



**FLAMEMASTER**  
 Flamemaster Corp.  
 13576 Desmond Street  
 Pacoima, CA 91331 - USA

**SAFETY DATA SHEET**  
**APRIL 2015**

**File: CS5500AA GSA 7-10**  
**High Temperature Fuel**  
**Tank Sealant/Base**

**Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

1.1. Product Identifier: CS-5500 PT A CLASS A / BASE (ALL APPLICATION TIMES)  
 - Product Name: High Temperature Fuel Tank Sealant / Base compound Part-A  
 - Product reference: CS-5500 PT A CLASS A BASE COMPOUND

1.2. Product Use:  
 - HIGH TEMPERATURE FUEL TANK SEALANT COMPOUND

1.3. Manufacturer's Name:  
**CAGE Code: 14439**  
**Flamemaster Corp.**  
**Chem Seal Division**  
**13576 Desmond Street**  
**Pacoima, CA 91333 – USA**

1.3.1 Suppliers Name ( if not manufacturer )

Technical Contact:  
**Flamemaster Corp.**  
**Tel: 818-890-1401**  
**Fax: 818-890-6001**  
[www.flamemaster.com](http://www.flamemaster.com)

1.4. Emergency Telephone:  
 Chemtrec – Chemtrec International  
 800-424-9300 ( North America)  
 703-527-3887 (Outside North America))

**Specification: AMS3276/FMS1044/FMS3055**

**Base PT A**

**CLASS A (ALL)**

NSN:	8030-01-496-6811 CS5500A1/2 2.5 OZ	8030-00-312-6128 CS5500A1/2 6OZ.	8030-00-602-0107 CS5500A1/2 1/2 PINT	8030-01-395-5474 CS5500A1/2 PINT	
	8030-00-602-0049 CS5500A-2 6 OZ.	8030-00-602-0051 CS5500A-2 GALLON	8030-01-036-6936 CS5500A1/2 QUART		

## Section -2. HAZARD ( S ) IDENTIFICATION

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

### CLASSIFICATION OF THE MIXTURE:

SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION (UNBORN CHILD) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY(REPEATED EXPOSURE) - Category 2  
AQUATIC CHRONIC - CATEGORY 4

### GHS LABEL REQUIREMENTS

#### HAZARD PICTOGRAMS



**SIGNAL WORD : DANGER**

#### HAZARD STATEMENTS:

CAUSES SERIOUS EYE IRRITATION - (H319)  
CAUSES SKIN IRRITATION - (H315)  
SUSPECTED OF DAMAGING THE UNBORN CHILD - (H361d)  
SUSPECTED OF CAUSING CANCER - (H351)  
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE - (H373)  
MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE - (H413)

#### PRECAUTIONARY STATEMENTS:

- P101+P102+P103: If medical advice is needed, have product container or label at hand. Keep out of reach of children.
- Read label before use
- P202: Do not handle until all safety precautions have been read and understood
- P210: Keep away from heat/sparks/open flames and hot surfaces-No Smoking
- P240:Ground/bond container and receiving equipment
- P261+P262+P263+P264:Avoid breathing dust/fumes/gas/mist/vapours/spray.Do not get in eyes , on skin, or on clothing. Avoid contact during pregnancy/while nursing. Wash thoroughly after handling.
- P270+P271+P273: Do not eat drink or smoke when using this product. Use only outdoors or in a well ventilated area. Avoid release to the environment.
- P281+P280: Use personal protective equipment as required. Wear protective gloves/ protective clothing/ eye protection/face protection
- P301+P310+P331: If swallowed: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.
- P305+P351+P338+P315: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,if present and easy to do. Continue rinsing. Get immediate medical advice attention.
- P304+P340+P314: If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell
- P342+P340+P315: If experiencing respiratory symptoms: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
- P302+P352: If on skin (or in hair) : Wash with plenty of soap and water. If skin irritation occurs seek medical attention
- P306+P361: If on clothing: Remove/ take off immediately all contaminated clothing
- P402+P403+P404: Store in a dry place. Store in a well ventilated space. Store in a closed container.
- P233+P234+P235: Keep container tightly closed. Keep only in original container. Keep cool.

#### SUPPLEMENTAL LABEL ELEMENTS:

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of concentrations above recommended limits causes headaches, drowsiness and nausea and could lead to unconsciousness or possibly death.

1-component mixtures: formaldehyde is released during the curing phase. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause the skin to become sensitized.

Avoid any contact with skin or clothing and wash thoroughly after handling.

Emits toxic fumes when heated.

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HAZARDS NOT OTHERWISE CLASSIFIED:  
Prolonged or repeated exposure may dry skin and / or cause skin irritation.

