

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM TPO Water Based Membrane Adhesive

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)**

Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitisation : Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Disposal:

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Adhesives and/or sealants

Hazardous components

Chemical name	CAS-No.	Concentration (%)
2-propenoic acid, polymer with butyl 2-propenoate and 2-propenenitrile	25686-45-7	>= 30 - < 60
rubber, natural	9006-04-6	>= 30 - < 60
2-dimethylaminoethanol	108-01-0	>= 1 - < 5

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- | | | |
|-------------------------|---|--|
| General advice | : | Show this safety data sheet to the doctor in attendance. |
| If inhaled | : | Remove person to fresh air. If signs/symptoms continue, get medical attention. |
| In case of skin contact | : | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Call a physician if irritation develops or persists. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Protect unharmed eye.
If eye irritation persists, consult a specialist. |
| If swallowed | : | DO NOT induce vomiting unless directed to do so by a physician or poison control center.
Gently wipe or rinse the inside of the mouth with water. |

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician or Poison Control Centre immediately.

Most important symptoms and effects, both acute and delayed : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Carbon dioxide (CO₂)
Foam
Dry chemical
Halon

Unsuitable extinguishing media : Water spray jet

Hazardous combustion products : carbon oxides
nitrogen oxides
Ammonia

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.

Further information : Standard procedure for chemical fires.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

Smoking, eating and drinking should be prohibited in the application area.

- Conditions for safe storage : Perishable if frozen.
- Materials to avoid : No materials to be especially mentioned.
- Storage period : 12 Months
- Further information on storage stability : Do not freeze.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
rubber, natural	9006-04-6	TWA (inhalable fraction)	0.0001 mg/m ³ (inhalable allergenic proteins)	ACGIH

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection
Material : Protective gloves

Remarks : Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection : Wear safety glasses with side shields or goggles.

Skin and body protection : Wear protective clothing, such as long-sleeved shirts and pants.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Written instructions for handling must be available at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

Colour	: light blue
Odour	: slight, ammoniacal
Odour Threshold	: No data available
pH	: 10 - 11
Melting point/freezing point	: ca. 0 °C
Boiling point/boiling range	: 100 °C
Flash point	: does not flash
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	: 0.99 g/cm ³
Solubility(ies)	
Water solubility	: soluble
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	: 10,000 - 15,000 mPa.s
Viscosity, kinematic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous	: Stable under recommended storage conditions.

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

reactions	No hazards to be specially mentioned.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Product:

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 40 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

Acute toxicity**Components:****2-dimethylaminoethanol:**

Acute oral toxicity	: LD50 (Rat, male and female): 1,182.7 mg/kg Method: OECD Test Guideline 401 GLP: yes
Acute inhalation toxicity	: LC50 (Rat, male and female): 1,641 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 GLP: no Assessment: The component/mixture is toxic after short term inhalation.
Acute dermal toxicity	: LD50 (Rabbit, male): 1,219 mg/kg Method: OECD Test Guideline 402 GLP: no

Skin corrosion/irritation**Components:****2-propenoic acid, polymer with butyl 2-propenoate and 2-propenenitrile:**

Result: irritating

Skin corrosion/irritation**2-dimethylaminoethanol:**

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

Species: Rabbit
Method: OECD Test Guideline 404
Result: Corrosive after 3 minutes to 1 hour of exposure
GLP: yes

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result: irritating

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

2-propenoic acid, polymer with butyl 2-propenoate and 2-propenenitrile:

Result: irritating

Serious eye damage/eye irritation

2-dimethylaminoethanol:

Species: Rabbit
Result: Irreversible effects on the eye
Method: OECD Test Guideline 405
GLP: no

Respiratory sensitisation: Not classified based on available information.

Respiratory or skin sensitisation**Components:**

rubber, natural:

Exposure routes: Skin contact
Result: Probability or evidence of skin sensitisation in humans
Remarks: largely based on human evidence

Respiratory or skin sensitisation

2-dimethylaminoethanol:

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.

ACGIH

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

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 (29 CFR 1910 Subpart Z, Toxic and Hazardous Substances).

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.

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

STOT - single exposure**Components:****2-dimethylaminoethanol:**

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:****Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Components:**2-dimethylaminoethanol:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 146.63 mg/l
End point: mortality
Exposure time: 96 h
Test Type: static test
Analytical monitoring: no
Method: DIN 38412
GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 98.37 mg/l
End point: mortality
Exposure time: 48 h
Test Type: static test
Analytical monitoring: no
Method: Regulation (EC) No. 440/2008, Annex, C.2
GLP: no

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 66.08 mg/l
Exposure time: 72 h
Test Type: static test

Toxicity to fish (Chronic toxicity) : Chronic Toxicity Value: 239.187 mg/l
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to daphnia and other : Chronic Toxicity Value (Daphnia sp. (water flea)): 7.253 mg/l

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

aquatic invertebrates
(Chronic toxicity)Remarks: The value is given based on a SAR/AAR approach
using OECD Toolbox, DEREK, VEGA QSAR models
(CAESAR models), etc.**Persistence and degradability****Components:****2-dimethylaminoethanol:**

Biodegradability : aerobic
Concentration: 100 mg/l
Result: Readily biodegradable.
Biodegradation: 60.5 %
Exposure time: 14 d
Method: OECD Test Guideline 301C

Bioaccumulative potential**Components:****2-dimethylaminoethanol:**

Partition coefficient: n-
octanol/water : log Pow: -0.55 (23 °C)

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

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of contents/container to an approved facility in
accordance with local, regional, national and international
regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as
the unused product.

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

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

Land transport

USDOT: Not classified as a dangerous good under transport regulations

TDG: Not classified as a dangerous good under transport regulations

Sea transport

IMDG: Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO: Not classified as a dangerous good under transport regulations

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**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Respiratory or skin sensitisation
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

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).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

JM TPO Water Based Membrane Adhesive

Version 4.1

Revision Date 04/27/2020

Print Date 04/27/2020

California Prop. 65

This product does not require a warning under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

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

TSCA : On the inventory, or in compliance with the inventory

DSL : On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION**Further information**

Revision Date : 04/27/2020

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.