

JM TPO Membrane Cleaner

Version 3.0

Revision Date 06/25/2019

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM TPO Membrane Cleaner

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127
Telephone : +1-303-978-2000
Emergency telephone : +1-800-424-9300 (CHEMTREC)
number

Company : Johns Manville Canada Inc.
Address : 5301 42 Avenue
Innisfail, AB Canada T4G 1A2
Telephone : +1-303-978-2000
Emergency telephone : +1-800-424-9300 (CHEMTREC)
number

Recommended use of the chemical and restrictions on use

Restrictions on use : For professional users only.

Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)**

Flammable liquids : Category 3
Acute toxicity (Dermal) : Category 4
Acute toxicity (Inhalation) : Category 4
Skin irritation : Category 2
Specific target organ toxicity : Category 3 (Respiratory system)
- single exposure
Specific target organ toxicity : Category 2
- repeated exposure
Reproductive toxicity : Category 2

GHS label elementsHazard pictograms : 

Signal word : Warning

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- Hazard statements : H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements : **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 surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Response:**
P303 + P361 + P353 IF ON SKIN (or hair): 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.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
- Storage:**
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P235 Keep cool.
P405 Store locked up.
- Disposal:**
P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Concentration (%)
m-xylene	108-38-3	>= 30 - <= 60
p-xylene	106-42-3	>= 10 - <= 30
ethylbenzene	100-41-4	>= 10 - <= 30
o-xylene	95-47-6	>= 5 - <= 30
toluene	108-88-3	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
If breathing has stopped, apply artificial respiration.
- In case of skin contact : In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention immediately if irritation develops and persists.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Keep eye wide open while rinsing.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Do NOT induce vomiting.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.
If swallowed, call a poison control centre or doctor immediately.
- Most important symptoms and effects, both acute and delayed : None known.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry chemical
Foam

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		Halons Water spray
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not use a solid water stream as it may scatter and spread fire. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	carbon oxides
Further information	:	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling	:	Avoid formation of aerosol.

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Do not breathe vapours/dust.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Take precautionary measures against static discharges.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Open drum carefully as content may be under pressure.
 Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.
 Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : Stable at normal ambient temperature and pressure.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
m-xylene	108-38-3	TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	150 ppm 655 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
p-xylene	106-42-3	TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	150 ppm 655 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
ethylbenzene	100-41-4	TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	NIOSH REL
		ST	125 ppm 545 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA

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o-xylene	95-47-6	ST	150 ppm 655 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	NIOSH REL
		TWA	100 ppm 435 mg/m ³	OSHA
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m ³	NIOSH REL
		ST	150 ppm 560 mg/m ³	NIOSH REL
		TWA	200 ppm	OSHA
		CEIL	300 ppm	OSHA
		Peak	500 ppm (10 minutes)	OSHA

Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection
Material : Solvent-resistant gloves

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Tightly fitting safety goggles
Safety glasses with side-shields

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
Written instructions for handling must be available at the work place.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colourless
Odor	: pleasant
Odor Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: ≥ 136.67 °C
Flash point	: 26.11 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Solubility(ies) Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity Viscosity, dynamic	: 0.59 mPa.s
Viscosity, kinematic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
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Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Vapours may form explosive mixture with air.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
Product:

Acute oral toxicity : Acute toxicity estimate : 1,000 - 2,000 mg/kg
 Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 16843 ppm
 Exposure time: 4 h
 Test atmosphere: gas
 Method: Calculation method

Acute toxicity
Components:
p-xylene:

Acute oral toxicity : LD50 (Rat): 4,029 mg/kg

LD50 (Rat): 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4550 ppm
 Exposure time: 4 h

LC50 (Mouse): 3900 ppm
 Exposure time: 6 h

Acute toxicity
ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): ca. 17,800 mg/kg

Acute toxicity
toluene:

Acute oral toxicity : LD50 Oral (Rat, male): 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat): 28.1 mg/l
 Exposure time: 4 h

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Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 12,267 mg/kg

Skin corrosion/irritation**Components:****p-xylene:**

Species: Rabbit

Exposure time: 4 h

Result: Skin irritation

Skin corrosion/irritation**toluene:**

Species: Rabbit

Result: Irritating to skin.

IARC

Group 2B: Possibly carcinogenic to humans

ethylbenzene

100-41-4

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity**Components:****toluene:**Reproductive toxicity -
Assessment

: Suspected of damaging the unborn child., Some evidence of adverse effects on development, based on animal experiments.

STOT - single exposure**Components:****toluene:**

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure**Components:****ethylbenzene:**

Target Organs: Sensory organs

Assessment: May cause damage to organs through prolonged or repeated exposure.

STOT - repeated exposure**toluene:**

Assessment: May cause damage to organs through prolonged or repeated exposure.

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Aspiration toxicity**Components:****ethylbenzene:**

May be fatal if swallowed and enters airways.

toluene:

May be fatal if swallowed and enters airways.

Experience with human exposure**Components:****toluene:**

Skin contact:

Remarks:

Prolonged skin contact may defat the skin and produce dermatitis.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability**Components:****ethylbenzene:**

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential**Components:****p-xylene:**

Partition coefficient: n-octanol/water : log Pow: 3.15

ethylbenzene:

Bioaccumulation : Bioconcentration factor (BCF): 110

Partition coefficient: n-octanol/water : log Pow: 3.6 (20 °C)
pH: 7.84**toluene:**

Partition coefficient: n-octanol/water : Pow: 2.7

Mobility in soil

No data available

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Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +
B).

Additional ecological
information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Disposal of residual product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with
chemical or used container.
Dispose of contents/container to an approved facility in
accordance with local, regional, national and international
regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION**International transport regulations**

US DOT: UN 1993, Flammable liquid, n.o.s. (Xylenes, Ethylbenzene), 3, III.

LIMITED QUANTITY if shipped in packages less than or equal to 1.3 gallons (5.0 liters).

SECTION 15. REGULATORY INFORMATION**TSCA list**

TSCA - 5(a) Significant New Use Rule List of
Chemicals : No substances are subject to a
Significant New Use Rule.

U.S. Toxic Substances Control Act (TSCA) Section
12(b) Export Notification (40 CFR 707, Subpart D) : No substances are subject to TSCA
12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

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Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
xylene	1330-20-7	100	100
p-xylene	106-42-3	100	333

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
 Acute toxicity (any route of exposure)
 Reproductive toxicity
 Specific target organ toxicity (single or repeated exposure)
 Skin corrosion or irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

m-xylene	108-38-3
p-xylene	106-42-3
ethylbenzene	100-41-4
o-xylene	95-47-6
toluene	108-88-3

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

m-xylene	108-38-3	30 - 60 %
p-xylene	106-42-3	10 - 30 %
o-xylene	95-47-6	5 - 30 %
toluene	108-88-3	0.1 - 0.9999 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

m-xylene	108-38-3	30 - 60 %
p-xylene	106-42-3	10 - 30 %
ethylbenzene	100-41-4	10 - 30 %
o-xylene	95-47-6	5 - 30 %
toluene	108-88-3	0.1 - 0.9999 %

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

⚠️ WARNING: This product can expose you to chemicals including benzene, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

DSL : All components of this product are on the Canadian DSL

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SECTION 16. OTHER INFORMATION**Further information**

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.