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**Section -3. COMPOSITION / INFORMATION ON INGREDIENTS**

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**Chemical family** : Mixture of organic compounds

For the hazards of the composition, (SDS see Section 2).

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**GHS CLASSIFICATION:LIQUID POLYSULFIDE POLYMER // OSHA HAZARDS: TARGET ORGAN EFFECT,IRRITANT**

EYE IRRITATION (CATEGORY 2)

SKIN IRRITATION (CATEGORY 2)

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE-(CATEGORY 3)

AQUATIC, CHRONIC (CATEGORY 3)

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS): TOLUENE**

FLAMMABLE LIQUIDS (CATEGORY 2),H225

SKIN IRRITATION (CATEGORY 2),H315

REPRODUCTIVE TOXICITY (CATEGORY 2),H361

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE-(CATEGORY 3),CENTRAL NERVOUS SYSTEM,H336

SPECIFIC TARGET ORGAN TOXICITY-REPEATED EXPOSURE (CATEGORY 2),H373

ASPIRATION HAZARD (CATEGORY 1),H304

ACUTE AQUATIC TOXICITY (CATEGORY 2),H401

**2-BUTANONE**

OSHA HAZARDS: FLAMMABLE LIQUID, TARGET ORGAN EFFECT, IRRITANT

TARGET ORGANS: CENTRAL NERVOUS SYSTEM

GHS CLASSIFICATION: 2-BUTANONE

FLAMMABLE LIQUIDS (CATEGORY 2)

ACUTE TOXICITY, ORAL (CATEGORY 5)

EYE IRRITATION (CATEGORY 2A)

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY 3), CENTRAL NERVOUS SYSTEM

OTHER HAZARDS: REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS AND CRACKING

**PHENOLIC FORMALDEHYDE POLYMER: HAZARD INFORMATION**

PHYSICAL/CHEMICAL HAZARDS: CORROSIVE

HUMAN HEALTH HAZARDS: HARMFUL BY INHALATION, CORROSIVE TO THE EYES AND SKIN

ENVIRONMENTAL HAZARDS: TOXIC TO AQUATIC ORGANISMS

GHS CLASSIFICATION: PHENOLIC RESIN

ACUTE TOXICITY,ORAL (CATEGORY 4)

ACUTE TOXICITY,DERMAL (CATEGORY 4)

SKIN CORROSIVE (CATEGORY 1B)

EYE IRRITATION (CATEGORY 2)

SKIN IRRITATION (CATEGORY 2)

EYE DAMAGE (CATEGORY1)

AQUATIC CHRONIC (CATEGORY 2)

**CALCIUM CARBONATE:**

GHS CLASSIFICATION: CALCIUM CARBONATE

EYE DAMAGE (CATEGORY 1)

SKIN IRRITATION (CATEGORY 2)

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE-(CATEGORY 3)

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**TITANIUM DIOXIDE**

OSHA HAZARDS: CARCINOGEN

GHS CLASSIFICATION: TITANIUM DIOXIDE

SKIN IRRITATION: (CATEGORY 3)

CARCINOGENICITY (CATEGORY 2)

SUBSTANCE % by weight in the product	H&P STATEMENTS	CAS	EINECS/ELINCS
LIQUID POLYSULFIDE-POLYMER < 71%	H319,H335,H315,H412,H223, P210,P270,P305+P351+P338 +P313,P306+P361,P370+P260	N/A	POLYMER
TOLUENE (Methylbenzene) < 5%	H225,H304,H315,H319,H332,H336, H361,H371,H401, P210P260,P281,P301+P310,P305+ P351+ P338,P331	108-88-3	203-625-9
2-BUTANONE (MEK) <5%	H225,H303+H333,H319,H336,P210, P261,P305+P351+P338	78-93-3	201-159-0
PHENOLIC FORMALDEHYDE POLYMER <5%	H302,H312,H314,H315,H318,H319, H411,P102,P270,P305+P351+P338+ P315,P301+P313+P101	N/A	---
Titanium Dioxide <3%	H319,H335,H315,H332,H312,H302 H373,P305+P351+P313,P280+ P281,P262,P102,P280	13463-67-7	236-675-5
Calcium Carbonate <35%	H319 P305+P351+P313,P280	72608-12-9	207-439-9

**Section -4. FIRST-AID MEASURES**

**General:** When in doubt or symptoms persist, seek medical attention. Have Safety Data Sheet information available. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air, if breathing has stopped, administer artificial respiration. Give nothing by mouth, seek immediate medical attention.

