

**Section 1 - Product and Company Identification**

Hazard Label DANGER label

**Company Information**Johns Manville  
Roofing Systems  
P.O. Box 5108  
Denver, CO 80127 USATelephone: 303-978-2000 8:00AM-5:00PM M-F  
Internet Address: <http://www.jm.com>  
Emergency: 800-424-9300 (Chemtrec, In English)

Trade Names: JM PVC Membrane Cleaner

**Section 2 - Hazards Identification****Emergency Overview**

DANGER: Extremely flammable liquid and vapor. Vapor may cause flash fire. Use water spray to cool materials in or near a fire. Fire may be difficult to extinguish. Vapors may travel, and can be ignited by a remote source.

HMIS Ratings: Health = 1 Fire = 3 Reactivity = 0

**Inhalation**

Inhalation of vapors or mists may cause irritation of the upper respiratory tract or central nervous system depression.

**Skin**

Drying of skin, dermatitis, and blistering may occur following prolonged exposures.

**Ingestion**

This product is not intended to be ingested under normal conditions of use. May be harmful if swallowed. May cause gastrointestinal irritation and disturbances. May cause effects similar to those for inhalation exposure. Aspiration into the lungs may cause lung inflammation and other lung injury.

**Eyes**

Irritation, redness, and burning in eyes may occur.

**Primary Routes of Entry (Exposure)**

Inhalation, skin, and eye contact.

**Target Organs**

Skin, eye, lungs, central nervous system (CNS), respiratory system, kidney, liver.

**Medical Conditions Aggravated by Exposure**

Pre-existing eye, skin, respiratory, central nervous system (CNS), liver and kidney diseases or conditions.

**Section 3 - Composition/Information on Ingredients**

CAS #	Component	Percent
141-78-6	Ethylacetate	98-100
75-07-0	Acetaldehyde (Possible trace contaminant)	<0.1

**General Product Description**

Clear liquid; sweet fruity odor.

**Section 4 - First Aid Measures****First Aid: Inhalation**

Remove to fresh air. If symptoms persist contact a physician.

**First Aid: Skin**

Remove contaminated clothing. Wash exposed areas with soap and water. If irritation develops or persists, seek medical attention. Launder contaminated clothing before reuse.

**First Aid: Ingestion**

Product is not intended to be ingested or eaten. If this product is ingested, do not induce vomiting and seek medical attention immediately.

**First Aid: Eyes**

Flush eyes with large amounts of water until irritation subsides. If irritation persists, seek medical attention.

**First Aid: Notes to Physician**

Treatment for inhalation, skin contact, or ingestion should be symptomatic. Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias.

**Section 5 - Fire Fighting Measures****Flash Point:** -4.4°C/24°F**Upper Flammable Limit (UFL):** 10.7**Auto Ignition:** Not determined**Rate of Burning:** Not determined**General Fire Hazards**

DANGER: EXTREMELY FLAMMABLE liquid and vapor.

Keep away from heat, sparks, and flame. Material is highly volatile and readily gives off vapors which are heavier than air and may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Keep container closed. Use with adequate ventilation.

**Extinguishing Media**Carbon dioxide (CO<sub>2</sub>), water, water fog, dry chemical.**Fire Fighting Equipment/Instructions**

Use NIOSH-approved self-contained breathing apparatus operating in the pressure demand mode and full fire fighting protective clothing. Avoid inhalation of vapors.

**Method Used:** TCC**Lower Flammable Limit (LFL):** 2.2**Flammability Classification:** Not determined**Section 6 - Accidental Release Measures****Containment Procedures**

Remove all sources of ignition. Evacuate and ventilate spill area. Dam spill area with sand, earth, or other suitable absorbent. Prevent entry of material into sewers, other water sources, or land areas. Wear full protective clothing and respiratory protection during clean-up as required to maintain exposures below the applicable exposure limit. Shovel absorbed material into containers in well-ventilated area.

**Clean-Up Procedures**

Place in closable container for disposal.

**Section 7 - Handling and Storage****Handling Procedures**

Use protective equipment as described in Section 8 of this safety data sheet when handling uncontained material. Handle in accordance with good industrial hygiene and safety practices.

