MATERIAL SAFETY DATA SHEET

PECORA CORPORATION®
Architectural Weatherproofing Products
U.S.A. • since 1862

890FTS and 890FTS-TXTR

PART I *What is the material and what do I need to know in an emergency?*

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED):	**Pecora 890FTS; 890FTS-TXTR**
PRODUCT DESCRIPTION:	Smooth or textured, Field Tintable, Non-Staining, Ultra Low-Modulus Silicone Sealant
CHEMICAL NAME/CLASS:	Smooth or textured, non-staining silicone sealant
SYNONYMS:	890FTS; 890FTS-TXTR

SUPPLIER/MANUFACTURER'S NAME:	**Pecora Corporation**
ADDRESS:	165 Wambold Road, Harleysville, PA 19438
EMERGENCY PHONE:	(800) 424-9300 (CHEMTREC , 24 hours)
BUSINESS PHONE:	(215) 723-6051 (Mon - Fri, 8 am - 5 pm ET)

EFFECTIVE DATE:	August 2009

This product is sold for commercial use. This MSDS has been developed to address safety concerns of those individuals working with bulk quantities of this material, as well as those of potential users of this product in industrial/occupational settings. All pertinent health, safety and environmental information has been presented based on ANSI Z400.1-2003, the US Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Materials Information System (WHMIS) and Controlled Products Regulations (CPR).

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL DESCRIPTION: This product is a smooth or textured paste with a mild medicinal odor and is available in a variety of standard and custom colors including Limestone, Black, Tru-White, Aluminum Stone, Beige, and Bronze.

WARNINGS (per ANSI Z129.1): CAUTION! EYE, SKIN, AND RESPIRATORY TRACT IRRITANT. MAY CAUSE ALLERGIC SKIN REACTION.

PRECAUTIONS (per ANSI Z129.1): Contact with uncured sealant or with vapors generated during curing may cause respiratory tract irritation. Do not breathe fumes, dusts, vapors or mist. Do not swallow or take internally. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Keep container closed. Use only in a well-ventilated area. Keep away from heat, sparks and flame.

HAZARD SYMBOLS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®)

Health	**1***
Flammability	**1**
Physical Hazard	**1**

See Section 16 for definitions of ratings

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

HMIS® is a registered trademark of the National Paint and Coatings Association.

2. HAZARDS IDENTIFICATION (Continued)

CANADIAN WHMIS SYMBOLS:

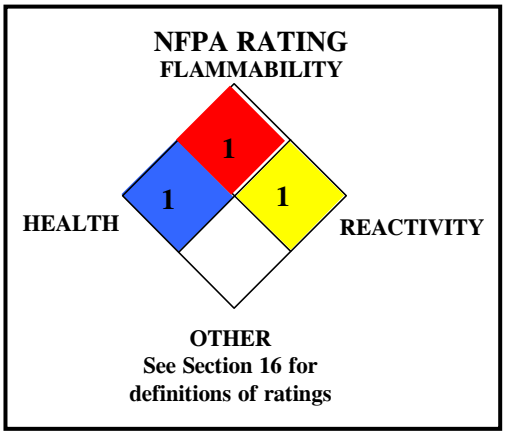
D2A

D2B - Poisonous and infectious material - Other effects – Toxic

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

OSHA REGULATORY STATUS

This material is classified as hazardous under OSHA regulations. It is an irritant and may cause an allergic skin reaction.



POTENTIAL HEALTH EFFECTS

The most significant routes of occupational overexposure are inhalation and contact with skin and eyes. The symptoms of overexposure to this product are as follows:

CONTACT WITH SKIN or EYES: Contact can cause eye or skin irritation. Prolonged skin contact can result in dermatitis or an allergic reaction. Prolonged eye exposure may include redness, pain, and tearing.

SKIN ABSORPTION: No component of this product is reported to be absorbed through intact skin.

INGESTION: If the product is swallowed, irritation of the mouth, throat, and other tissues of the gastro-intestinal system can occur.

INHALATION: Overexposure to vapors of this product generated during curing, or dusts of this product can cause irritation to the respiratory tract. Methyl ethyl ketoxime (2-butanone oxime, CAS # 96-29-7) is slowly formed when this product comes into contact with water or moisture in the air. Provide adequate ventilation to control exposures to less than the suggested exposure guideline of 2 ppm. Crystalline Silicon dioxide dust can cause a chronic degenerative pulmonary disease called silicosis. Crystalline Silicon dioxide dust is also suspected to be a cause of lung cancer, and is a suspect carcinogen.