**Eye contact:** Check for and remove any contact lenses. Irrigate with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek immediate medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleaners. Do NOT use aromatic solvents, thinners or petroleum products.

**Ingestion:** If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**Section -5. FIRE-FIGHTING MEASURES****Extinguishing agents**

**Recommended:** Universal resistant foam, CO<sub>2</sub>, water, powder.

**Agents to avoid:** None known

**Attention**

Promptly remove all persons in the event of a fire from the fire area. If safe to do so, remove all containers from fire area as well.

Fire will produce dense black smoke. Exposure to decomposition products may cause a Health Hazard. Fire fighters should wear self-contained breathing apparatus.

Water mist may be used to cool closed containers to prevent pressure build-up and possible auto-ignition and explosion when exposed to extreme heat.

Do not weld, flame cut or expose to extreme heat or ignition sources, empty containers which have contained flammable products.

Do not allow run-off from fire fighting to enter drains or water courses.

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**HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE:** CARBON DIOXIDE, CARBON MONOXIDE, HALOGENATED COMPOUNDS, AND METAL OXIDE / OXIDES, FORMALDEHYDE

### **Section -6. ACCIDENTAL RELEASE MEASURES**

Eliminate sources of ignition, ventilate the area. Avoid breathing vapors by using appropriate respiratory protective equipment. Refer to protective measures listed in sections 7 & 8.

Collect spill with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with local regulations (see section 13). Do not allow to enter drains or watercourses.

Clean-up with a detergent/ water mix ; avoid use of aromatic solvents. If the product enters drains or watercourses, inform authority with jurisdiction in accordance with state / local regulations.

### **Section -7. HANDLING AND STORAGE**

#### **7.1 Handling:**

No smoking, eating and drinking during handling.

Avoid exposure during pregnancy.

Keep containers tightly closed. Prior to movement containers which are opened should be carefully resealed.

Avoid skin and eye contact. Avoid inhalation in case of exposure to vapor and spray mist.

Handle and open containers with care to avoid spilling of contents. Never use pressure to empty; container is not a pressure vessel. Clean or discard contaminated clothing and shoes.

Preparation may charge electrostatically; always use grounding/ bonding/ earthing leads when transferring contents of containers. Operators should wear antistatic footwear and clothing, and floors should be electrically conductive.

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air, and avoid vapor concentration higher than the Occupational Exposure Limits.

Use in areas from which local sources of ignition have been excluded. Electrical equipment including lighting should be protected to the appropriate standard. Isolate from sources of heat, sparks and open flame. Non-sparking tools are recommended.

#### **7.2 Storage:**

Observe label precautions. Store between 32/F and 95/F ( 0/C and 35/C ) in a dry, clean and well ventilated place, away from sources of heat, ignition, and direct sunlight. For flash points below 23 °C store in an area constructed to the appropriate standard

### **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### **8.1 Engineering measures:**

Avoid the inhalation of vapors, spray mist and particulates. Achieve by local exhaust ventilation providing good general extraction as to keep air-borne concentration below the Occupational Exposure Limits (OEL).

If local / area ventilation is not sufficient to comply with OEL, suitable (NIOSH) respiratory protection to be provided. Always provide suitable (NIOSH) respiratory protection when sanding, grinding or otherwise abrading cured material.

#### **8.2 Exposure limits**

**Work place exposure limits ( 8 hour )**

<b>Substance</b>	<b>OSHA</b>	<b>ACGIH TWA</b>
ALIPHATIC POLYSULFIDE-POLYMER	Not known	Not known
TOLUENE (Methylbenzene)*	200 ppm	20 ppm
2-BUTANONE (MEK) *	200 ppm	200 ppm
PHENOLIC FORMALDEHYDE POLYMER *	N/E	N/E
CALCIUM CARBONATE *	5 mg/m <sup>3</sup> ( RESPIRABLE FRACTION)	3 mg/m <sup>3</sup> (RESPIRABLE FRACTION)
CALCIUM CARBONATE *	15mg/m <sup>3</sup> (TOTAL DUST)	10 mg/m <sup>3</sup> (TOTAL DUST)
TITANIUM DIOXIDE *	15mg/m <sup>3</sup> (TOTAL DUST)	10 mg/m <sup>3</sup> (TOTAL DUST)
* can be absorbed through skin		

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### 8.3 Personal protection

All Personal Protective Equipment, including Respiratory Protection, used to control exposure to hazardous substances must be selected to meet the requirements of OSHA Regulations.

#### Respiratory protection :

Appropriate respiratory protection equipment should be selected according to the type of contaminants, following regulatory (OSHA / NIOSH) and manufacturers instructions including proper fitting of devices.

