

1 Identification of substance:

· **Product details:**

- **Trade name:** **CARSIAL 90**
- **Application of the substance / the preparation:** Refractory product
- **Manufacturer/Supplier:** RHI Canada Inc.
4355 Fairview Street
Burlington, Ontario L7L 2A4
Canada
Tel 905-639-8660
- **Information department:** MSDS Technical Information: 905-639-8660
- **Emergency information:** Tel: +43 50213 5361
Fax: +43 50213 5364
CHEMTREC 24 HOUR EMERGENCY PHONE NUMBER: 1-800-424-9300

2 Composition/Data on components:

· **Chemical characterization**

- **Description:** Shaped refractory product on the basis of

· **Dangerous components:**

409-21-2	silicon carbide	75-100%
7440-21-3	silicon, containing more than 99.99 per cent by weight of silicon	2.5-5.0%
1302-93-8	alumina silicate	2.5-5.0%
14808-60-7	Quartz (SiO ₂)	0.1-0.5%

3 Hazards identification

- **Hazard description:** Toxic
- **Carcinogenicity Information:** Crystalline silica is listed by IARC as a Group 1 Carcinogen "sufficient evidence of carcinogenicity in humans", and is listed by NTP as K, "Known To Be A Human Carcinogen".
- **Classification system:** The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4):**

0	0	0
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 - Health = 0
 - Fire = 0
 - Reactivity = 0
- **HMIS Classification:**

0	0
0	0
REACTIVITY	0

 - Health = 0
 - Fire = 0
 - Reactivity = 0
- **Additional information:** Dust formed during manipulation can affect silicosis.

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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· **Protective equipment:** *Wear self-contained breathing apparatus*

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6 Accidental release measures

- **Person-related safety precautions:** *see section 8*
- **Measures for environmental protection:** *see section 12*
- **Measures for cleaning/collecting:** *Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Dispose of the collected material according to regulations.*
- **Additional information:** *No dangerous substances are released.*

7 Handling and storage

- **Handling**
 - **Information for safe handling:** *Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.*
 - **Information about protection against explosions and fires:** *The product is not flammable*
- **Storage**
 - **Requirements to be met by storerooms and receptacles:** *No special requirements.*
 - **Information about storage in one common storage facility:** *Not applicable*
 - **Further information about storage conditions:** *None.*

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*

· **Components with limit values that require monitoring at the workplace:**

409-21-2 silicon carbide	
PEL	<i>15*; 5** mg/m³</i> <i>*Total dust **Respirable fraction</i>
REL	<i>10*; 5** mg/m³</i> <i>*Total dust **Respirable fraction</i>
TLV	<i>10 I mg/m³</i> <i>3 R; (e)</i>
7440-21-3 silicon, containing more than 99.99 per cent by weight of silicon	
PEL	<i>15*; 5** mg/m³</i> <i>*Total dust **Respirable fraction</i>
REL	<i>10*; 5** mg/m³</i> <i>*Total dust **Respirable fraction</i>
TLV	<i>10 mg/m³</i>
14808-60-7 Quartz (SiO₂)	
REL	<i>0.05* mg/m³</i> <i>*Respirable dust</i>
TLV	<i>(0.05 R) mg/m³</i> <i>NIC-0.025 R</i>

- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Personal protective equipment**
 - **General protective and hygienic measures** *Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.*

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- **Breathing equipment:** NIOSH approved respirators should be used if dust is present. A respiratory protection program should be implemented if exposure exceed OSHA PELs.
 - **Respiratory protection:** Filter P100
 - **Protection of hands:** Leather gloves
Protective gloves
 - **Eye protection:** Safety glasses with side shields
 - **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

- **Form:** Solid material.
- **Color:** Dark
- **Odor:** Characteristic

· Change in condition

- **Melting point/Melting range:** undetermined
- **Boiling point/Boiling range:** undetermined

- **Flash point:** Not applicable

- **Auto igniting:** Product is not self igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density:** Not determined

· Solubility in / Miscibility with

- **Water:** Insoluble

· Solvent content:

- **Organic solvents:** 0.0 %

- **Solids content:** 6.4 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Additional toxicological information:** Carcinogenic if inhaled.

12 Ecological information:

- **General notes:** Do not allow large quantities of undiluted product to reach ground water, water course or sewage system.

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13 Disposal considerations

- **Product:**
 - **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**
 - **ADR/RID class:** -
- **Maritime transport IMDG:**
 - **IMDG Class:** -
- **Transport/Additional information:** Not dangerous according to available informations.

15 Regulations

- **Additional classification according to Decree on Hazardous Materials** PRODUCT MAY CONTAIN CRYSTALLINE SILICA, an IARC and NTP listed cancer agent. Prolonged or repeated inhalation of dust from products containing crystalline silica can cause silicosis or cancer.
- **Carcinogenity categories**

· EPA (Environmental Protection Agency)		
None of the ingredients is listed.		
· IARC (International Agency for Research on Cancer)		
14808-60-7	Quartz (SiO ₂)	I
· NTP (National Toxicology Program)		
14808-60-7	Quartz (SiO ₂)	K
· TLV (Threshold Limit Value established by ACGIH)		
409-21-2	silicon carbide	A4
14808-60-7	Quartz (SiO ₂)	A2
· MAK (German Maximum Workplace Concentration)		
409-21-2	silicon carbide	2
14808-60-7	Quartz (SiO ₂)	I
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
14808-60-7	Quartz (SiO ₂)	
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

- **Product related hazard informations:** The product has been classified and marked in accordance with directives on hazardous materials.
- **Risk phrases:** May cause cancer by inhalation.
Danger of serious damage to health by prolonged exposure.
- **Safety phrases:** Do not breathe dust.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately.
If swallowed, seek medical advice immediately and show this container or label.

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*Use only in well-ventilated areas.**In case of accident by inhalation: remove casualty to fresh air and keep at rest**If swallowed, rinse mouth with water (only if the person is conscious)*

- **Special labeling of certain preparations:**

If dust or fumes are present, wear NIOSH approved respirator.

- **National regulations**

- **SARA 313 TOXIC CHEMICALS**

No material listed in the components in Section 2 of this MSDS is on the SARA 313 list.

- **SARA 302 EXTREMELY HAZARDOUS SUBSTANCES**

No material listed in the components in Section 2 of this MSDS is on the SARA 302 list.

- **TSCA (Toxic Substances Control Act)**

This substance or all the ingredients of this product are on the Chemical Substances Inventory of the Toxic Substances Control Act (TSCA Inventory). The presence on this list does not require any legal reporting

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- *** Data compared to the previous version altered.**

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