INJECTION: Accidental injection of this product can cause burning, reddening, and swelling in addition to the wound. Symptoms of such exposure can include those described under "Inhalation", "Contact with Skin or Eyes," and "Ingestion".

TARGET ORGANS: Skin, eyes, mucous membranes, respiratory tract.

CHRONIC EFFECTS: Long-term skin or eye contact can result in dermatitis or an allergic reaction or eye irritation. Titanium dioxide and Carbon Black have been classified as "2B" (sufficient evidence in animals and inadequate evidence in humans) cancer-causing agents by the International Agency for Research on Cancer.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye and skin irritation (redness or swelling); allergic reaction. See Section 11: TOXICOLOGICAL INFORMATION.

POTENTIAL ENVIRONMENTAL EFFECTS

This product does not normally present a significant hazard to aquatic or terrestrial life in small quantities. Do not discharge effluent containing this product into streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. See Section 12: ECOLOGICAL INFORMATION.

3. MATERIAL IDENTIFICATION

CHEMICAL NAME	CAS #	Weight %
polydimethyl siloxane diol	70131-67-8	45 – 75
calcium carbonate	1317-65-3	15 – 30
silicon dioxide	112945-52-5	1 – 15
phenyl oximino silane	34036-80-1	1 – 9
alumina silicate	65997-17-3	0 – 8
mineral spirits	64741-65-7 or 8052-41-3	1 – 5
polyamino silane	35141-30-1	0 – 2
mullite	1302-93-8	0 – 2
titanium dioxide	13463-67-7	0 – 2
aluminum	7429-90-5	0 – 2
carbon black	1333-86-4	0 – 1
quartz	14464-46-1, 14808-60-7	0.1-1.0
The ingredients in the balance of this product do not contribute significant hazards beyond those described in this document. Methyl ethyl ketoxime (MEKO) is generated during curing. See Section 8.		

PART II *What should I do if a hazardous situation occurs?*

4. FIRST-AID MEASURES

Victims of chemical exposure must be taken for medical attention if any adverse effects occur. Take a copy of label and MSDS to physician or health professional with victim.

FIRST AID PROCEDURES

SKIN EXPOSURE: If this product contaminates the skin, remove material and rinse with running water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim must seek immediate medical attention if any adverse exposure symptoms develop.

EYE EXPOSURE: If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Victim must seek medical attention.

INHALATION: If vapors of this product are inhaled, remove victim to fresh air. Victim must seek immediate medical attention if any adverse exposure symptoms develop. If necessary, use artificial respiration to support vital functions.

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directed by medical personnel. Have victim rinse mouth with water, if conscious. Never induce vomiting or give a diluent (e.g., water) to someone who is unconscious, having convulsions, or unable to swallow. If contaminated individual is convulsing, maintain an open airway and obtain immediate medical attention.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Persons with pre-existing skin disorders, eye problems, or impaired respiratory system function can be more susceptible to health effects associated with overexposures to this product.

NOTE TO PHYSICIANS

Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

This product is not readily combustible. This material will not significantly contribute to the intensity of a fire. Use extinguishing material suitable to the surrounding fire. Not sensitive to mechanical impact under normal conditions. Not sensitive to static discharge under normal conditions.

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA:

Water Spray:	OK	Carbon Dioxide:	OK
Foam:	OK	Dry Chemical:	OK
Halon:	OK	Other	Any "ABC" Class

UNSUITABLE EXTINGUISHING MEDIA: None.

PROTECTION OF FIREFIGHTERS

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: None.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Responders should wear the level of protection appropriate to the type of chemical released, the amount of the material spilled, and the location where the incident has occurred. For releases of 1 drum or less, Level D Protective Equipment (gloves, chemical resistant apron, boots, and eye protection) should be adequate.

