

**JM PVC Membrane Adhesive (Low VOC)**

Version 2.0

Revision Date 03/11/2020

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**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Trade name : JM PVC Membrane Adhesive (Low VOC)

## 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)  
numberCompany : 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 and industrial installation and use 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 2  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Reproductive toxicity : Category 2  
Specific target organ toxicity : Category 3 (Central nervous system)  
- single exposure  
Specific target organ toxicity : Category 2  
- repeated exposure  
Aspiration hazard : Category 1**GHS label elements**

Hazard pictograms :



Signal word : Danger

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- Hazard statements : H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H361d Suspected of damaging 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:**  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
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.  
P331 Do NOT induce vomiting.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash 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 facility in

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accordance with local, regional, national and international regulations.

**Other hazards**

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
acetone	67-64-1	>= 60 - <= 80
2-butanone	78-93-3	>= 3 - <= 10
toluene	108-88-3	>= 1 - <= 5

Actual concentration or concentration range is withheld as a trade secret

### 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.  
 Symptoms of poisoning may appear several hours later.
- If inhaled : Remove to fresh air immediately. Get medical attention immediately.  
 If breathing is irregular or stopped, administer artificial respiration.
- 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.  
 Get medical attention immediately.
- 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.  
 Never give anything by mouth to an unconscious person.  
 Get medical attention immediately.  
 If breathing is irregular or stopped, administer artificial respiration.
- Most important symptoms and effects, both acute and delayed : Causes serious eye irritation.  
 May cause drowsiness or dizziness.  
 Suspected of damaging the unborn child.  
 May cause damage to organs through prolonged or repeated exposure.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific

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personal protective equipment.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Water spray  
Dry chemical  
Foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Vapours are heavier than air and may spread along floors.  
Vapours may form flammable mixture with air
- Hazardous combustion products : carbon oxides  
aldehydes
- Further information : Standard procedure for chemical fires.
- 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 : Ensure adequate ventilation.  
Use personal protective equipment.  
Evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Remove all sources of ignition.  
Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Should not be released into the environment.
- 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).  
Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : Use explosion-proof equipment.  
Electrical equipment should be protected to the appropriate standard.  
Take measures to prevent the build up of electrostatic charge.  
Use only in area provided with appropriate exhaust ventilation.  
Keep away from open flames, hot surfaces and sources of ignition.  
Vapours are heavier than air and may spread along floors.  
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than

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the occupational exposure limits.

- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place.  
To maintain product quality, do not store in heat or direct sunlight.  
Use explosion-proof equipment.  
Keep away from sources of ignition - No smoking.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.
- Recommended storage temperature : 15.5 - 35 °C
- Storage period : 12 Months
- Further information on storage stability : Protect from frost, heat and sunlight.

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetone	67-64-1	TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m <sup>3</sup>	OSHA
2-butanone	78-93-3	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m <sup>3</sup>	NIOSH REL
		ST	300 ppm 885 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm 590 mg/m <sup>3</sup>	OSHA
toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m <sup>3</sup>	NIOSH REL
		ST	150 ppm 560 mg/m <sup>3</sup>	NIOSH REL
		TWA	200 ppm	OSHA
		CEIL	300 ppm	OSHA
		Peak	500 ppm (10 minutes)	OSHA

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**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI
2-butanone	78-93-3	methyl ethyl ketone	Urine	End of shift (As soon as possible after exposure ceases)	2 mg/l	ACGIH BEI
toluene	108-88-3	Toluene	In blood	Prior to last shift of workweek	0.02 mg/l	ACGIH BEI
		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g Creatinine	ACGIH BEI

**Engineering measures** : Use only in an area equipped with explosion proof exhaust ventilation.  
 Provide exhaust ventilation close to floor level.