#### Hand protection :

For prolonged or repeated contact, recommend gloves type: polyvinyl alcohol, nitrile rubber, latex rubber (some people may exhibit sensitivity to Latex). Barrier creams may help to protect exposed areas of the skin. However, they should not be applied post exposure.

#### Eye protection :

Use safety glasses with side shields to protect against splashes. Face shields may also be worn.

#### Skin protection :

Protective clothing made of antistatic and fire resistant fibers. All parts of the body should be washed after contact. Use good hygiene and industrial practices, keep working clothes clean.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| <ul style="list-style-type: none"><li>• Physical state at: 68 ° F (20 ° C) Liquid</li><li>• Flash point: 200 ° F (16.67 ° C) Method: TCC</li><li>• Specific gravity at: 68 ° F (20 ° C) 1.55 g/cm<sup>3</sup></li><li>• Vapor Density: N/A</li><li>• Lower Explosive Limit (% vol.): 1.3</li><li>• Upper Explosive Limit (% vol.): 11.5</li><li>• Miscibility in water at 20 ° C: Negligible</li><li>• VOC : 218 g/l</li></ul> | <ul style="list-style-type: none"><li>• Ph : 8.5</li><li>• Volatile by Volume % : 4</li><li>• Vapor pressure at: 68 ° F (20 ° C) 22 mm Hg</li><li>• Color: Grey</li><li>• Appearance: Paste</li><li>• Odor: Polysulfide Odor</li><li>• Boiling Point: 175-350° F</li><li>• Material Supports Combustion : Yes</li></ul> |
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## 10. STABILITY AND REACTIVITY

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Stable under recommended storage and handling conditions (see SDS section 7). In case of combustion, may produce hazardous decomposition products such as :

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|---|---|
| <ul style="list-style-type: none"><li>• Carbon Monoxide</li><li>• Sulfur Oxides</li><li>• Carbon Dioxide</li><li>• Formaldehyde</li></ul> | <ul style="list-style-type: none"><li>• Halogenated Compounds</li><li>• Oxides of Carbon, Nitrogen, Sulfur Dioxide, Trace Hydrogen Sulfide</li><li>• Metal Oxide / Oxides</li></ul> |
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## 11. TOXICOLOGICAL INFORMATION

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There are no data available on the preparation itself. See (SDS Sections 3 and 15) for details.

Exposure to component solvents vapors at concentrations in excess of the stated Occupational Exposure Limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms and signs of overexposure include headache, dizziness, fatigue, muscular weakness, drowsiness, reduced fetal weight, increase in fetal deaths, skeletal malformations, and in extreme cases loss of consciousness

Repeated or prolonged contact with the preparation may cause Defatting of the skin resulting in non-allergic dermatitis and absorption through the skin.

The liquid splashed in the eyes causes serious eye irritation and damage.

Irritating to mouth, throat and stomach. Ingestion causes reduced fetal weight, increased fetal deaths and skeletal malformations

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**ACUTE TOXICITY:**

PRODUCT:	RESULT	SPECIES	DOSE	EXPOSURE
Calcium Carbonate	LD50 ORAL	Rat	6450 mg/kg	-
Butanone	LC50 Inhalation Vapor	Rat	11243 ppm	4 Hours
	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 ORAL	Rat	2737 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 Hours
	LC50 Inhalation Vapor	Rat	8000 ppm	4 Hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 ORAL	Rat	636 mg/kg	-
Titanium Dioxide	LD50 ORAL	Rat	>10g/kg	-

May cause damage to organs through prolonged or repeated exposure.

Suspected of causing cancer. Risk depends on level and duration of exposure.

Suspected of damaging the unborn child.

**CARCINOGENICITY:**

INGREDIENT	IARC	OSHA	NTP	CAS#
TOLUENE :	3	-	-	108-88-3
TITANIUM DIOXIDE :	2B	-	-	13463-67-7

**SPECIFIC TARGET ORGAN TOXICITY-STOT (SINGLE EXPOSURE)**

BUTANONE - CATEGORY 3

LIQUID POLYMER - CATEGORY 3

TOLUENE - CATEGORY 3

LIQUID POLYMER - CATEGORY 3

**SPECIFIC TARGET ORGAN TOXICITY-STOT (REPEATED EXPOSURE)**

TOLUENE - CATEGORY 2

**TARGET ORGANS:** BRAIN, BLOOD, KIDNEYS, LUNGS, REPRODUCTIVE SYSTEM, LIVER, HEART, PERIPHERAL NERVOUS SYSTEM, GASTROINTESTINAL TRACT, UPPER RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS AND/OR CORNEA.