ENVIRONMENTAL PRECAUTIONS

Minimize use of water to prevent environmental contamination. Prevent spill or rinsate from contamination of storm drains, sewers, soil or groundwater. Place all spill residues in a suitable container and seal. Dispose of in accordance with applicable U.S. Federal, State, or local procedures or appropriate standards of Canada (see Section 13, Disposal Considerations)

METHODS FOR CONTAINMENT

SPILL AND LEAK RESPONSE: Trained personnel using pre-planned procedures should respond to uncontrolled releases. Proper protective equipment should be used. In case of a spill, clear the affected area and protect people.
RESPONSE TO INCIDENTAL RELEASES: Personnel who have received basic chemical safety training can generally handle small-scale releases, such as 1 container of this product. Respond to incidental chemical releases by wearing gloves, eye protection, and appropriate body protection.
RESPONSE TO NON-INCIDENTAL RELEASES: Respond to non-incidental chemical releases of this product, such as the simultaneous puncturing of several drums, by clearing the impacted area and contacting appropriate emergency personnel. Clean up should only be done by qualified personnel.

METHODS FOR CLEAN-UP

Mechanically remove the spilled product. Wipe up residues with a small amount of mineral spirits on a rag following appropriate safety precautions on the supplier's MSDS or allow residues to cure and remove mechanically to decontaminate the area thoroughly.

OTHER INFORMATION

US regulations may require reporting of spills of this material that reach surface waters if a sheen is formed. If necessary, the toll-free phone number for the US Coast Guard National Response Center is 1-800-424-8802.

PART III *How can I prevent hazardous situations from occurring?*

7. HANDLING and STORAGE

HANDLING

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after using this product. Do not eat or drink while using this material. Avoid generating dusts, mists or sprays of this product. Remove contaminated clothing immediately. Do not breathe (dust, vapor, mist, gas). Avoid contact with skin, eyes or clothing. In the event of a spill, follow practices indicated in Section 6 (Accidental Release Measures).

STORAGE

This product is stable under ordinary conditions of handling, use and storage. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Keep container tightly closed when not in use. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. To prolong shelf life, store at temperatures below 80°F.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE GUIDELINES

CHEMICAL NAME	CAS #	Guideline	Value
Polydimethyl siloxane diol	70131-67-8	NE	NE
Mineral spirits	64741-65-7	TLV PEL NIOSH REL NIOSH STEL (C)	100 ppm 500 ppm 350 1800 mg/m^3 15 minutes
Calcium carbonate	1317-65-3	TLV PEL NIOSH REL	10 mg/m^3 15 mg/m^3, total dust 5 mg/m^3 respirable dust 15 mg/m^3, total dust 5 mg/m^3 respirable dust
Carbon black	1333-86-4	TLV PEL	3.5 mg/m^3 3.5 mg/m^3
Methyl ethyl ketoxime	96-29-7	Suggested TWA	2 ppm
Alumina silicate	65997-17-3	TLV PEL	10 mg/m^3, total dust 3 mg/m^3 respirable 15 mg/m^3, total dust 5 mg/m^3 respirable
Phenyl oximino silane	34036-80-1	NE	NE
Polyamino silane	35141-30-1	NE	NE
Silicon dioxide	112945-52-5	TLV PEL NIOSH REL NIOSH IDLH	10 mg/m^3 20 mppcf 6 mg/m^3 3000 mg/m^3
Titanium dioxide	13463-67-7	TLV PEL NIOSH REL DFG MAK	10 mg/m^3 15 mg/m^3 total dust NE 1.5 mg/m^3
Aluminum	7429-90-5	TLV PEL NIOSH REL DFG MAK	10 mg/m^3 15 mg/m^3 total dust 5 mg/m^3 respirable dust 15 mg/m^3 total dust 5 mg/m^3 respirable dust 1.5 mg/m^3

8. EXPOSURE CONTROLS - PERSONAL PROTECTION (continued)

Quartz	14464-46-1, 14808-60-7	TLV PEL NIOSH REL	0.025 mg/m^3 30 $mg/m^3/(\%SiO_2)$ total dust 30 $mg/m^3/(\%SiO_2)$ respirable dust 0.05 mg/m^3 respirable dust
Mullite	1302-93-8	PEL	15 mg/m^3, total dust 5 mg/m^3 respirable

NE = Not Established. See Section 16 for Definitions of Terms Used.

