JM Corbond® open-cell Spray Polyurethane Foam side B

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM Corbond® oc 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 number : 1-800-424-9300 (Chemtrec, in English)

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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Eye irritation : Category 2B

GHS Label element

Hazard pictograms :

Signal word : Warning

Hazard statements : H302 Harmful if swallowed.
H320 Causes eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
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:
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 (%)
tris(2-chloro-1-methylethyl) phosphate	13674-84-5	>= 30 - < 50
Surfactant	Not Assigned	>= 30 - < 50
Tertiary amine	Not Assigned	>= 5 - < 10

Relevant ingredients

Chemical Name	CAS-No.	Concentration (%)
Polyether Polyol	Not Assigned	40 %

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.

If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Gently wipe or rinse the inside of the mouth with water.

SECTION 5. FIREFIGHTING MEASURES

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : Standard procedure for chemical fires.

Further information	:	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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 product from entering drains. 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	:	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 safe handling	:	Do not breathe vapours/dust. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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

Engineering measures : Prevent unauthorised persons entering the zone.

Local exhaust

Personal protective equipment

Respiratory protection	:	Use NIOSH approved respiratory protection. Wear respiratory equipment when entering the spray area. Wear a positive-pressure supplied-air respirator with full facepiece.
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).
Eye protection	:	Tightly fitting safety goggles
Skin and body protection	:	impervious clothing Complete suit protecting against chemicals
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	:	> 93 ℃
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	:	not determined
Relative vapour density	:	No data available
Relative density	:	1.12
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, 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	:	Exposure to moisture. Heat.
Hazardous decomposition products	:	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Halogenated compounds Nitrogen oxides (NOx) Aldehydes Ketones

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate : 1,580 mg/kg Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate : 5,000 mg/kg Method: Calculation method

Acute toxicity

Components:

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

Surfactant:

Acute oral toxicity	:	LD0 (Rat): 3,310 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): 2,000 mg/kg

Skin corrosion/irritation

Product:

Remarks: Irritating to skin and mucous membranes

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.

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

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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Disposal of residual product : The product should not be allowed to enter drains, water courses or the soil.
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

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 SOCMI 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 : All components of this product are on the Canadian DSL.

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 04/07/2015

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.