**ASPIRATION HAZARD:**

TOLUENE - CATEGORY 1

**12. ECOLOGICAL INFORMATION**

There is no data available on the preparation itself. Do not allow the product to enter drains or water ways. See (SDS Sections 3 and 15)

Toxicity :

Product / Ingredient	Result	Species	Exposure
Titanium Dioxide	Acute LC50>100mg/l Fresh Water	Daphnia	48 Hours

Persistence and Degradability :

Product / Ingredient	Aquatic Half Life	Photolysis	Biodegradability
Toluene	-	-	Readily

Bioaccumulative Potential :

Product / Ingredient	LogP(ow)	BCF	Potential
Butanone	.29	-	low
Toluene	2.73	8.32	low

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Mobility in Soil : Not Available

**13. DISPOSAL CONSIDERATIONS**

Recommended incineration or land fill as hazardous waste per Federal, State and local regulations.  
React with curing agent and dispose of as hazardous waste per Federal, State and local regulations. Recommended incineration or land fill.

**14. TRANSPORT INFORMATION**

DOT: Not regulated  
UN Number: Not regulated  
IATA: Not regulated  
IMDG/IMO: Not regulated  
NMFC: 4620 SUB.5 – CL.60  
Schedule B # 3506.91.0000

**15. REGULATORY INFORMATION**

**US Regulations Federal**

chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 (SARA)	Chemical Name	CAS No	Weight %	Threshold limit (Reporting Value)
	TOLUENE (Methylbenzene)	108-88-3	<5%	unknown
	LIQUID POLYMER	N/A	50%-71%	unknown
	2-BUTANONE	78-93-3	<5%	unknown
	PHENOLIC POLYMER	N/A	<5%	unknown
	Calcium Carbonate	72608-12-9	<35%	unknown
	Titanium Dioxide	*13463-67-7	< 3%	unknown
	*(DELETED CAS# 98084-96-9)			

SARA notifications must remain attached to this SDS. Any copies and /or distribution of this SDS must include all SARA notifications.

All remaining Constituents are non-hazardous per FED-STD-313 All Constituents are listed in TSCA inventory; complete mixture is excluded Per TSCA Par. 710.4 (d) 95 (6) (7) Constituents are not listed in TSCA 12b CORR. LIST

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**US Regulations State**

California Proposition 65 (Developmental – Female)	<b>TOLUENE</b>	108-88-3	5% - 12%	>= 1.0%
Massachusetts	<b>TOLUENE</b>	108-88-3	5% - 12%	>= 1.0%
New Jersey	<b>TOLUENE</b>	108-88-3	5% - 12%	>= 1.0%
Pennsylvania	<b>TOLUENE</b>	108-88-3	5% - 12%	>= 1.0%
Rhode Island	<b>TOLUENE</b>	108-88-3	5% - 12%	>= 1.0%
California Proposition 65 (Developmental – Female)	LIQUID POLYMER	N/A	50%-71%	>= 1.0%
	LIQUID POLYMER		50%-71%	
Massachusetts	LIQUID POLYMER	N/A	50%-71%	>= 1.0%
New Jersey	LIQUID POLYMER	N/A	50%-71%	>= 1.0%
Pennsylvania	LIQUID POLYMER	N/A	50%-71%	>= 1.0%
Rhode Island	LIQUID POLYMER	N/A	50%-71%	>= 1.0%
California Proposition 65 (Developmental – Female)	2-BUTANONE	78-93-3	<5%	>= 1.0%
Massachusetts	2-BUTANONE	78-93-3	<5%	>= 1.0%
New Jersey	2-BUTANONE	78-93-3	<5%	>= 1.0%
Pennsylvania	2-BUTANONE	78-93-3	<5%	>= 1.0%
Rhode Island	2-BUTANONE	78-93-3	<5%	>= 1.0%
California Proposition 65 (Developmental – Female)	PHENOLIC POLYMER	N/A	<5%	>= 1.0%
Massachusetts	PHENOLIC POLYMER	N/A	<5%	>= 1.0%
New Jersey	PHENOLIC POLYMER	N/A	<5%	>= 1.0%
Pennsylvania	PHENOLIC POLYMER	N/A	<5%	>= 1.0%
Rhode Island	PHENOLIC POLYMER	N/A	<5%	>= 1.0%
California Proposition 65 (Developmental – Female)	Calcium Carbonate	72608-12-9	<35%	>= 1.0%
Massachusetts	Calcium Carbonate	72608-12-9	<35%	>= 1.0%
New Jersey	Calcium Carbonate	72608-12-9	<35%	>= 1.0%
Pennsylvania	Calcium Carbonate	72608-12-9	<35%	>= 1.0%
Rhode Island	Calcium Carbonate	72608-12-9	<35%	>= 1.0%
California Proposition 65 (Developmental – Female)	Titanium Dioxide	13463-67-7	<3%	>= 1.0%
Massachusetts	Titanium Dioxide	13463-67-7	<3%	>= 1.0%
New Jersey	Titanium Dioxide	13463-67-7	<3%	>= 1.0%
Pennsylvania	Titanium Dioxide	13463-67-7	<3%	>= 1.0%
Rhode Island	Titanium Dioxide	13463-67-7	<3%	>= 1.0%