ENGINEERING CONTROLS

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION: For specific industrial applications, enhanced eye protection can be necessary. Use approved safety goggles or safety glasses, as described in OSHA 29 CFR 1910.133. If necessary, refer to U.S. OSHA 29 CFR 1910.133, or appropriate Canadian standards.
SKIN PROTECTION: Wear chemical impervious gloves (e.g., Nitrile or Neoprene). If necessary, refer to U.S. OSHA 29 CFR 1910.138 or the appropriate standards of Canada.
BODY PROTECTION: For general industrial applications, chemically protective clothing is not normally needed. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects can pierce the soles of the feet or where employee's feet can be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.
RESPIRATORY PROTECTION: None needed under normal conditions of use or handling. Use NIOSH approved respirators if ventilation is inadequate to control dusts, mists, fumes or vapors. Maintain airborne contaminate concentrations below guidelines listed above. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres use of a full-face-piece pressure/demand SCBA or a full face-piece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (29 CFR 1910.134).

GENERAL HYGIENE CONSIDERATIONS

Contact with uncured sealant or with vapors generated during curing MAY CAUSE RESPIRATORY TRACT IRRITATION. Avoid breathing vapor, mist, or dust. Keep container closed when not in use. Use only with adequate ventilation or wear an appropriate NIOSH-approved respirator. MAY CAUSE SKIN AND EYE IRRITATION OR ALLERGIC REACTION. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. HARMFUL IF SWALLOWED. Do not taste or swallow.

9. PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

RELATIVE VAPOR DENSITY (air = 1):	Heavier than air	EVAPORATION RATE (BuAc =1):	<1
SPECIFIC GRAVITY:	1.1 - 1.3	MELTING/FREEZING POINT:	Not Available
SOLUBILITY IN WATER:	Negligible	BOILING POINT:	Not Available
VAPOR PRESSURE, mm Hg @ 20°C:	Not Available	pH:	Not Applicable
COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT)			Not Available
PHYSICAL STATE, APPEARANCE AND COLOR	This product is a smooth or textured paste with a mild medicinal odor and is available in a variety of standard and custom colors including Black, Tru-White, Aluminum Stone, Translucent, and Bronze.		

HOW TO DETECT THIS SUBSTANCE (WARNING PROPERTIES)

The appearance and odor of this product can act as warning properties in the event of an accidental release

CHEMICAL PROPERTIES

ODOR THRESHOLD:		Not Available	
VOC, less water and exempt:		<100 g/L	
Weight % VOC:		(approx) 10%	
FLASH POINT:	>300°F (>140 °C)	AUTOIGNITION TEMPERATURE:	Not established

FLAMMABLE LIMITS (in air by volume, %):

Lower: NA Upper: NA

10. STABILITY and REACTIVITY

CHEMICAL STABILITY
Stable under normal circumstances of use and handling. Product slowly cures upon contact with moisture in air.

CONDITIONS TO AVOID
Avoid contact with incompatible chemicals and exposure to extreme temperatures.

INCOMPATIBLE MATERIALS
This product is not compatible with strong bases, strong acids, and powerful oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS
Thermal decomposition of this product can generate dusts, irritating fumes, and toxic gases (e.g., Carbon monoxide, Carbon dioxide).

POSSIBILITY OF HAZARDOUS REACTIONS
This product is not expected to undergo hazardous polymerization, decomposition, condensation or self-reactivity. Product slowly cures upon contact with moisture in air.

PART IV *Is there any other useful information about this material?*

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA

There are currently no toxicity data available for this product; the following toxicology information is available for components greater than 1% in concentration.

The following data are available for Carbon black:

LD50 (rat), > 8000 mg/kg
skin (rabbit), non-irritative, index score 0.6/8 (4.0 = severe edema)
eye (rabbit), non-irritative, Draize score 10-17/110 (100 maximally irritating)
Rat, inhalation, duration 90 days
Target organ: lungs
Effect: inflammation, hyperplasia, fibrosis
NOEL = 1.1 mg/m3
Rat, oral, duration 2 years
Effect: no tumors
Mouse, oral, duration 2 years
Effect: no tumors
Mouse, dermal, duration 18 months
Effect: no skin tumors
Rat, inhalation, duration 2 years
Target organ: lungs.
Effect: inflammation, fibrosis, tumors

Tumors in the rat lung are related to the fine particle overload phenomenon rather than to a specific chemical effect of the dust particles in the lung. These effects in rats have been reported in studies on other inorganic insoluble particles and appear to be species specific. Tumors have not been observed in other species (i.e., mouse and hamster) for carbon black under similar circumstances and study conditions.

