

1. IDENTIFICATION OF SUBSTANCE

PRODUCT FORM	Mixture
PRODUCT NAME	Rugged Coatings MaSI
SUPPLIER IDENTIFICATION	Rugged Coatings 3217 Messer Airport Hwy Birmingham, AL 35222
EMERGENCY TELEPHONE	(800) 424-9300 Chemtrec

2. HAZARD(S) IDENTIFICATION

GHS RATINGS:

Flam. Liq.	4	H227
Carc. 2	2	H351

GHS HAZARDS

GHS PRECAU	TIONS
H351	Suspected of causing cancer
H227	Combustible liquid

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GHS PRECAU	JTIONS
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P308+P313	If exposed or concerned: Get medical advice/attention
P370+P378	In case of fire: Use media other than water to extinguish.
P405	Store locked up.
P501	Dispose of contents/container in accordance with existing federal, state, and local environmental

LABEL ELEMENTS

PICTOGRAM



control laws.

SIGNAL WORD Warning

3. COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURES	
poly(dimethylsiloxane) CAS number: 9016-00-6	40 - 60%
silica, pyrogenic CAS number: 1129945-52-5	40 - 60%
titanium(IV) oxide CAS number: 13463-67-7	1 - 5%
butan-2-one 0,0',0"-(methylsilylidyne)trioxime CAS number: 22984-54-9	1 - 5%
3-aminopropyltrimethoxysilane CAS number: Proprietary	0.7 - 3%

4. FIRST-AID MEASURES

GENERAL INFO	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention.
INHALATION	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
SKIN CONTACT	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse skin with water/shower. Take off immediately all contaminated clothing.
EYE CONTACT	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
INGESTION	Call a poison center or a doctor if you feel unwell.





5. FIRE-FIGHTING MEASURES

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Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.		
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE			
Fire Hazard	Combustible liquid.		
Reactivity	The product is non-reactive under normal conditions of use, storage and transport.		
ADVICE FOR FIREFIGHTERS			
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel	Ventilate spillage area. No open flames, no sparks, and no smoking.		
For emergency responders	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
ENVIRONMENTAL PRECAUTIONS			
Avoid release to the environment.			
METHODS AND MATERIAL FOR CONTA	AINMENT AND CLEANING UP		
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Methods for cleaning up Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information Dispose of materials or solid residues at an authorized site.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Precautions for safe handling	Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.	
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product	
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES		
Storage conditions Store in a well-ventilated place. Store locked up.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME / CAS NO.	OSHA EXPOSURE LIMITS	ACGIH EXPOSURE LIMITS	OTHER EXPOSURE LIMITS
poly(dimethylsiloxane) (9016-00-6)	Not Established	Not Established	Not Established
Titanium dioxide (13463-67-7)	Not Established	10 mg/m3 TWA	Not Established
2-Butanone, 0,0',0"-(methylsilylidyne) trioxime 22984-54-9	Not Established	Not Established	Not Established
3-aminopropyltrimethoxysilane (13822-56-5)	Not Established	Not Established	Not Established
silica, pyrogenic (112945-52-5)	Not Established	Not Established	Not Established





EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS	Ensure good ventalation of the work station.
HAND PROTECTION	Wear protective gloves.
EYE PROTECTION	Chemical goggles or safety glasses.
SKIN & BODY PROTECTION	Wear suitable protective clothing
RESPITORY PROTECTION	In case of insufficient ventilation, wear suitable respiratory equipment.
ENVIROMENTAL EXPOSURE CONTROLS	Avoid release to the environment.
OTHER INFORMATION	do not eat, drink or smoke during use

9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Mixture contains one or more component(s) which have the following colour(s):Colourless Pure substance: white Unpurified: coloured White Yellow Colourless to light yellow
Odor	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Flash point:	>100°F
Density	~ 12.3 lb/gal

10. STABILITY AND REACTIVITY

REACTIVITY

The product is non-reactive under normal conditions of use, storage and transport.

CHEMICAL STABILITY

Stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use.

