

**JM Open-cell (oc) and Open-cell Appendix x (ocx) Spray  
Polyurethane Foam (SPF) – Component B (USA)**

Version 2.0

Revision Date 05/13/2019

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**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 : +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)**Acute toxicity (Oral) : Category 4  
Acute toxicity (Inhalation) : Category 4  
Eye irritation : Category 2B**GHS label elements**

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/doctor 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

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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:**

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

**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
polyol blend (trade secret)	Not Assigned	>= 30 - < 50
tris(2-chloro-1-methylethyl) phosphate	13674-84-5	>= 20 - < 30
flame retardant (trade secret)	Not Assigned	>= 10 - < 20
tertiary amine (trade secret)	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 : Do NOT induce vomiting.  
Keep respiratory tract clear.  
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 : Water spray  
Carbon dioxide (CO<sub>2</sub>)  
Foam

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	Dry chemical
Unsuitable extinguishing media	: High volume water jet
Hazardous combustion products	: Hazardous decomposition products due to incomplete combustion carbon oxides
Specific extinguishing methods	: 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	: 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 protection against fire and explosion	: Normal measures for preventive fire protection.
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.
Further information on storage stability	: Stable at normal ambient temperature and pressure.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### Components with workplace control parameters

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

Johns Manville is a member of the Center for the Polyurethanes Industry (CPI) of the American Chemistry Council. For more information about safe work practices, see CPI's *Health and Safety Product Stewardship Workbook for High-Pressure Application of Spray Polyurethane Foam (SPF)* and other resources (some available in Spanish and French) at the following website hyperlinks: <https://www.spraypolyurethane.org/resources/> and <https://www.spraypolyurethane.org/additional-resources/>.

### Personal protective equipment

- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.  
Use NIOSH approved respiratory protection.  
Wear respiratory equipment when entering the spray area.
- Hand protection  
Material : Impervious 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 : 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.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : amber
- Odor : slight
- Odor Threshold : No data available

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pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: 93.4 °C
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
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**

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**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 (trade secret):**

- 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  
Exposure time: 4 h
- Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

**Acute toxicity****flame retardant (trade secret):**

- 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

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**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**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:****tris(2-chloro-1-methylethyl) phosphate:**Effects on fertility : Species: Rat, male  
Application Route: InhalationReproductive toxicity -  
Assessment : Experiments have shown reproductive toxicity effects in male and female laboratory animals.  
Did not show teratogenic effects in animal experiments.

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**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

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

Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 47 mg/l

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****Product:**Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances



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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**

Land transport

USDOT: 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**

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

**SARA 311/312 Hazards** : Acute toxicity (any route of exposure)  
Serious eye damage or eye irritation

**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 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).

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 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** : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

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**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.