

**JM Corbond® open-cell and open-cell Appendix x Spray
Polyurethane Foam side B**

Version 1.1

Revision Date 04/07/2015

Print Date 04/07/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM Corbond® oc SPF side B, JM Corbond® ocx SPF side B

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127
Telephone : 303-978-2000 8:00AM-5:00PM M-F
Emergency telephone : 1-800-424-9300 (Chemtrec, in English)
number
Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Eye irritation : Category 2B

GHS Label element

Hazard pictograms



Signal word : Warning

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled
H320 Causes eye irritation.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician 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.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
Disposal:

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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 (%)
Polyol blend	Not Assigned	>= 30 - < 50
tris(2-chloro-1-methylethyl) phosphate	13674-84-5	>= 20 - < 30
Flame retardant	Not Assigned	>= 10 - < 20
Tertiary amine	Not Assigned	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of eye contact : Remove contact lenses.
Immediately flush eye(s) with plenty of water.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.
Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Hazardous decomposition products due to incomplete combustion
Carbon oxides

No hazardous combustion products are known
- Specific extinguishing methods : Standard procedure for chemical fires.
- Further information : Standard procedure for chemical fires.

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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.

Environmental precautions : 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 : Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Tertiary amine	Not Assigned	TWA	0.05 ppm	ACGIH
		C	0.15 ppm	ACGIH

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection
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).

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Eye protection	: Tightly fitting safety goggles
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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: amber
Odour	: slight
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: 200 °F
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: 1.2
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available

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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 decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	: Acute toxicity estimate : 1,141 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : 12.07 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : 3,877 mg/kg Method: Calculation method

Acute toxicity**Components:****Polyol blend:**

Acute oral toxicity	: LD50 (Rat): 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 200 mg/l Exposure time: 1 h
Acute dermal toxicity	: LD50 (Rabbit): 2,000 mg/kg

Acute toxicity**tris(2-chloro-1-methylethyl) phosphate:**

Acute oral toxicity	: LD50 (Rat): 632 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 4.6 mg/l

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Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Acute toxicity**Flame retardant:**

Acute oral toxicity : LD50 (Rat): 10,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4.4 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): 20,000 mg/kg

Skin corrosion/irritation**Product:**

Remarks: May cause skin irritation in susceptible persons.

Skin corrosion/irritation**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Serious eye damage/eye irritation**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Species: Rabbit

Result: Mild eye irritation

Exposure time: 24 h

Method: Draize Test

Respiratory or skin sensitisation**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Result: Does not cause skin sensitisation.

Germ cell mutagenicity**Components:****tris(2-chloro-1-methylethyl) phosphate:**Germ cell mutagenicity-
Assessment : Not mutagenic in Ames Test.

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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.
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:****tris(2-chloro-1-methylethyl) phosphate:**

Effects on fertility : Species: Rat, male
Application Route: Inhalation

Reproductive toxicity - Assessment : Experiments have shown reproductive toxicity effects in male and female laboratory animals.
Did not show teratogenic effects in animal experiments.

Repeated dose toxicity**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Species: Rat, male
NOAEL: 36 mg/kg
Application Route: Oral
Exposure time: 90 d

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****tris(2-chloro-1-methylethyl) phosphate:**

Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 47 mg/l
Exposure time: 96 h

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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia (water flea)): 32 mg/l

Persistence and degradability**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential**Components:****tris(2-chloro-1-methylethyl) phosphate:**

Partition coefficient: n-octanol/water : log Pow: 2.68

Mobility in soil

No data available

Other adverse effects

No data available

Product:

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.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

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

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These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : Not relevant
Not relevant

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

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 12 (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 I Intermediate or Final VOC's (40 CFR 60.489).

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

TSCA : On TSCA Inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

: Polyol blend

: Surfactant

: Flame retardant

SECTION 16. OTHER INFORMATION**Further information**

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