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**United States:** Sara 302/304 (Sara 304 RQ): Not Applicable

Information On Ingredients: None Were Found

Sara 311/312

Classification: Fire Hazard, Immediate (acute) Health Hazard, Delayed (chronic) Health Hazard

**Information On Ingredients:**

**Butanone:** Fire Hazard, Immediate (acute) Health Hazard

**Polysulfide Polymer:** Immediate (acute) Health Hazard

**Toluene:** Fire Hazard, Immediate (acute) Health Hazard, Delayed (chronic) Health Hazard

**Phenolic Formaldehyde Polymer:** Immediate (acute) Health Hazard

**Titanium Dioxide:** Delayed (chronic) Health Hazard

**Sudden Release Of Pressure:** No Products

**Reactivity:** No Products

Sara 313 Notification: \*

Toluene - Cas# 108-88-3 - 3-7% Concentration

\* Do not detach SARA 313 notifications from SDS. All copies of SDS must include SARA 313 notifications.

**California Prop. 65 : Warning**

This product contains a chemical or chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

Canada



**Class B – Flammable**  
**TOLUENE**  
2-BUTANONE



**Class D - Poisonous and Infectious materials Division 2: Materials Causing Other Toxic Effects D2A TOLUENE D2B TOLUENE**

Liquid Polysulfide Polymer CAS# N/A  
2-BUTANONE CAS#78-93-3  
PHENOLIC RESIN CAS# N/A  
Calcium Carbonate CAS# 72608-12-9  
Titanium Dioxide CAS# 13463-67-7

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

Listed National Pollutant Release Inventory (NPRI):TOLUENE CAS:108-88-3      Liquid Polysulfide Polymer cas#N/A  
2-BUTANONE CAS#78-93-3      PHENOLIC FORMALDEHYDE POLYMER CAS# N/A  
Calcium Carbonate CAS#72608-12-9      Titanium Dioxide CAS#13463-67-7

**16. OTHER INFORMATION**

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PPE	H

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0
PPE	H

Customer and / or end user is responsible for determining PPE

**NFPA**

**HMIS**

Preparer: Flamemaster / Compliance  
Rev-A 4/02/2015  
Supersedes (conversion)

Revision Notes: A

Conversion to ANSI format

Containers: plastic jars, metal cans  
cartridge kits

Limited Quantity      See SDS Section 14

Maximum container size 50 Gallons / 190 Liters

Notice to reader:

This SDS is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.

In all cases, the user must determine the applicability of all information and recommendations contained herein as well as the suitability of this product for their own particular needs or purposes.

This product may be hazardous and should always be used with care and discretion. Every effort has been made to describe all known hazards, but this in no way guarantees the above mentioned hazards are the only hazards present.

Flamemaster Corporation, its Affiliates and its Agents, shall in no way be held liable for any damages resulting from handling, using, storing, disposing of, or from contact with this product. User assumes all risk.

**End of Safety Data Sheet**

This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge.



**FLAMEMASTER**  
 Flamemaster Corp.  
 13576 Desmond Street  
 Pacoima, CA 91331 - USA

**SAFETY DATA SHEET**  
**APRIL 2015**

**File: CS5500BA GSA 07-10**  
**High Temperature Fuel Tank**  
**Sealant / Catalyst**

**Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

1.1. Product Identifier: CS-5500 Part B Class A All  
 - Product Name: High Temperature Fuel Tank Sealant / Catalyst Part B  
 - Product reference: CS-5500-B

1.2. Product Use:  
 - High Temperature Fuel Tank Sealant

1.3. Manufacturer's Name:  
**CAGE Code: 14439**  
 Flamemaster Corp.  
 Chem Seal Division  
 13576 Desmond Street  
 Pacoima, CA 91333 – USA

1.3.1 Suppliers Name ( if not manufacturer )

Technical Contact:  
 Flamemaster Corp.  
 Tel: 818-890-1401  
 Fax: 818-890-6001  
[www.flamemaster.com](http://www.flamemaster.com)

