

Section 1: IDENTIFICATION

Product Name: Rokide MBC Flame Spraying Rods

Article Number: 910029CA, 910039BA

Product Use: Preparation of coatings.

Restrictions on Use: Not available.

Manufacturer/Supplier: Saint-Gobain Coating Solutions
One New Bond Street
Worcester, MA 01615-0137
United States

Email: CeramicMaterials@saint-gobain.com

Phone Number: (508) 795-5000

Emergency Phone: **Manufacturer:**
ChemTel 1-800-255-3924; +1 (813)248-0585 (International)

In Country Contact:
Australia: 1-300-954-583
Brazil: 0-800-591-6042
China: 400-120-0751
India: 000-800-100-4086
Mexico: 01-800-099-0731

Date of Preparation of SDS: April 18, 2022

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

As supplied, this material is unlikely to pose any health hazards and is not hazardous according to OSHA criteria (29 CFR 1910.1200) and WHMIS 2015 criteria.

During intended conditions of use, molten material may generate fumes. The classification below and the information contained in this SDS refer to the hazards posed by the molten material.

Once cooled, the deposited coating is unlikely to pose any health hazards.

Classification: Skin Irritation, Category 2
Eye Irritation, Category 2A
Sensitization - Skin, Category 1
Germ Cell Mutagenicity, Category 2
Carcinogenicity, Category 1B
Specific Target Organ Toxicity (Repeated Exposure), Category 2

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Danger



SAFETY DATA SHEET according to the US OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulations

Hazard Statements: Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Suspected of causing genetic defects.
 May cause cancer.
 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention: Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe mist or fumes.
 Wash hands thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves, protective clothing and eye protection.

Response: IF ON SKIN: Wash with plenty of water.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF exposed or concerned: Get medical attention.
 Get medical attention if you feel unwell.
 If skin irritation or rash occurs: Get medical attention.
 If eye irritation persists: Get medical attention.
 Take off contaminated clothing and wash it before reuse.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 100% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Chromium oxide (Cr ₂ O ₃)	Dichromium trioxide	1308-38-9	65 - 78
Phenol-formaldehyde resin	Not available.	9003-35-4	5 - 10
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	Not available.	14807-96-6	1 - 5
Wollastonite (Ca(SiO ₃))	Not available.	13983-17-0	1 - 5
Chromium hexavalent ion (Cr VI)*	Not available.	18540-29-9	1 - 3
Quartz (SiO ₂)	Not available.	14808-60-7	0.5 - 1.5
Phenol	Not available.	108-95-2	0.1 - 1
1,3,5,7-Tetraazatricyclo[3.3.1.1 ^{3,7}]decane	Methenamine	100-97-0	0.1 - 1

* Hexavalent chromium (Cr VI) may be formed by extreme heat during conditions of intended use.

Section 4: FIRST-AID MEASURES

- Inhalation:** If mist or fumes are inhaled: Call a poison center or doctor if you feel unwell.
- Acute and delayed symptoms and effects:** Hot mist and fumes may cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Inhalation of Phenol vapour may cause lung edema. Exposure may cause effects on the central nervous system, heart and kidneys, resulting in convulsions, coma, cardiac disorders respiratory failure, collapse and death. Inhalation of respirable Talc and/or Quartz from this material is unlikely. Rods as supplied and the cooled deposited material are not likely to cause any adverse effects.
- Eye Contact:** If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
- Acute and delayed symptoms and effects:** Hot mist and fumes may cause serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact. Handling of rods and the cooled deposited material are unlikely to cause any adverse effects on the eyes.
- Skin Contact:** If on skin (or hair): Rinse skin with water or shower. Get immediate medical attention. If skin irritation or rash occurs: Get medical attention. Remove non-adhering contaminated clothing. Cool adherent materials and burned areas with ice and/or cold water. Do not remove adherent material or clothing. Wash contaminated clothing before reuse.
- Acute and delayed symptoms and effects:** Hot mist and fumes may cause an allergic skin reaction and skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Handling of rods and the cooled deposited material are unlikely to cause any adverse effects on the skin.
- Ingestion:** If molten material is swallowed: Rinse mouth. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- Acute and delayed symptoms and effects:** Hot product may cause thermal burns. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen. Accidental poisoning of humans with Chromium(6+) compounds resulted in oral ulcers, diarrhea, abdominal pain, indigestion, vomiting, leukocytosis and presence of immature neutrophils, metabolic acidosis, acute tubular necrosis, kidney failure, and death.



