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

