

JM TPO 1168 Membrane Adhesive

Version 1.1

Revision Date 03/08/2017

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM TPO 1168 Membrane Adhesive

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127

Telephone : +1 303-978-2000 8:00AM-5:00PM M-F
Emergency telephone number : 1-800-424-9300 (Chemtrec, in English)

Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Skin irritation : Category 2

Eye irritation : Category 2A

Specific target organ toxicity - repeated exposure : Category 2

Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

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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 + P312 IF INHALED: Remove person to fresh air
and keep comfortable for breathing. Call a POISON
CENTER/doctor if you feel unwell.
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.
P332 + P313 If skin irritation occurs: Get medical advice/
attention.
P337 + P313 If eye irritation persists: Get medical advice/
attention.
P362 + P364 Take off contaminated clothing and wash it before
reuse.
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.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste
disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	>= 60 - <= 70

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toluene	108-88-3	>= 1 - <= 10
methyl acetate	79-20-9	>= 1 - <= 10

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.
 Symptoms of poisoning may appear several hours later.
 Do not leave the victim unattended.
- If inhaled : If breathed in, move person into fresh air.
 If not breathing, give artificial respiration.
 Call a physician or poison control centre immediately.
- In case of skin contact : Take off all contaminated clothing immediately.
 Wash off immediately with soap and plenty of water.
 If symptoms persist, call a physician.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical
 attention if eye irritation develops or persists.
 If easy to do, remove contact lens, if worn.
 Protect unharmed eye.
- If swallowed : If swallowed, call a poison control centre or doctor
 immediately.
 Do NOT induce vomiting.
 Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical
 Carbon dioxide (CO₂)
 Halons
 Water spray
 Foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon oxides
 Chlorine compounds
 Fluorine compounds
- 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

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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 : Wear self-contained breathing apparatus for firefighting if necessary for firefighters

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Keep people away from and upwind of spill/leak.
Remove all sources of ignition.
Ventilate the area.
Use personal protective equipment.
- 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, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a 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). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol.
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.

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Materials to avoid : Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
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
methyl acetate	79-20-9	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 610 mg/m ³	NIOSH REL
		ST	250 ppm 760 mg/m ³	NIOSH REL
		TWA	200 ppm 610 mg/m ³	OSHA

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

 Hand protection
 Material : Protective 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 : Safety glasses
 Tightly fitting safety goggles

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific 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

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place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: yellow
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: > 35 °C
Flash point	: -10 °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
Density	: 1.24 g/cm ³
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	: 2,000 - 5,000 mPa.s
Viscosity, kinematic	: No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	Carbon monoxide Carbon dioxide (CO ₂) Chlorine compounds Fluorine compounds

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****Benzene, 1-chloro-4-(trifluoromethyl)-:**

Acute oral toxicity	:	LD ₅₀ (Rat): 13,000 mg/kg LD ₅₀ (Mouse): 11,500 mg/kg
Acute inhalation toxicity	:	LC ₅₀ (Rat): 33 mg/l Exposure time: 4 h
Acute dermal toxicity	:	LD ₅₀ (Rabbit): > 3,300 mg/kg

Acute toxicity**toluene:**

Acute oral toxicity	:	LD ₅₀ Oral (Rat): 5,580 mg/kg
Acute inhalation toxicity	:	LC ₅₀ (Rat): 28.1 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD ₅₀ (Rabbit, male): > 5,000 mg/kg

Skin corrosion/irritation**Components:****toluene:**

Species: Rabbit
Result: Irritating to skin.

Serious eye damage/eye irritation**Components:**

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toluene:

Species: Rabbit

Result: Mild eye irritation

Exposure time: 24 h

Respiratory or skin sensitisation**Components:****Benzene, 1-chloro-4-(trifluoromethyl)-:**

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: May cause sensitisation by skin contact.

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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:****toluene:**

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

Aspiration toxicity**Components:****toluene:**

May be fatal if swallowed and enters airways.

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

Skin contact:

Remarks:

Prolonged skin contact may defat the skin and produce dermatitis.

Further information**Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Components:****Benzene, 1-chloro-4-(trifluoromethyl)-:**Partition coefficient: n-
octanol/water : log Pow: 3.7 (25 °C)**toluene:**Partition coefficient: n-
octanol/water : Pow: 2.7**Mobility in soil**

No data available

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

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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.
 Send to a licensed waste management company.
- 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 1133, Adhesives, 3, II.

LIMITED QUANTITY if shipped in packages less than or equal to 0.3 gallons (1.0 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.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) : The following substance(s) is/are subject to TSCA 12(b) export notification requirements:
 Benzene, 1-chloro-4-(trifluoromethyl)-

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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
toluene	108-88-3	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Acute Health Hazard
 Chronic Health Hazard
 Fire Hazard

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

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

toluene	108-88-3	10 %
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Clean Air Act

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

toluene	108-88-3	10 %
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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):

toluene	108-88-3	10 %
methyl acetate	79-20-9	10 %

Massachusetts Right To Know

toluene	108-88-3	
methyl acetate	79-20-9	

Pennsylvania Right To Know

Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	
toluene	108-88-3	
methyl acetate	79-20-9	
zinc oxide	1314-13-2	

New Jersey Right To Know

Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	
toluene	108-88-3	
methyl acetate	79-20-9	

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

toluene	108-88-3	
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The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

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

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.