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General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Oxides of nitrogen. Oxides of chromium. Oxides of calcium. Oxides of silica. Oxides of magnesium.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Keep unauthorized personnel away.

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: If molten material spills, contain hot liquid by dyking and allow to cool and solidify. Do not flush to sewer or allow to enter waterways.

Methods for Clean-Up: Pick up and place into suitable containers for disposal.

Other Information: See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Do not swallow. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or fumes. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.

Storage:

Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

Dichromium trioxide [CAS No. 1308-38-9]

ACGIH: 0.5 mg/m³ (TWA); Inhalable particulate matter (2017); For Chromium and inorganic compounds, as Cr; Metal and Cr III compounds

OSHA: No PEL established.

Phenol-formaldehyde resin [CAS No. 9003-35-4]

ACGIH: No TLV established.

OSHA: No PEL established.

Talc [CAS No. 14807-96-6]

ACGIH: 2 mg/m³ (TWA); A4; The value is for particulate matter containing no asbestos and < 1% crystalline silica; Respirable fraction (2009)

OSHA: 20 mppcf (Talc, not containing asbestos) (TWA)

Wollastonite [CAS No. 13983-17-0]

ACGIH: 10 mg/m³ (TWA) (Inhalable.); 3 mg/m³ (TWA) (Respirable.); For Particles (Insoluble or Poorly Soluble) Not Otherwise Specified

OSHA: 15 mg/m³ (Total dust) (TWA), 5 mg/m³ (Respirable fraction) (TWA); For Particulates Not Otherwise Regulated (PNOR).

Chromium hexavalent ion [CAS No. 18540-29-9]

ACGIH: 0.003 mg/m³ (TWA); A4; DSEN; RSEN; Inhalable particulate matter (2017); For Chromium and inorganic compounds, as Cr; Water-soluble Cr VI compounds

OSHA: 5 ug/m³ (TWA); For Chromic acid, Chromates.

Quartz [CAS No. 14808-60-7]

ACGIH: 0.025 mg/m³ (TWA); A2; Respirable particulate matter (2009)

OSHA: 30 / (%SiO₂ + 2) mg/m³ Quartz (Total dust) (TWA), 10 / (%SiO₂ + 2) mg/m³ Quartz (Respirable) & 250 / (%SiO₂ + 5) mppcf Quartz (Respirable) (TWA); See Table Z3. 0.1 mg/m³ (As respirable quartz) (TWA) [Vacated];

Phenol [CAS No. 108-95-2]

ACGIH: 5 ppm (TWA); Skin; A4; BEI (1992)

OSHA: 5 ppm (TWA), 19 mg/m³ (TWA); Skin.

Methenamine [CAS No. 100-97-0]

ACGIH: 1 mg/m³ (TWA); DSEN; A4; Inhalable fraction and vapor (2020)

OSHA: No PEL established.

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

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PERSONAL PROTECTIVE EQUIPMENT (PPE)



- Eye/Face Protection:** Wear chemical safety goggles. If product is hot, wear full face-shield. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.
- Hand Protection:** Wear protective gloves. If product is hot, thermally protective gloves are recommended. Consult manufacturer specifications for further information.
- Skin and Body Protection:** Wear protective clothing.
- Respiratory Protection:** If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-18, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
- General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Ceramic rod.
Colour:	Green.
Odour:	Odourless.
Odour Threshold:	Not available.
Physical State:	Solid.
pH:	Not available.
Melting Point / Freezing Point:	2000 °C (3632 °F)
Initial Boiling Point:	Not available.
Boiling Range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.



Rokide MBC Flame Spraying Rods

Date of Preparation: April 18, 2022

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Flammability (solid, gas):	See Section 5.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	Not available.
Solubilities:	Insoluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Density:	Not available.
Coefficient of Water/Oil Distribution:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity:	Contact with incompatible materials. Exposure to heat.
Chemical Stability:	Stable under normal storage conditions.
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Contact with incompatible materials. Exposure to heat.
Incompatible Materials:	Strong oxidizers.
Hazardous Decomposition Products:	Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral:	Not available.
Dermal:	Not available.
Inhalation:	Not available.