HAZARDOUS DECOMPOSITION PRODUCTS

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

CONDITIONS TO AVOID

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

11. TOXICOLOGICAL INFORMATION

POLY(DIMETHYLSILOXANE)	(9016-00-6)
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LD50 Oral Rat	> 5000 mg/kg (Rat, Literature Study)
TITANIUM(IV) OXIDE (1346	3-67-7)
LD50 Oral Rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)
LD50 Inhalation - Rat	> 6.8 mg/l/4h (Rat; Experimental value)
BUTAN-2-ONE 0,0',0"-(METHYLSILYLIDYNE)TRIOXIME (22984-54-9)	
LD50 Oral Rat	> 10000 mg/kg (Rat; OECD 425: Acute OralToxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal Rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value)





ATE US (oral)	>2463 mg/kg bodyweight
3-AMINOPROPYTRIMETHIXYSILANE (13822-56-5)	
LD50 Oral Rat	2.97 ml/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	11.3 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 inhalation - rat [ppm]	> 5 ppm (OECD 403: Acute Inhalation Toxicity, 6 h, Rat, Male, Read-across, Inhalation (vapours), 14 day(s))
SILICA, PYROGENIC (112945-52-5	
LD50 Oral Rat	3160 mg/kg (Rat)
LD50 dermel rabbit	>5000 mg/kg (Rabbit)
ATE US (oral)	> 3160 mg/kg bodyweight
TITANIUM(IV) OCXIDE (13463-67-7)	
IARC Group	2B - Possibly carinogenic to humans

12. ECOLOGICAL INFORMATION

TOXICITY

Ecology - General	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
POLY(DIMETHYLSILOXANE)) (9016-00-6)
LC50 - Fish [1]	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
TITANIUM(IV) OXIDE (1346	3-67-7)
EC50 Daphina 1]	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)
Threshold limit - Algae [1]	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
BUTAN-2-ONE 0,0',0"-(MET	HYLSILYLIDYNE)TRIOXIME (22984-54-9)
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Read-across)
EC50 - Daphina 1	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Readacross)
3-AMINOPROPYTRIMETHIX	YSILANE (13822-56-5)
LD50- Fish [1]	> 934mg/l (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
EC50 Daphina 1	331 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Readacross)
BIOACCUMULATIVE POTEN	TIAL
POLY(DIMETHYLSILOXANE)) (9016-00-6)
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)
Bioaccumulative potential	No straightforward conclusion can be drawn based upon the available numerical values.
BUTAN-2-ONE 0,0',0" - (MET	THYSSILYLIDYNE)TRIOXIME (22984-54-9)
BCF - Fish [1]	0.5 - 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Read-across)



Bioaccumulative potential

Partition coefficient n-octanol/water (Log Pow)

9.83 (Calculated, KOWWIN)

Low potential for bioaccumulation (BCF < 500).<



3-AMINOPROPYTRIMETHIXYSILANE (13822-56-5)

Partition coefficient n-octanol/water (Log Pow) 0.2 (QSAR, 20 °C)

Bioaccumulative potential Low potential for bioaccumulation (Log Kow <4)

MOBILITY SOIL

POLY(DIMETHYLSILOXANE) (9016-00-6)

Ecology - soil Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.

BUTAN-2-ONE 0,0',0" - (METHYSSILYLIDYNE)TRIOXIME (22984-54-9)

5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Log Koc

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste treatment methods

14. TRANSPORT INFORMATION

DOT REGULATED COMPONENTS

In accrodance with DOT. Not regulated for transport.

15. REGULATORY INFORMATION

NATIONAL REGULATIONS Acute health hazard, chronic health hazard.

TITANIUM(IV) OXIDE (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

CANADA REGULATIONS

(9016-00-6)

Listed on the Canadian DSL (Domestic Substances List)

(13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

3-AMINOPROPYLTRIMETHOXYSILANE (13822-56-5)

Listed on the Canadian DSL (Domestic Substances List)

(112945-52-5)

Listed on the Canadian DSL (Domestic Substances List)

NATIONAL REGULATIONS

(9016-00-6)

Not listed on the United States TCSA (Toxic Substances Control Act) Inventory

Listed on INSQ (Mexican National Inventory of Chemcial Substances)

(13463-67-7)

US STATE REGULATIONS

RUGGED COATINGS SILICONE MASTIC

U.S. - California - Proposition 65 - Carcinogens Yes toxicity

U.S. - California - Proposition 65 - Developmental





U.S. - California - Proposition 65 - Reproductive Toxicity - Female No

U.S. - California - Proposition 65 - Reproductive Toxicity - Male No

TITANIUM(IV) OXIDE (13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

16. OTHER INFORMATION

SAFETY DATA SHEET ISSUED BY PRODUCT SAFETY DEPARTMENT

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Rugged Coatings. The data on these sheets relates only to the specific material designated herein. Rugged Coatings assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.