The following data are available for Silicon dioxide:

Unscheduled DNA Synthesis-Rat-Intratracheal 120 mg/kg
Body Fluid Assay-Rat:lung 120 mg/kg
Inhalation-Rat TCLo:50 mg/m3:Carcinogenic effects
Oral-Rat LD50:3160 mg/kg
Intraperitoneal-Rat LDLo:50 mg/kg
Intravenous-Rat LD50:15 mg/kg
Intratracheal-Rat LDLo:10 mg/kg
Intraperitoneal-Guinea Pig, adult LDLo:120 mg/kg

11. TOXICOLOGICAL INFORMATION (Continued)

The following data are available for Limestone:
Oral-Rat: LD_{50}: 6450 mg/kg

The following data are available for Methyl ethyl ketoxime:
Inhalation-Rat, male: liver tumorogen
Intraperitoneal-Rat LD_{50} 200 mg/kg
Subcutaneous-Rat LD_{50} 2702 mg/kg
Oral-Rat LD_{50}: 930 mg/kg
Dermal-Rabbit LD_{50}: 200 µL/kg
Irritancy, eye, Draize test, rabbit: 100 uL, Severe
Oral-mouse: LD_{50} = 1000 mm/kg

SUSPECTED CANCER AGENT

The following table summarizes the carcinogenicity listing for the components of this product. "NO" indicates that the substance is not considered to be, or suspected to be, a carcinogen by the listed agency, see section 16 for definition of other ratings.

CHEMICAL	IARC	NTP	NIOSH	ACGIH	OSHA	PROP 65
Polydimethyl siloxane diol	No	No	No	No	No	No
Mineral spirits	No	No	No	No	No	No
Calcium carbonate	No	No	No	No	No	No
Carbon black	2B	No	No	No	No	Yes
Methyl ethyl ketoxime	No	No	No	No	No	No
Mullite	No	No	No	No	No	No
Polyamino silane	No	No	No	No	No	No
Alumina silicate	No	No	No	No	No	No
Phenyl oximino silane	No	No	No	No	No	No
Silicon dioxide	3, inadequate evidence	No	No	No	No	No
Titanium dioxide	2B	No	No	A4	No	No
Aluminum	No	No	No	No	No	No
Quartz	1	Yes	Carcinogen	A2	No	Yes

IARC Group 2B: Sufficient evidence in animals and inadequate evidence in humans. IARC Group 3: Unclassifiable as to carcinogenicity in humans. ACGIH A2: Sufficient evidence in animals and inadequate evidence in humans . A4: Not Classifiable as a Human Carcinogen.

IRRITANCY OF PRODUCT

This product can be irritating to contaminated tissue. Prolonged exposure can lead to tissue damage.

SENSITIZATION TO THE PRODUCT

Prolonged contact with this product may cause skin sensitization.

TOXICOLOGICAL SYNERGISTIC PRODUCTS

None.

REPRODUCTIVE TOXICITY INFORMATION

Listed below is information concerning the effects of this product and its components on the human reproductive system.

MUTAGENICITY: When used as directed, this product is not expected to produce mutagenic effects in humans.
EMBRYOTOXICITY: When used as directed, this product is not expected to produce embryotoxic effects in humans.
TERATOGENICITY: When used as directed, this product is not expected to produce teratogenic effects in humans.
REPRODUCTIVE TOXICITY: When used as directed, this product is not expected to produce reproductive toxicity in humans.

A mutagen is a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical that causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance that interferes in any way with the reproductive process.