**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.

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Hand protection	
Material	: Nitrile rubber
Material	: Solvent-resistant 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. Remove and wash contaminated clothing before re-use.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Written instructions for handling must be available at the work place. Contaminated work clothing should not be allowed out of the workplace.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Colour	: amber
Odour	: solvent-like
Odour Threshold	: No data available
pH	: not determined
	: not determined
Initial boiling point and boiling range	: 56.1 - 110.6 °C
Flash point	: -17 °C
Evaporation rate	: > 1.0 (Butyl Acetate=1.0)
Flammability (solid, gas)	: No data available
Upper explosion limit	: 12.8 %(V)
Lower explosion limit	: 1.0 %(V)
Vapour pressure	: No data available

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Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.849 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: slightly 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, dynamic	: No data available
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 reactions	: Will ignite Hazardous decomposition products formed under fire conditions.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	: carbon oxides Aldehydes

**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 : > 200 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method



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**Acute toxicity****Components:****acetone:**Acute oral toxicity : LD50 (Rat, female): 5,800 mg/kg  
GLP: noAcute inhalation toxicity : LC50 (Rat, female): 76.0 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
GLP: noAcute dermal toxicity : LD50 (Guinea pig, male and female): > 7,426 mg/kg  
GLP: no**Acute toxicity****2-butanone:**Acute oral toxicity : LD50 (Rat, male and female): 2,193 mg/kg  
Method: OECD Test Guideline 423Acute inhalation toxicity : Assessment: The substance or mixture has no acute  
inhalation toxicityAcute dermal toxicity : LD50 (Rabbit, male): > 8,054 mg/kg  
Method: OECD Test Guideline 402  
GLP: no**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  
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): &gt; 12,267 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: irritating

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

Species: Rabbit

Result: Irritating to skin.

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

Species: Rabbit  
Result: Eye irritation  
Exposure time: 24 h  
Assessment: Irritating to eyes.  
Method: Draize Test

**Serious eye damage/eye irritation****2-butanone:**

Species: Rabbit  
Result: irritating  
Method: OECD Test Guideline 405

Respiratory sensitisation: Not classified based on available information.

**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:****acetone:**

Exposure routes: inhalation (vapour)  
Target Organs: Nervous system  
Assessment: May cause drowsiness or dizziness.

**STOT - single exposure****2-butanone:**

Exposure routes: Inhalation  
Target Organs: Central nervous system  
Assessment: May cause drowsiness or dizziness.

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

Assessment: May cause drowsiness or dizziness.

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**STOT - repeated exposure****Components:****toluene:**

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

**Aspiration toxicity**

Not classified based on available information.

**Product:**

May be fatal if swallowed and enters airways.

**Components:****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.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****2-butanone:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2,993 mg/l  
End point: mortality  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 308 mg/l  
End point: Immobilization  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 2,029 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 201

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**Persistence and degradability****Components:****acetone:**Biodegradability : Result: Readily biodegradable.  
Biodegradation: 100 %**Bioaccumulative potential****Components:****acetone:**Partition coefficient: n-  
octanol/water : log Pow: -0.24 (20 °C)**2-butanone:**Partition coefficient: n-  
octanol/water : log Pow: 0.3 (40 °C)  
Method: OECD Test Guideline 117**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 : Toxic to aquatic life.  
Harmful to aquatic life with long lasting effects.**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 : 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.

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### SECTION 14. TRANSPORT INFORMATION

#### International transport regulations

Land transport

USDOT (Special Provision 149): UN1133, Adhesives, 3, II

TDG: UN1133, Adhesives, 3, II

LIMITED QUANTITY if shipped in inner packagings not over 5.0 L (1.3 gallons) net capacity each, packed in a strong outer packaging.

Sea transport

IMDG: UN1133, Adhesives, 3, II

Air transport

IATA/ICAO: UN1133, Adhesives, 3, II

### 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

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
acetone	67-64-1	5000	*

\*: 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** : Flammable (gases, aerosols, liquids, or solids)  
 Serious eye damage or eye irritation  
 Reproductive toxicity  
 Specific target organ toxicity (single or repeated exposure)  
 Skin corrosion or irritation  
 Aspiration hazard

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

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

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toluene	108-88-3	1 - 5 %
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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	1 - 5 %
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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):

acetone	67-64-1	60 - 80 %
2-butanone	78-93-3	3 - 10 %
toluene	108-88-3	1 - 5 %

### California Prop. 65

**⚠️ WARNING:** This product can expose you to chemicals including benzene, 1-chloro-4-(trifluoromethyl)-, which is/are known to the State of California to cause cancer, and toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### 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

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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.