**Storage Procedures**

Warehouse storage should be in accordance with package directions, if any. Product should be kept in a cool and dry area in original packaging. Do not freeze.

**Section 8 - Exposure Controls / Personal Protection****Exposure Guidelines****A: General Product Information**

Protective equipment should be provided as necessary to prevent inhalation of vapors, prolonged skin contact, and to keep exposure levels below the applicable exposure limits.

**B: Component Exposure Limits****Ethylacetate (141-78-6)**OSHA: 400 ppm TWA; 1400 mg/m<sup>3</sup> TWA400 ppm TWA; 1400 mg/m<sup>3</sup> TWA

ACGIH: 400 ppm TWA

**Acetaldehyde (Possible trace contaminant) (75-07-0)**OSHA: 200 ppm TWA; 360 mg/m<sup>3</sup> TWA100 ppm TWA; 180 mg/m<sup>3</sup> TWA

ACGIH: 25 ppm Ceiling

**PERSONAL PROTECTIVE EQUIPMENT****Personal Protective Equipment: Eyes/Face**

Safety glasses with side shields or chemical goggles are recommended.

**Personal Protective Equipment: Skin**

Impervious gloves such as nitrile rubber should be used to help prevent excessive skin contact.

**Personal Protective Equipment: Respiratory**

A NIOSH approved respirator must be used if vapor concentrations exceed exposure limits.

**Ventilation**

Local exhaust or general dilution ventilation may be required to maintain exposures below the applicable exposure limits. The need for ventilation systems should be evaluated by a professional industrial hygienist, while the design of specific ventilation systems should be conducted by a professional engineer.

**Personal Protective Equipment: General**

Protective equipment should be provided as necessary to prevent irritation of the throat, eyes, and skin, and to keep exposures below the applicable exposure limits identified in Section 8.

**Section 9 - Physical & Chemical Properties**

<b>Appearance:</b>	Clear liquid	<b>Odor:</b>	sweet fruity odor
<b>Physical State:</b>	liquid solution	<b>pH:</b>	Neutral.
<b>Vapor Pressure:</b>	68.860 mmHg @ 68 F	<b>Vapor Density:</b>	3.0
<b>Boiling Point:</b>	75.5°C/168.0°F	<b>Melting Point:</b>	Not determined
<b>Solubility (H<sub>2</sub>O):</b>	Moderate	<b>Specific Gravity:</b>	0.902
<b>Freezing Point:</b>	Not determined	<b>Evaporation Rate:</b>	6.20
<b>Percent Volatile:</b>	100%	<b>VOC:</b>	904.72 g/L

**Section 10 - Stability & Reactivity Information****Stability**

These products are not reactive.

**Stability: Conditions to Avoid**

Keep away from ignition sources. Do not freeze. Do not thin.

**Incompatibility**

Strong acids, alkalis, and oxidizing agents

**Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information****Acute Toxicity****A: General Product Information**

Vapors from this product may cause eye and upper respiratory irritation, dry throat and mouth, nausea, headache, dizziness, drowsiness, and coma in extreme cases. Prolonged exposures may lead to liver and kidney injury.

**B: Component Analysis - LD50/LC50****Ethylacetate (141-78-6)**

Oral LD50 Rat: 5620 mg/kg; Dermal LD50 Rabbit:>20 mL/kg; Dermal LD50 Rabbit:>18000 mg/kg

**Acetaldehyde (Possible trace contaminant) (75-07-0)**

Oral LD50 Rat: 1930 mg/kg

**Component Carcinogenicity****Acetaldehyde (Possible trace contaminant) (75-07-0)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

IARC: Group 2B - Possibly Carcinogenic to Humans (IARC Monograph 71 [1999], Supplement 7 [1987], Monograph 36 [1985])

**Section 12 - Ecological Information****Ecotoxicity****A: General Product Information**

No data available for this product.

