

## JM Cool Roof Granules

Version 1.0

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### 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.

## JM Cool Roof Granules

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

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.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**
**Hazardous components**

| Chemical name      | CAS-No.    | Concentration (%) |
|--------------------|------------|-------------------|
| mullite            | 1302-93-8  | >= 45 - <= 85     |
| crystalite         | 14464-46-1 | >= 0.1 - <= 30    |
| crystalline silica | 14808-60-7 | >= 0.1 - <= 15    |

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**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.

## JM Cool Roof Granules

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

### 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<br>(Form of exposure) | Control parameters /<br>Permissible concentration | Basis |
|------------|---------|----------------------------------|---|-------|
|            |         |                                  |   |       |

**JM Cool Roof Granules**

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

|                    |            |                                      |  |           |
|--------------------|------------|--------------------------------------|--|-----------|
| mullite            | 1302-93-8  | TWA<br>(Respirable<br>fraction)      | 1 mg/m <sup>3</sup><br>(Aluminium)             | ACGIH     |
| cristobalite       | 14464-46-1 | TWA<br>(Respirable<br>dust)          | 0.05 mg/m <sup>3</sup>                         | OSHA      |
|                    |            | TWA<br>(respirable<br>dust fraction) | 0.05 mg/m <sup>3</sup>                         | OSHA      |
|                    |            | TWA<br>(Respirable<br>fraction)      | 0.025 mg/m <sup>3</sup><br>(Silica)            | ACGIH     |
|                    |            | TWA<br>(Respirable<br>dust)          | 0.05 mg/m <sup>3</sup><br>(Silica)             | NIOSH REL |
| crystalline silica | 14808-60-7 | TWA<br>(Respirable<br>fraction)      | 0.025 mg/m <sup>3</sup>                        | ACGIH     |
|                    |            | TWA<br>(respirable)                  | 10 mg/m <sup>3</sup> /<br>%SiO <sub>2</sub> +2 | OSHA      |
|                    |            | TWA<br>(respirable)                  | 250 mppcf /<br>%SiO <sub>2</sub> +5            | OSHA      |
|                    |            | TWA<br>(Respirable<br>dust)          | 0.05 mg/m <sup>3</sup>                         | NIOSH REL |
|                    |            | TWA<br>(Respirable<br>dust)          | 0.05 mg/m <sup>3</sup>                         | 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.

**JM Cool Roof Granules**

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

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 <sup>3</sup>                       |
| 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                                    |

## JM Cool Roof Granules

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

### 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<br>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<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: OECD Test Guideline 403<br>GLP: yes<br>Assessment: The substance or mixture has no acute inhalation toxicity<br>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

##### **crystalite:**

|                           |   |   |
|---------------------------|---|---|
| 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:**

## JM Cool Roof Granules

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

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

**JM Cool Roof Granules**

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

**Bioaccumulative potential****Components:****crystalite:**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

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**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.

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**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

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**SECTION 15. REGULATORY INFORMATION****TSCA list**



**JM Cool Roof Granules**

Version 1.0

Revision Date 06/20/2019

Print Date 06/20/2019

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](http://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**

Revision Date : 06/20/2019

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

**JM Cool Roof Granules**

Version 1.0

Revision Date 06/20/2019

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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.