BIOLOGICAL EXPOSURES INDICES (BEIs)

There are no BEI's established for any component of this product at this time.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ECOTOXICITY

This product can be harmful to terrestrial plant and animal life if large volumes of it are released into the environment. Refer to Section 11, "Toxicological Information", for specific animal data. This product can be harmful to animal life if large volumes of it are released into an aquatic environment. The following aquatic toxicity data is available for components of this product:

Carbon black

Acute algae toxicity: EC 50 (72 h) > 10,000 mg/l, NOEC 50 > 10,000 mg/l (Scenedesmus subspicatus), (OECD Guideline 201).
12.1.2 Acute fish toxicity: LC50 (96 h) > 1000mg/l, *Brachydanio rerio* (zebrafish), (OECD Guideline 203).
12.1.3 Acute water flea toxicity: EC50 (24 h) > 5600 mg/l, *Daphnia magna* (waterflea), (OECD Guideline 202).
Activated sludge, EC0 (3 h) > 800 mg/l.
DEV L3 (TTC test)

PERSISTENCE/DEGRADABILITY

The following environmental data is available for components of this product:

Carbon black and Titanium dioxide can be persistent in the environment.

BIOACCUMULATION/ACCUMULATION

There is no accumulation data for any component of this product at this time.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL

Recover or recycle if possible. Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations or with regulations of Canada.

EPA WASTE NUMBER

As supplied, this product would not be a hazardous waste as defined by U.S. federal regulation (40 CFR 261) if discarded or disposed. State and local regulations may differ from federal regulations. The generator of the waste is responsible for proper waste determination and management.

14. TRANSPORTATION INFORMATION

BASIC SHIPPING DESCRIPTION

This product is not hazardous per 49 CFR 172.101, the U.S. Department of Transportation or Transport Canada Transportation of Dangerous Goods Regulations or International Air Transport Association (IATA) Regulations or International Maritime Organization Regulations (IMO) or International Civil Aviation Organization (ICAO).

14. TRANSPORTATION INFORMATION (Continued)

PROPER SHIPPING NAME:	Not Regulated
HAZARD CLASS NUMBER and DESCRIPTION:	Not Regulated
UN IDENTIFICATION NUMBER:	Not Regulated
DOT LABEL(S) REQUIRED:	Not Regulated
PACKAGING GROUP:	Not Regulated
NORTH AMERICAN RESPONSE GUIDEBOOK NUMBER (2000):	Not Regulated
MARINE POLLUTANT:	No component is designated as a DOT Marine Pollutant.

15. REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS - EPA REPORTING REQUIREMENTS

The following reporting requirements are applicable to components of this product:

CHEMICAL	SECTION 302 EHS (TPQ) (40 CFR 355, Appendix A)	SECTION 304 RQ (40 CFR Table 302.4)	SECTION 313 TRI (threshold) (40 CFR 372.65)
Polydimethyl siloxane diol	No	No	No
Mineral spirits	No	No	No
Calcium carbonate	No	No	No
Carbon black	No	No	No
Alumina silicate	No	No	No
Methyl ethyl ketoxime	No	No	No
Mullite	No	No	No
Phenyl oximino silane	No	No	No
Polyamino silane	No	No	No
Silicon dioxide	No	No	No
Titanium dioxide	No	No	No
Aluminum	No	No	No
Quartz	No	No	No

U.S. SARA SECTION 311/312 FOR PRODUCT:

Acute health effects; chronic health effects.

U.S. TSCA INVENTORY STATUS:

The components of this product are listed on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS:

Not applicable.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):

Components of this product are found on either the Proposition 65 Carcinogen List or the Adverse Reproductive Effects List.
Carbon black: Carbon black (airborne, unbound particles of respirable size). Quartz.
WARNING: This product contains chemicals known to the State of California to cause cancer.

15. REGULATORY INFORMATION (Continued)

GLOBAL HARMONIZATION SYSTEM WARNINGS

Risk Phrases:	R23/24	Toxic by inhalation and in contact with skin.
	R36/37/38	Irritating to eyes, respiratory system and skin.
	R40	Limited evidence of a carcinogenic effect.
	R42	May cause sensitization by inhalation.
Safety Phrases:	S7	Keep container tightly closed.
	S13	Keep away from food, drink and animal feeding stuffs.
	S15	Keep away from heat.
	S20/21	When using do not eat, drink or smoke.
	S23	Do not breathe fumes generated during curing
	S24/25	Avoid contact with skin and eyes.
	S26/28	In case of contact with skin or eyes, rinse thoroughly with water. Seek medical assistance if irritation persists.

Symbols:

ADDITIONAL CANADIAN REGULATIONS

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are listed on the DSL or NDSL Inventory.

16. OTHER INFORMATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information presented in this Material Safety Data Sheet is presented in good faith based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. In no case shall the descriptions, information, data or designs provided be considered a part of our terms and conditions of sale.