1.4. Emergency Telephone:  
 Chemtrec – Chemtrec International  
 800-424-9300 ( North America)  
 703-527-3887 (Outside North America))

**Specification: AMS 3276/FMS1044/FMS3055/MIL-S-83430      Catalyst /Part B      CLASS A All**

<b>NSN:</b>	8030-01-496-6811 CS5500A1/2 2.5 OZ	8030-00-312-6128 CS5500A1/2 6OZ.	8030-00-602-0107 CS5500A1/2 1/2 PINT	8030-01-395-5474 CS5500A1/2 PINT	
	8030-00-602-0049 CS5500A-2 6 OZ.	8030-00-602-0051 CS5500A-2 GALLON	8030-01-036-6936 CS5500A1/2 QUART		

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**Section -2. HAZARD ( S ) IDENTIFICATION**

ACUTE TOXICITY (ORAL) 4, H302

ACUTE TOXICITY (INHALATION) 4, H332

SKIN SENSITIZATION 1, H317

CARCINOGENICITY 2, H351

TOXIC TO REPRODUCTION (FERTILITY) 2, H361f

SPECIFIC TARGET ORGAN TOXICITY (STOT) REPEATED EXPOSURE 2, H373

AQUATIC CHRONIC 4, H413

**For A Complete List of H-Statements and Classifications See Section 16**

**OSHA / HCS STATUS :** THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

Human and Environmental Hazards:

Harmful by Inhalation and / or Swallowing

May Cause an Allergic Skin Reaction

Suspected of Damaging Fertility

Suspected of Causing Cancer

May Cause Damage to Organs through Prolonged or Repeated Exposure

May Cause long lasting harmful effects to aquatic life

**HAZARD PICTOGRAMS:**



**SIGNAL WORD:**

**WARNING**

**HAZARD STATEMENTS:**

Harmful by Inhalation and / or Swallowing

May Cause an Allergic Skin Reaction

Suspected of Damaging Fertility

Suspected of Causing Cancer

May Cause Damage to Organs through Prolonged or Repeated Exposure

Full text of P statements associated to this compound:

- P101+P102+P103: If medical advice is needed, have product container or label at hand. Keep out of reach of children.
- Read label before use
- P202: Do not handle until all safety precautions have been read and understood
- P210: Keep away from heat/sparks/open flames and hot surfaces-No Smoking
- P240:Ground/bond container and receiving equipment
- P261+P262+P263+P264:Avoid breathing dust/fumes/gas/mist/vapours/spray.Do not get in eyes , on skin, or on clothing. Avoid contact during pregnancy/while nursing. Wash thoroughly after handling.
- P270+P271+P273: Do not eat drink or smoke when using this product. Use only outdoors or in a well ventilated area. Avoid release to the environment.
- P281+P280: Use personal protective equipment as required. Wear protective gloves/ protective clothing/ eye protection/face protection
- P301+P310+P331: If swallowed: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.
- P305+P351+P338+P315: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses,if present and easy to do. Continue rinsing. Get immediate medical advice attention.
- P304+P340+P314: If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell
- P342+P340+P315: If experiencing respiratory symptoms: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
- P302+P352: If on skin: Wash with plenty of soap and water
- P306+P361: If on clothing: Remove/ take off immediately all contaminated clothing
- P402+P403+P404: Store in a dry place. Store in a well ventilated space. Store in a closed container.
- P233+P234+P235: Keep container tightly closed. Keep only in original container. Keep cool.

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**HAZARDS NOT OTHERWISE CLASSIFIED:** OXIDISING POTENTIAL: Contact with combustible material may result in fire. Keep away from combustible materials. This material increases the risk of fire and may aid in combustion.

**Section -3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Chemical family :** Mixture of organic compounds

For the hazards of the composition, ( SDS see Section 2).

