

1. IDENTIFICATION OF SUBSTANCE

PRODUCT NAME	Rugged Si95
PRODUCT USE	Silicone Roof Coating
USES ADVISED AGAINST	No specific uses advised against are identified.
SUPPLIER IDENTIFICATION	Rugged Coatings 3217 Messer Airport Hwy Birmingham, AL 35222
EMERGENCY TELEPHONE	(800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS CLASSIFICATIONS:

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Skin Irritation - Category 3

Eye Irritation - Category 2A

Carcinogenicity - Category 2

Reproductive Toxicity - Category 2

Flammable Liquids - Category 4

HAZARD STATEMENTS

H373 - May cause damage to organs through prolonged or repeated exposure.

H316 - Causes mild skin irritation

H319 - Causes serious eye irritation

H351 - Suspected of causing cancer.

H361 - Suspected of damaging fertility or the unborn child.

GHS PRECAUTIONS

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

GHS RESPONSE STATEMENTS

P314 - Get Medical advice/attention if you feel unwell.

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P370 + P378 - In case of fire: Use dry chemical, carbon dioxide, foam to extinguish. For detailed information, see Section-5 (Fire Fighting Measures)

GHS STORAGE STATEMENTS

P403 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up

GHS DISPOSAL STATEMENT

P501 Dispose of contents/ container to an approved waste disposal plant.

LABEL ELEMENTS

PICTOGRAM



SIGNAL WORD Warning

ACUTE TOXICITY

EYES May cause irritation & burns

SKIN Minor potential for irritation

INHALATION Liquid may cause irritation

INGESTION May cause irritation & burns

CONDITIONS AGGRAVATED Unknown

CHRONIC EFFECTS Prolonged or repeated skin contact may cause skin reactions.

3. COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES

SILICA, CRYSTALLINE 19 - 36%

CAS number: 0014808-60-7

TITANIUM DIOXIDE 8 - 14%

CAS number: 0013463-67-7

METHYLTRIS(METHYLETHYLKETOXIME)SILANE 5 - 12%

CAS number: 0022984-54-9

OCTAMETHYLCYCLOTETRASILO 1.9 - 4%

CAS number: 0000556-67-2

2-BUTANONE OXIME Trace

CAS number: 0000096-29-7

COMPOSITION COMMENTS

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

4. FIRST-AID MEASURES

INGESTION	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. IF exposed or concerned: Get medical advice/attention.
SKIN CONTACT	Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard. IF exposed or concerned: Get medical advice/attention.
EYE CONTACT	Avoid direct contact. Wear chemical protective gloves, if necessary. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.
INHALATION	Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor. Eliminate all ignition sources if safe to do so..

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Suitable extinguishing media	Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.
Unsuitable extinguishing	If water is used, use very large quantities of cold water

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Specific hazards	Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can occur. Excessive pressure or temperature may cause explosive rupture of containers. Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them
------------------	---

ADVICE FOR FIREFIGHTERS

Protective actions during firefighting	Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations..
Special protective equipment	Wear NIOSH approved self-contained breathing apparatus in positive pressure mode with full-face piece. Boots, gloves (neoprene), goggles, and full protective clothing are also required. Care should always be exercised in dust/mist areas..

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Appropriate dust or face mask to eliminate breathing foam dust particulates.

ENVIRONMENTAL PRECAUTIONS

Emergency Procedure	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated. Measures for
---------------------	--

Environmental Protection	Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.
Methods and Materials	Soak up material with absorbent and shovel into a chemical waste container. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

7. HANDLING AND STORAGE

Information for Safe Handling	Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas..
Ventilation Requirements	Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.
Storage Requirements	Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME / CAS NO.	OSHA EXPOSURE LIMITS	ACGIH EXPOSURE LIMITS	OTHER EXPOSURE LIMITS
Titanium dioxide 13463-67-7	15 mg/m ³ TWA (total dust)	10 mg/m ³ TWA	NIOSH Carcinogen 1
Silica, Crystalline	[10 mg/m ³ percent SiO ₂ +2 / 250 percent SiO ₂ +5 mppcf]; [30 mg/m ³ percent SiO ₂ +2]; /m ³ TWA (total dust)	0.025 (R)/m ³ TWA (total dust)	NIOSH Carcinogen 1

(R) - Respirable fraction

Engineering Controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
Personal Protective Equipment:	
Respiratory Protection:	If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied pressure supplied air respiratory with a full face piece or an air supplied hood. For emergencies, use a positive pressure self-contained breathing apparatus.
Skin Protection:	Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over- boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated. Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Wash contaminated clothing before re-wearing.
Eye Protection:	Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