All materials may present hazards and should be used with caution. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices or applicable federal, state, or local laws or regulations. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

DATE OF PRINTING October 6, 2009

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these, which are commonly used, include the following:

KEY ACRONYMS:
CHEMTREC – Chemical Transportation Emergency Center, a 24-hour emergency information and/or emergency assistance to emergency responders.
CAS # - This is the Chemical Abstract Service Number that uniquely identifies each compound.
ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.
TLV - Threshold Limit Value - an airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers can be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average **(TWA)**, the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level **(C)**. Skin absorption effects must also be considered.
OSHA - U.S. Occupational Safety and Health Administration.
PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL that was vacated by Court Order.
IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG - MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. **O**ccupational **S**afety and **H**ealth **A**dministration (**OSHA**). NIOSH issues exposure guidelines called **R**ecommended **E**xposure **L**evels (**REL**s). When no exposure guidelines are established, an entry of **NE** is made for reference.
OEL – Occupational Exposure Level – In some cases, specific exposure guidelines have been assigned by industry. These are referred to as "Occupational Exposure Levels."

HAZARD RATINGS:
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS®): Health Hazard: **0** (minimal acute exposure hazard); **1** (slight acute exposure hazard); **2** (moderate acute exposure hazard); **3** (serious acute exposure hazard; onetime overexposure can require medical treatment and cause permanent injury); **4** (severe acute exposure hazard; onetime overexposure can be fatal). An "*" indicates that the health hazard is chronic. Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38° C [100°F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]. Physical/ Reactivity Hazard: **0** (normally stable); 1 (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).
NATIONAL FIRE PROTECTION ASSOCIATION: Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure could cause death or major residual injury). Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

FLAMMABILITY LIMITS IN AIR:
Much of the information related to fire and explosion is derived from the National Fire Protection Association (**NFPA**). Flash Point - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:
Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD_{50}** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC_{50}** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m^3** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TDo**, **LDLo**, **LDo**, **TC**, **TCo**, **LCLo**, and **LCo**, the lowest dose (or concentration) to cause lethal or toxic effects. **BEI** - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. Ecological Information: **EC** is the effect concentration in water.
Data from several sources are used to evaluate the cancer-causing potential of the material. The sources and ratings are: **IARC** - the International Agency for Research on Cancer; 1 = Carcinogenic to humans, 2A, 2B = Probably carcinogenic to humans, 3 = Unclassifiable as to carcinogenicity in humans, and 4 = Probably not carcinogenic to humans. **NTP** - the National Toxicology Program; K =Known to be a human carcinogen, and R = Reasonably anticipated to be a human carcinogen. **RTECS** - the Registry of Toxic Effects of Chemical Substances. **OSHA** - Occupational Safety and Health Administration and **CAL/OSHA** - California's subunit of the Occupational Safety and Health Administration; Ca = Carcinogen defined with no further categorization. **ACGIH –** American Conference of Governmental Industrial Hygienists; A1 = Confirmed human carcinogen, A2 = Suspected human carcinogen, A3 = Confirmed animal carcinogen with unknown relevance to humans, A4 = Not classifiable as a human carcinogen, and A5 = Not suspected as a human carcinogen. **NIOSH** – U.S. National Institute for Occupational Safety and Health; Ca = Potential occupational carcinogen, with no further categorization. **EPA** – U.S. Environmental Protection; A = Human carcinogen, B = Probable human carcinogen, C = Possible human carcinogen, D = Not classifiable as to human carcinogenicity, E = Evidence of Non-carcinogenicity for humans, K = Known human carcinogen, L = Likely to produce cancer in humans, CBD = Cannot be determined, NL = Not likely to be carcinogenic in humans, and I = Data are inadequate for an assessment of human carcinogenic potential.

REGULATORY INFORMATION:
This section explains the impact of various laws and regulations on the material. **EPA** is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Superfund Amendments and Reauthorization Act **(SARA)**; the Canadian Domestic/Non-Domestic Substances List **(DSL/NDSL)**; the U.S. Toxic Substance Control Act **(TSCA)**; Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act **(CERCLA or Superfund)**; and various state regulations. This section also includes information on the precautionary warnings that appear on a material's industrial package label.