



Section 1 : Identification

**Product Name:** Ceramic Engine Seal  
**Part Number:** 35500  
**Supplier** Moroso Performance Products, Inc.  
80 Carter Drive  
Guilford, CT 06437  
**Phone Number:** (203) 453-6571

**Product Use:** Forms rigid seal in crevices and joints.

**Emergency Number:** Chemtrec (24 hour) (800) 424-9300

Section 2 : Hazard(s) Identification

**Signal word:** DANGER

**Hazard Classification:** **Category:** **Pictograms:**  
Carcinogenicity 1A



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

**Hazard Statement(s):** Cause eye and skin irritation. May be harmful if swallowed.  
Contains material that may cause target organ damage based on animal data

**Precautionary Statement(s):** Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Use personal protective equipment as required.  
If exposed or concerned: Get medical attention.  
Store locked up.  
Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Non-Classified** None  
**Hazards:**

Section 3 : Composition/Information on Ingredients

Ingredient/Common Name	CAS No.	Percent
Crystalline silica, quartz	14808-60-7	0.1 - 1
Sodium Silicate	1344-09-8	1 - 5%
Carbon black	1333-86-4	1 - 5%

\*In accordance with 29 CFR 1910.1200 (i) the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Section 4 : First-Aid Measures

**Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eye lids. Get medical attention immediately.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothes and shoes. Wash clothing before reuse. Clean shoes before reuse. Get medical attention immediately.

**Ingestion:** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Inhalation:** Move person to fresh air. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained professional. Loosen tight clothing such as a collar, tie, waistband, or belt. Get medical attention immediately.

**Important Symptoms/Effects:** No known significant effects or critical hazards

**Medical Recommendations:** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

#### Section 5 : Fire-Fighting Measures

**Extinguishing Equipment:** Use an extinguishing agent suitable for the surrounding fire.

**Extinguishing Media:** No non-suitable media known.

**Hazardous thermal decomposition products:** Decomposition products may include the following materials:  
Carbon dioxide; Carbon monoxide; Sulfur oxides; metal oxide/oxides

**Special Protective Actions for Fire Fighters:** No special measures are required.

**Firefighting Procedures:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Unusual Fire/Combustion Hazards:** No specific fire or explosion hazard

## Section 6 : Accidental Release Measures

### Personal Precautions

**Non Emergency Personnel:** No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**Emergency Personnel:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Containment Materials/Methods

**Small Spill:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large Spill:** Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or contain and collect with correct material. Dispose according to local regulations and via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: See Section 1 for Emergency Contact and Section 13 for Disposal.

## Section 7 : Handling and Storage

**Protective Measures:** Put on appropriate personal protective equipment (see Section 8). Avoid exposure -obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Occupational Hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

**Incompatible:** None known.  
**Material Handling:**

**Safe Storage:** Store accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, well-ventilated area, away from incompatible materials, food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8 : Exposure Controls/Personal Protection

Ingredient	OSHA (8 HR) TWA PEL (mg/m <sup>3</sup> )	NIOSH (10 HR) REL (mg/m <sup>3</sup> )	ACGIH (8 HR) TLV
Carbon Black	3.5	3.5 (10 hr)	3*
Crystalline silica, quartz	10**; 250 mppcf**	0.05	0.025

\*Inhalable \*\*Respirable

**Other Exposure Limits:** None

**Engineering Controls:** If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental Exposure Controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## **Personal Protective Equipment (PPE)**

**Eye Protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin Protection:** Personal protective equipment for the body should be selected based on task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Respiratory Protection:** Use a properly fitted, air purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Other Protective Equipment:** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or necessity to use respiratory protective equipment.

**Work/Hygiene Practices:** Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of a working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before using. Ensure that safety showers and eyewash stations are close to working areas.

## **Section 9 : Physical and Chemical Properties**

**Physical State:** Liquid, grey

**UEL/LEL:** Not Available

**Odor:** Odorless

**Odor Threshold:** Not Available

**VOC Content:** 0% (w/w)

**Vapor Pressure:** Not Available

**Vapor Density:** Not Available

**Relative Density:** 1.4

**Specific gravity:** Not Available  
**pH:** Not Available  
**Melting Point:** Not Available  
**Boiling Point/Range:** Not Available  
**Freezing Point:** Not Available  
**Solubility:** Soluble in cold and hot water  
**Flash Point:** Product does not sustain combustion  
**Evaporation Rate:** Not Available  
**Flammability:** Not Available  
**% Volatile by Volume:** 55% (w/w)  
**Auto Ignition Temperature:** Not Available  
**Decomposition Temperature:** Not Available  
**Partition Coefficient n-octanol/water:** Not Available  
**Viscosity:** Not Available

### Section 10 : Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical Stability:** Stable

**Hazardous** Under normal conditions of storage and use, hazardous decomposition  
**Reactions:** products should not occur.

**Incompatible** Oxidizing materials  
**Materials:**

**Conditions to Avoid:** No specific data

**Hazardous** Under normal conditions of storage and use, hazardous decomposition  
**Decomposition** products should not be produced.  
**Products:**

### Section 11 : Toxicological Information

#### Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Sodium silicate	LD50 Oral	Rat	1960 mg/kg	-
Carbon Black	LD50 Oral	Rat	>15400 mg/kg	-

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sodium silicate	Eyes -Severe irritant	Rabbit	-	24 hours 10 mg	-
	Skin -Severe irritant	Rabbit	-	24 hours 500 mg	-

**Sensitization:** No data available

**Carcinogenicity\***

Product/Ingredient Name	NTP	IARC	EPA	NIOSH	ACGIH	OSHA
Ethene, homopolymer	-	3	-	None.	-	-
Crystalline silica, quartz	Known to be a human carcinogen	1	-	+	A2	-
Carbon Black	-	2B	-	+	A3	-

\*May cause cancer. Risk of cancer depends on duration and level of exposure.