DENSITY	11.00 LB/GAL	LOWER EXPLOSION LEVEL	N.A.
SPECIFIC GRAVITY	1.32	UPPER EXPLOSION LEVEL	N.A.
VOC REGULATORY	0.33 LB/GAL	VAPOR PRESSURE	N.A.
VOC PART A & B COMBINED	N.A.	VAPOR DENSITY	HEAVIER THAN AIR
APPEARANCE	PIGMENTED VISCOUS LIQUID	FREEZING POINT	N.A.
ODOR THRESHOLD	N.A.	MELTING POINT	N.A.
ODOR DESCRIPTION	CHEMICAL	LOW BOILING POINT	118 °C
PH	N.A.	HIGH BOILING POINT	N.A.
WATER SOLUBILITY	N.A.	AUTO IGNITION TEMP	N.A.
FLAMMABILITY	N/A	DECOMPOSITION PT	N.A.
FLASH POINT SYMBOL	N.A.	EVAPORATION RATE	SLOWER THAN ETHER
FLASH POINT	77 °C	COEFFICIENT WATER/OIL	N.A.
VISCOSITY	N.A.		

10. STABILITY AND REACTIVITY

STABILITY	Material is stable at standard temperature and pressure.
INCOMPATIBLE MATERIALS:	Strong acids and isocyanates.
HAZARDOUS POLYMERIZATION:	Will not occur under normal conditions but under high temperatures in the presence of alkalis, tertiary amines, and metal compounds will accelerate polymerization. Possible evolution of carbon dioxide gas may rupture closed containers
DANGEROUS PRODUCTS OF DECOMPOSITION:	Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.
CONDITIONS TO AVOID	Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause liberation of carbon dioxide and buildup of pressure.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is available for this product:

0013463-67-7 TITANIUM DIOXIDE

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic

respiratory disease in humans at concentrations experienced in the workplace.

0014808-60-7 SILICA, CRYSTALLINE

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury. **WARNING:** This chemical is known to the State of California to cause cancer.

0014808-60-7 SILICA, CRYSTALLINE

Prolonged inhalation of respirable crystalline silica dust can result in lung

disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

ACUTE TOXICITY Oral : Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

SKIN CORROSION / IRRITATION Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact. Causes mild skin irritation

SERIOUS EYE DAMAGE / IRRITATION Causes irritation experienced as pain, with excess blinking and tear production, and as seen extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness. Causes serious eye irritation

RESPIRATORY OR SKIN SENSITIZATION No data available

GERM CELL MUTAGENICITY No data available.

CARCINOGENICITY Suspected of causing cancer.

REPRODUCTIVE TOXICITY Suspected of damaging fertility or the unborn child.

STOT-SINGLE EXPOSURE No data available

STOT-REPEATED EXPOSURE May cause damage to organs through prolonged or repeated exposure.

ASPIRATION HAZARD No data available.

12. ECOLOGICAL INFORMATION

TOXICITY: NO DATA AVAILABLE.

PERSISTENCE AND DEGRADABILITY: NO DATA AVAILABLE.

BIOACCUMULATIVE POTENTIAL: NO DATA AVAILABLE.

MOBILITY IN SOIL: NO DATA AVAILABLE.

OTHER ADVERSE EFFECTS: NO DATA AVAILABLE..

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

14. TRANSPORT INFORMATION

U.S. DOT INFORMATION: Not regulated.

IMDG INFORMATION: Not regulated.

IATA INFORMATION: Not regulated.

15. REGULATORY INFORMATION

CAS no. 0014808-60-7	SILICA, CRYSTALLINE	19% - 36%	DSL,SARA312,TSCA,CA_Prop65 - California Proposition 65
CAS no. 0013463-67-7	TITANIUM DIOXIDE	8% - 14%	DSL,SARA312,TSCA,CA_Prop65 - California Proposition 65
CAS no. 0022984-54-9	METHYLTRIS(METHYLET HYLKETOXIME)SILANE	5% - 12%	DSL,SARA312,VOC,TSCA
CAS no. 0000556-67-2	OCTAMETHYLCYCLOTET RASILO	1.9% - 4%	DSL,SARA312,TSCA
CAS no. 0000096-29-7	2-BUTANONE OXIME	Trace	DSL,SARA312,VOC,TSCA

15. REGULATORY INFORMATION

CAS no. 0014808-60-7	SILICA, CRYSTALLINE	19% - 36%	DSL,SARA312,TSCA,CA_Prop65 - California Proposition 65
CAS no. 0013463-67-7	TITANIUM DIOXIDE	8% - 14%	DSL,SARA312,TSCA,CA_Prop65 - California Proposition 65
CAS no. 0022984-54-9	METHYLTRIS(METHYLET HYLKETOXIME)SILANE	5% - 12%	DSL,SARA312,VOC,TSCA
CAS no. 0000556-67-2	OCTAMETHYLCYCLOTET RASILO	1.9% - 4%	DSL,SARA312,TSCA
CAS no. 0000096-29-7	2-BUTANONE OXIME	Trace	DSL,SARA312,VOC,TSCA