Rokide MBC Flame Spraying Rods

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Component Toxicity

Component	CAS No.	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀
Dichromium trioxide	1308-38-9	Not available.	Not available.	Not available.
Phenol-formaldehyde resin	9003-35-4	> 5000 mg/kg (rat)	> 2000 mg/kg (rat)	
Talc	14807-96-6	Not available.	Not available.	Not available.
Wollastonite	13983-17-0	Not available.	Not available.	Not available.
Chromium hexavalent ion	18540-29-9	Not available.	Not available.	Not available.
Quartz	14808-60-7	Not available.	Not available.	0.3 mg/m ³ (human); 10Y
Phenol	108-95-2	317 mg/kg (rat)	669 mg/kg (rat)	316 mg/m ³ (rat); 4H
Methenamine	100-97-0	569 mg/kg (mouse)	Not available.	Not available.

Likely Routes of Exposure: Skin contact.

Target Organs: Skin. Eyes. Respiratory system.

Symptoms (including delayed and immediate effects)

Inhalation: Hot mist and fumes may cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Inhalation of Phenol vapour may cause lung edema. Exposure may cause effects on the central nervous system, heart and kidneys, resulting in convulsions, coma, cardiac disorders respiratory failure, collapse and death. Inhalation of respirable Talc and/or Quartz from this material is unlikely. Rods as supplied and the cooled deposited material are not likely to cause any adverse effects.

Eye: Hot mist and fumes may cause serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact. Handling of rods and the cooled deposited material are unlikely to cause any adverse effects on the eyes.

Skin: Hot mist and fumes may cause an allergic skin reaction and skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Handling of rods and the cooled deposited material are unlikely to cause any adverse effects on the skin.

Ingestion: Hot product may cause thermal burns. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen. Accidental poisoning of humans with Chromium(6+) compounds resulted in oral ulcers, diarrhea, abdominal pain, indigestion, vomiting, leukocytosis and presence of immature neutrophils, metabolic acidosis, acute tubular necrosis, kidney failure, and death.

Skin Sensitization: Hot mist and fumes may cause an allergic skin reaction.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.



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EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood. Cardiovascular system. Spleen. Liver. Kidneys. Central nervous system.

Chronic Effects: Hazardous by OSHA/WHMIS criteria. Inhalation of mist or fumes may cause chronic effects. Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to Phenol may cause eye and skin discoloration. Long term excessive exposures to Talc may cause Talcosis, a pulmonary fibrosis which may in turn lead to severe and permanent damage to the lung. Repeated exposure to Silica (Quartz, SiO₂) can cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death. However, inhalation of respirable Talc and/or Quartz from this material is unlikely.

Carcinogenicity: May cause cancer. Long term inhalation of Chromium(6+) compounds has been linked to increased incidence of lung cancer. Respirable Silica (Quartz, SiO₂) dust is classified as a human carcinogen. However, inhalation of respirable Quartz from this material is unlikely.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Talc	A4	Group 3	Not listed.	Not listed.	Not listed.
Chromium hexavalent ion	A4	Group 1	List 1	OSHA Carcinogen.	Listed.
Quartz	A2	Group 1	List 1	OSHA Carcinogen.	Listed.
Phenol	A4	Group 3	Not listed.	Not listed.	Not listed.
Methenamine	A4	Not listed.	Not listed.	Not listed.	Not listed.

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.



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Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Placard(s): Not applicable.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Placard(s): Not applicable.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Chromium hexavalent ion	Not listed.	Not listed.	5000	313	Not listed.	Not listed.
Phenol	500/10000	1000	1000	313	U188	Not listed.



Rokide MBC Flame Spraying Rods

Date of Preparation: April 18, 2022

SAFETY DATA SHEET according to the US OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulations

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Dichromium trioxide	1308-38-9	E
Talc	14807-96-6	Listed.
Quartz	14808-60-7	E
Phenol	108-95-2	E

Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Dichromium trioxide	1308-38-9	Listed.
Talc	14807-96-6	Listed.
Quartz	14808-60-7	SHHS
Phenol	108-95-2	SHHS
Methenamine	100-97-0	Listed.

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Talc	14807-96-6	Listed.
Chromium hexavalent ion	18540-29-9	E
Quartz	14808-60-7	Listed.
Phenol	108-95-2	E

Note: E = Environmental Hazard

California

California Prop 65:



WARNING This product can expose you to Chromium hexavalent ion and Quartz, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Rokide MBC Flame Spraying Rods

Date of Preparation: April 18, 2022

SAFETY DATA SHEET according to the US OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulations

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS: April 18, 2022

Version: 1.0

GHS SDS Prepared by: Aegis Regulatory Inc.

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