**Specific Target Organ (single exposure)**

Name	Category	Route(s) of Exposure	Target Organs
Sodium silicate	Category 3	Inhalation; dermal contact; eye contact; Ingestion	Respiratory Tract Irritation

**Specific Target Organ (repeated exposure)**

Name	Category	Route(s) of Exposure	Target Organs
Crystalline silica, quartz	Category 1	Inhalation; dermal contact; eye contact; Ingestion	Kidneys, Respiratory Tract and Testes

**Aspiration Hazard:** There is no data available

No Additional Known Significant Effects or Critical Hazards

## Section 12 : Ecological Information

**Toxicity**

Product/Ingredient Name	Result	Species	Exposure
Sodium Silicate	Acute EC50 0.4mg/L Fresh Water	Crustaceans - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	Acute LC50 494000ug/L Fresh Water	Daphnia - Daphnia magna	48 hours

**Degradation** No available data  
**Potential:**

**Bioaccumulation** No available data  
**Potential:**

**Other Adverse** No known significant effects or critical hazards  
**Effects:**

### Section 13 : Disposal Considerations

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**Disposal Containers:** Waste packaging should be recycled.

**Disposal Methods:** Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions, and any by-product should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. The material and its container must be disposed of in a safe way.

**Disposal Precautions:** Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

**Sewage Disposal:** Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant.

### Section 14 : Transport Information

**UN Number:** Not regulated

**UN Shipping Name:** Not regulated

**Transport Hazard Class(es):** Not regulated

**Packing Group Number:** Not regulated

**Environmental Hazards:** No known hazards

### Section 15 : Regulatory Information

#### U.S. Federal Regulations

**TSCA 8(a):** Not Determined

**TSCA 8(b):** Not Determined

**CAA 112:** Not listed

**CAA 602 Class I & II:** Not listed

**DEA List 1 Chemicals:** Not listed



**SARA:****Section 302:** No products found.**Section 304:** Not applicable**Section 311/312:** Delayed (chronic) health hazard**U.S. State Regulations****Massachusetts:** The following components are listed; Carbon black.**New York:** None of the components are listed.**New Jersey:** The following components are listed; Carbon black.**Pennsylvania:** The following components are listed; Carbon black.**California Prop 65: WARNING:** This product contains a chemical known to the State of California to cause cancer.**Section 16 : Other Information****Prepared Date:** December 30, 2006**Revision Date:** November 16, 2015**Revisions:** 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16**Definitions:****ACGIH:** American Conference of  
Governmental Industrial Hygienists**ADR:** Carriage of Dangerous Goods by  
Road (International Regulation)**CAA:** Clean Air Act**CAS:** Chemical Abstracts Service**CERCLA:** Comprehensive Environmental  
Response, Compensation and  
Liability Act**DSL:** Domestic Substances List**EPA:** Environmental Protection Agency**EU:** European Union**f/cc:** Fibers per cubic centimeter**HEPA:** High Efficiency Particulate Air**HMIS:** Hazardous Materials Identification  
System**IARC:** International Agency for Research on  
Cancer**IATA:** International Air Transport  
Association**IMDG:** International Maritime Dangerous  
Goods Code**mg/m³:** Milligrams per cubic meter of air**mmpcf:** Million particles per cubic meter**NIOSH:** National Institute for  
Occupational Safety  
and Health**OSHA:** Occupational Safety  
and Health  
Administration**29 CFR 1910.134** OSHA Respiratory  
& **1926.103:** Protection Standards**29 CFR** OSHA Hazard  
**1910.1200 &** Communication  
**1926.59:** Standards**PEL:** Permissible Exposure  
Limit (OSHA)**PIN:** Product Identification  
Number**PNOC:** Particulates Not  
Otherwise Classified**PNOR:** Particulates Not  
Otherwise Regulated**PSP:** Product Stewardship  
Program**RCRA:** Resource  
Conservation and  
Recovery Act**STEL:** Short Term Exposure  
Limit**SVF:** Synthetic Vitreous  
Fiber**TDG:** Transportation of  
Dangerous Goods**TLV:** Threshold Limit Value  
(ACGIH)**TSCA:** Toxic Substances  
Control Act**TWA:** Time Weighted  
Average

**NFPA:** National Fire Protection Association

**WHMIS:** Workplace Hazardous Materials  
Information System (Canada)

**REL:** Recommended Exposure Limit  
(NIOSH)

**RID:** Carriage of Dangerous Goods by Rail  
(International Regulations)

**SARA:** Superfund Amendments and  
Reauthorization Act

**SARA Title III:** Emergency Planning and Community  
Right to Know Act

**SARA Section 302:** Extremely Hazardous Substances

**SARA Section 304:** Emergency Release

**SARA Section 311:** MSDS/List of Chemicals and  
Hazardous Inventory

**SARA Section 312:** Emergency and Hazardous Inventory

**SARA Section 313:** Toxic Chemicals and Release  
Reporting

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