



Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Tropical - RX Roof Repair Premium Silicone Mastic

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS
1904 S.W. 31ST Ave.
HALLANDALE, FL 33009 - UNITED STATES
T 954-983-3434
technical@tropicalroofingproducts.com - www.tropicalroofingproducts.com

1.4. Emergency telephone number

Emergency number : 800-424-9300
Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226
Muta. 1B H340
Carc. 1B H350

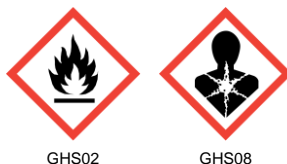
Full text of H-statements: see section 16

2.2. Label elements

GHS US labelling

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Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H226 - Flammable liquid and vapour.
H340 - May cause genetic defects.
H350 - May cause cancer.

Precautionary statements (GHS US) :

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.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards

2.4. Unknown acute toxicity (GHS US)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
poly(dimethylsiloxane)	(CAS-No.) 9016-00-6	30 – 40	Not classified
silica, pyrogenic	(CAS-No.) 112945-52-5	30 – 40	Not classified
Naphtha (petroleum), heavy alkylate; Low boiling point modified naphtha;	(CAS-No.) 64741-65-7	8 – 18	Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
titanium(IV) oxide	(CAS-No.) 13463-67-7	0 – 10	Carc. 2, H351
butan-2-one O,O',O''-(methylsilylidyne)trioxime	(CAS-No.) 22984-54-9	1 – 5	Flam. Liq. 4, H227
polyethylenes	(CAS-No.) 9002-88-4	1 – 5	Not classified
3-aminopropyltrimethoxysilane	(CAS-No.) 13822-56-5	1 – 3	Flam. Liq. 4, H227

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: 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.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after 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.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable liquid and vapour.
Reactivity	: Flammable liquid and vapour.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.

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

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tropical - RX Roof Repair Premium Silicone Mastic	
ACGIH	Not applicable
OSHA	Not applicable
poly(dimethylsiloxane) (9016-00-6)	
ACGIH	Not applicable
OSHA	Not applicable

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

titanium(IV) oxide (13463-67-7)		
ACGIH	ACGIH OEL TWA	10 mg/m ³ (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
OSHA	Not applicable	

butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)		
ACGIH	Not applicable	
OSHA	Not applicable	

3-aminopropyltrimethoxysilane (13822-56-5)		
ACGIH	Not applicable	
OSHA	Not applicable	

silica, pyrogenic (112945-52-5)		
ACGIH	Not applicable	
OSHA	Not applicable	

polyethylenes (9002-88-4)		
ACGIH	ACGIH OEL TWA	3 mg/m ³ (Particulates (insoluble or poorly soluble)(NOS); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
OSHA	Not applicable	

Naphtha (petroleum), heavy alkylate; Low boiling point modified naphtha; [A complex combination of hydrocarbons produced by distillation of the reaction products of isobutane with monoolefinic hydrocarbons usually ranging in carbon numbers from C3 to C5. It consists of predominantly branched chain saturated hydrocarbons having carbon numbers predominantly in the range of C9 through C12 and boiling in the range of approximately 150°C to 220°C (302°F to 428°F).] (64741-65-7)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses. Safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
	: No data available
	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 105 °F
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: ≈ 11.1 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: ≥ 10000 mm ² /s
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

poly(dimethylsiloxane) (9016-00-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study)
titanium(IV) oxide (13463-67-7)	
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)
LC50 Inhalation - Rat	> 6.8 mg/l/4h (Rat; Experimental value)
butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
LD50 oral rat	2463 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male/female, 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-aminopropyltrimethoxysilane (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))

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

silica, pyrogenic (112945-52-5)	
LD50 oral rat	3160 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	3160 mg/kg bodyweight

polyethylenes (9002-88-4)	
LD50 oral rat	> 2000 mg/kg (Rat)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects. Based on available data, the classification criteria are not met
Carcinogenicity	: May cause cancer.

titanium(IV) oxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

polyethylenes (9002-88-4)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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poly(dimethylsiloxane) (9016-00-6)	
LC50 - Fish [1]	> 10000 mg/l (96 h, <i>Salmo gairdneri</i> , Static system, Literature study)

titanium(IV) oxide (13463-67-7)	
EC50 - Crustacea [1]	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; <i>Daphnia magna</i> ; Static system; Fresh water; Weight of evidence)
Threshold limit - Algae [1]	61 mg/l (EC50; Other; 72 h; <i>Pseudokirchneriella subcapitata</i> ; Static system; Fresh water; Experimental value)

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, <i>Oryzias latipes</i> , Semi-static system, Fresh water, Read-across)
EC50 - Crustacea [1]	201 mg/l (OECD 202: <i>Daphnia</i> sp. Acute Immobilisation Test, 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Read-across)

3-aminopropyltrimethoxysilane (13822-56-5)	
LC50 - Fish [1]	> 934 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, <i>Danio rerio</i> , Semi-static system, Fresh water, Read-across, GLP)
EC50 - Crustacea [1]	331 mg/l (OECD 202: <i>Daphnia</i> sp. Acute Immobilisation Test, 48 h, <i>Daphnia magna</i> , Static system, Fresh water, Read-across, GLP)

12.2. Persistence and degradability

Tropical - RX Roof Repair Premium Silicone Mastic	
Persistence and degradability	Not established.

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

poly(dimethylsiloxane) (9016-00-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
titanium(IV) oxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
Persistence and degradability	Not readily biodegradable in water.
3-aminopropyltrimethoxysilane (13822-56-5)	
Persistence and degradability	Not readily biodegradable in water.
silica, pyrogenic (112945-52-5)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
polyethylenes (9002-88-4)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.

12.3. Bioaccumulative potential

Tropical - RX Roof Repair Premium Silicone Mastic	
Bioaccumulative potential	Not established.
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.
titanium(IV) oxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
butan-2-one O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
BCF - Fish [1]	0.5 – 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Read-across)
Partition coefficient n-octanol/water (Log Pow)	9.83 (Calculated, KOWWIN)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
3-aminopropyltrimethoxysilane (13822-56-5)	
Partition coefficient n-octanol/water (Log Pow)	0.2 (QSAR, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
silica, pyrogenic (112945-52-5)	
Bioaccumulative potential	Not bioaccumulative.
polyethylenes (9002-88-4)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in 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 O,O',O''-(methylsilyldiyl)trioxime (22984-54-9)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.
3-aminopropyltrimethoxysilane (13822-56-5)	
Ecology - soil	No (test)data on mobility of the substance available.

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

Effect on the ozone layer : No additional information available

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Flammable vapours may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Tropical - RX Roof Repair Premium Silicone Mastic

Not subject to reporting requirements of the United States SARA Section 313
Listed on the United States TSCA (Toxic Substances Control Act) inventory

polyethylenes (9002-88-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

15.2. International regulations

CANADA

(9016-00-6)

Listed on the Canadian DSL (Domestic Substances List)

(13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)

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)

EU-Regulations

No additional information available

Tropical - RX Roof Repair Premium Silicone Mastic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

(9016-00-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

(13463-67-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

butan-2-one O,O',O''-(methylsilylidyne)trioxime (22984-54-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

3-aminopropyltrimethoxysilane (13822-56-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

(112945-52-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

(13463-67-7)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H-statements:

H226	Flammable liquid and vapour.
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.

ZLF-PMS 364 CUSTOM TEMPLATE

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.