

JM Cool Roof Granules

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : JM Cool Roof Granules

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

Company : 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 users 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)**

Carcinogenicity : Category 1A

Specific target organ toxicity : Category 1 (Lungs)
- repeated exposure
(Inhalation)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H350 May cause cancer.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

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P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

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 (%)
mullite	1302-93-8	≥ 45 - ≤ 85
cristobalite	14464-46-1	≥ 0.1 - ≤ 30
crystalline silica	14808-60-7	≥ 0.1 - ≤ 15

SECTION 4. FIRST AID MEASURES

General advice	: Handle in accordance with good industrial hygiene and safety practice.
If inhaled	: If inhaled, remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash with water and soap as a precaution. Wash clothing before reuse.
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	: No hazards which require special first aid measures.
Most important symptoms and effects, both acute and delayed	: May cause cancer. Causes damage to organs through prolonged or repeated exposure if inhaled.

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SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Hazardous combustion products : No hazardous combustion products are known
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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 : Avoid dust formation.
- Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.
Do not create a powder cloud by using a brush or compressed air.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Minimize dust generation and accumulation.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
- Conditions for safe storage : Keep in a dry, cool place.
- Materials to avoid : No materials to be especially mentioned.
- Further information on storage stability : Stable at normal ambient temperature and pressure.

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

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mullite	1302-93-8	TWA (Respirable fraction)	1 mg/m3 (Aluminium)	ACGIH
cristobalite	14464-46-1	TWA (Respirable dust)	0.05 mg/m3	OSHA
		TWA (respirable dust fraction)	0.05 mg/m3	OSHA
		TWA (Respirable fraction)	0.025 mg/m3 (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
crystalline silica	14808-60-7	TWA (Respirable fraction)	0.025 mg/m3	ACGIH
		TWA (respirable)	10 mg/m3 / %SiO ₂ +2	OSHA
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA
		TWA (Respirable dust)	0.05 mg/m3	NIOSH REL
		TWA (Respirable dust)	0.05 mg/m3	OSHA

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
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.

Filter type : Particulates type

Hand protection

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses with side-shields
Safety goggles

Skin and body protection : If used and stored as directed, no special protective equipment is necessary.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

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Written instructions for handling must be available at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: granules, powder
Color	: white
Odor	: none
Odor Threshold	: No data available
pH	: 6 - 8
Melting point/freezing point	: ca. 1,700 °C
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Not expected to form explosive dust-air mixtures.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: No data available
Density	: 2.2 - 2.5 g/cm ³
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable

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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	: No hazards to be specially mentioned.
Conditions to avoid	: No data available
Incompatible materials	: Strong oxidizing agents hydrofluoric acid
Hazardous decomposition products	: fluorine compounds

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****mullite:**

Acute oral toxicity	: Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC50 (Rat, male and female): > 2.19 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute inhalation toxicity Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Acute dermal toxicity	: Assessment: The substance or mixture has no acute dermal toxicity

Acute toxicity**cristobalite:**

Acute oral toxicity	: Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: Assessment: The substance or mixture has no acute dermal toxicity

Acute toxicity**crystalline silica:**

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Acute oral toxicity	: LD50 (Rat): > 22,500 mg/kg	
Acute inhalation toxicity	: Assessment: The substance or mixture has no acute inhalation toxicity	
Acute dermal toxicity	: Assessment: The substance or mixture has no acute dermal toxicity	
Respiratory sensitisation: Not classified based on available information.		
IARC	Group 1: Carcinogenic to humans	
	cristobalite	14464-46-1
	crystalline silica	14808-60-7
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	Known to be human carcinogen	
	cristobalite	14464-46-1
	crystalline silica	14808-60-7

STOT - repeated exposure**Components:****cristobalite:**

Exposure routes: Inhalation

Target Organs: Lungs

Assessment: Causes damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****crystalline silica:**

Toxicity to fish	: LC50 (Cyprinus carpio (Carp)): > 10,000 mg/l
	Exposure time: 72 h

Persistence and degradability

No data available

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Bioaccumulative potential**Components:****cristobalite:**Partition coefficient: n-
octanol/water : Remarks: Not applicable**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 : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Disposal of residual product : Dispose of contents/container to an approved facility in
accordance with local, regional, national and international
regulations.

Contaminated packaging : Dispose of as unused product.

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

Land transport

USDOT: Not classified as a dangerous good under transport regulations

TDG: 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**

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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

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

SARA 311/312 Hazards : Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

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

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)

 **WARNING:** This product can expose you to chemicals including crystalline silica, which is/are known to the State of California to cause cancer. For more information go to 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

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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.