**B: Component Analysis - Ecotoxicity - Aquatic Toxicity**

**Ethylacetate (141-78-6)**

96 Hr LC50 Pimephales promelas: 220-250 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss:484 mg/L [flow-through];  
96 Hr LC50 Oncorhynchus mykiss:352-500 mg/L [semi-static]  
48 Hr EC50 Scenedesmus subspicatus: 3300 mg/L  
48 Hr EC50 Daphnia magna: 717 mg/L

**Acetaldehyde (Possible trace contaminant) (75-07-0)**

96 Hr LC50 Pimephales promelas: 28.0-34.0 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus:53 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss:1.8-2.4 mg/L [static]; 96 Hr LC50 Pimephales promelas:39.8-46.8 mg/L [static]  
120 Hr EC50 Nitzschia linearis: 237-249 mg/L  
48 Hr EC50 water flea: 9000 mg/L; 48 Hr EC50 Daphnia magna: 48.3 mg/L

<b>Section 13 - Disposal Considerations</b>
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**US EPA Waste Number & Descriptions****A: General Product Information**

This product is classified an ignitable hazardous waste by the Resource Conservation and Recovery Act (RCRA; 40 CFR 261: Waste # D001). Dispose of spilled material in accordance with federal, state, and local regulations in a hazardous waste facility. Empty containers must be handled with care due to product residue. Do not heat or cut empty containers with electric or gas torch. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the Environmental Protection Agency (EPA).

**B: Component Waste Numbers****Ethylacetate (141-78-6)**

RCRA: waste number U112 (Ignitable waste)

**Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

<b>Section 14 - Transport Information</b>
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**International Transport Regulations**

DOT: UN1173, Ethyl Acetate, 3, PG II  
FLAMMABLE LIQUID label required.

<b>Section 15 - Regulatory Information</b>
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**US Federal Regulations****A: General Product Information**

SARA 311 Status. The following SARA 311 designations apply to this product: Immediate (acute) health hazard. Delayed (chronic) health hazard. Fire hazard.

**B: Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

**Ethylacetate (141-78-6)**

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**Acetaldehyde (Possible trace contaminant) (75-07-0)**

CERCLA: 1000 lb final RQ; 454 kg final RQ

**State Regulations****A: General Product Information**

Other state regulations may apply. Check individual state requirements.

**B: Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Ethylacetate	141-78-6	Yes	No	Yes	Yes	Yes	Yes
Acetaldehyde (Possible trace contaminant)	75-07-0	Yes	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):  
WARNING! This product contains a chemical known to the state of California to cause cancer.

Component	CAS #
Acetaldehyde (Possible trace contaminant)	75-07-0

**A: TSCA Status**

This product and its components are listed on the TSCA 8(b) inventory.

None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.

**B: Component Analysis - Inventory**

Component	CAS #	TSCA	DSL	EINECS
Ethylacetate	141-78-6	Yes	Yes	Yes
Acetaldehyde (Possible trace contaminant)	75-07-0	Yes	Yes	Yes

**Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Ethylacetate	141-78-6	1 %

**WHMIS Classification**

Controlled Product Classification: B2, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. This SDS contains all the information required by the Controlled Products Regulations.

<b>Section 16 - Other Information</b>
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**Other Information**

Prepared for:  
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P. O. Box 5108  
Denver, CO USA 80217-5108

Prepared by:  
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P.O. Box 625005  
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The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Date	MSDS #	Reason
08/01/00	3204-1.0000	New MSDS authoring system.
05/07/01	3204-1.0001	Update Transportation Section
03/18/03	3204-1.0002	Sect. 2, added acetaldehyde as possible trace contaminant. Sect. 3 & 5, added HMIS & NFPA. Sect. 9, added VOC g/L.
05/20/03	3204-1.0200	Minor revisions.
09/03/03	3204-1.0201	Sect. 14: changed "ethylacetate solution" to "ethylacetate"; this is pure chemical with possible trace contaminant.
10/22/03	3204-1.0202	Section 15, TSCA 12b, Ethylacetate is deleted
07/20/05	3204-1.0203	Regulatory update: Section 11 LD50 and Carcinogenicity; Section 15 WHMIS
02/21/06	3204-1.0204	UltraGuard name changed to JM PVC.
03/17/09	3201-1.0205	SDS updated to GHS format.

End of Sheet 3204