<b>CHEMICAL NAME: MANGANESE DIOXIDE</b> OSHA HAZARDS: TARGET ORGAN EFFECT, TOXIC BY INHALATION TARGET ORGANS: NERVES, LUNGS GHS CLASSIFICATION: ACUTE TOXICITY, ORAL (CATEGORY 4) - H302 ACUTE TOXICITY, INHALATION (CATEGORY 4) - H332	CAS# 1313-13-9	EC# 215-202-6	<50% by weight
<b>CHEMICAL NAME: TERPHENYL, HYDROGENATED</b> AQUATIC CHRONIC (CATEGORY 4) - H413	CAS# 61788-32-7	EC# 262-967-7	<50% by weight
<b>CHEMICAL NAME: ZEOLITES</b> NOT CLASSIFIED	CAS# 1318-02-1	EC# 215-283-8	<10% by weight
<b>CHEMICAL NAME: TALC</b> NOT CLASSIFIED	CAS# 14807-96-6	EC# 238-877-9	<5% by weight
<b>CHEMICAL NAME: CARBON BLACK</b> NOT CLASSIFIED	CAS# 1333-86-4	EC# 215-609-9	<3% by weight
<b>CHEMICAL NAME: TERPHENYL</b> AQUATIC ACUTE (CATEGORY 1) - H400 AQUATIC CHRONIC (CATEGORY 1) - H410	CAS# 26140-60-3	EC# 247-477-3	<2% by weight
<b>CHEMICAL NAME: 1,3 DIPHENYLGUANIDINE</b> ACUTE TOXICITY (CATEGORY 4) - H302 SKIN IRRITATION (CATEGORY 2) - H315 EYE IRRITATION (CATEGORY 2) - H319 REPRODUCTIVE (CATEGORY 2) - H361f (FERTILITY) STOT-SINGLE EXPOSURE (CATEGORY 3) - H335 AQUATIC CHRONIC (CATEGORY 2) - H411	CAS# 102-06-7	EC# 203-002-1	<3% by weight
<b>CHEMICAL NAME: BIS(PIPERIDINOTHIOCARBONYL) TETRASULFIDE</b> SKIN SENSITIVITY (CATEGORY 1) - H317	CAS# 120-54-7	EC# 204-406-0	<3% by weight
<b>CHEMICAL NAME: POLYPHENYL, QUATER AND HIGHER</b>	CAS# 68956-74-1		<10% by weight
<b>MAGNESIUM CARBONATE</b>	CAS# 546-93-0		<10% by weight

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#### Section -4. FIRST-AID MEASURES

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**General:** When in doubt or symptoms persist, seek medical attention. Have Safety Data Sheet information available. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air, if breathing has stopped, administer artificial respiration. Give nothing by mouth, seek immediate medical attention.

**Eye contact:** Check for and remove any contact lenses. Irrigate with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek immediate medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleaners. Do NOT use aromatic solvents, thinners or petroleum products.

**Ingestion:** If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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#### Section -5. FIRE-FIGHTING MEASURES

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##### Extinguishing agents

**Recommended:** Universal resistant foam, CO<sub>2</sub>, water, powder.

**Agents to avoid:** None known

##### Attention

Fire will produce dense black smoke. Exposure to decomposition products may cause a Health Hazard. Fire fighters should wear self-contained breathing apparatus.

Water mist may be used to cool closed containers to prevent pressure build-up and possible auto-ignition and explosion when exposed to extreme heat.

Do not weld, flame cut or expose to extreme heat or ignition sources, empty containers which have contained flammable products.

Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous decomposition products include:** Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Sulfur Oxides  
Metal Oxide / Oxides

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#### Section -6. ACCIDENTAL RELEASE MEASURES

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Eliminate sources of ignition, ventilate the area. Avoid breathing vapors by using appropriate respiratory protective equipment. Refer to protective measures listed in sections 7 & 8.

Collect spill with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with local regulations (see section 13). Do not allow to enter drains or watercourses.

Clean-up with a detergent/ water mix ; avoid use of aromatic solvents. If the product enters drains or watercourses, inform authority with jurisdiction in accordance with state / local regulations.

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#### Section -7. HANDLING AND STORAGE

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##### 7.1 Handling:

No smoking, eating and drinking during handling.

Avoid exposure during pregnancy.

Keep containers tightly closed. Prior to movement containers which are opened should be carefully resealed.

Avoid skin and eye contact. Avoid inhalation in case of exposure to vapor and spray mist.

Handle and open containers with care to avoid spilling of contents. Never use pressure to empty; container is not a pressure vessel. Clean or discard contaminated clothing and shoes.

Preparation may charge electrostatically; always use grounding/ bonding/ earthing leads when transferring contents of containers. Operators should wear antistatic footwear and clothing, and floors should be electrically conductive.

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air, and avoid vapor concentration higher than the Occupational Exposure Limits.

Use in areas from which local sources of ignition have been excluded. Electrical equipment including lighting should be protected to the appropriate standard. Isolate from sources of heat, sparks and open flame. Non-sparking tools are recommended.

##### 7.2 Storage:

Observe label precautions. Store between 32/F and 95/F ( 0/C and 35/C ) in a dry, clean and well ventilated place, away from sources of heat, ignition, and direct sunlight. For flash points below 23 °C store in an area constructed to the appropriate standard

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### 8.1 Engineering measures:

Avoid the inhalation of vapors, spray mist and particulates. Achieve by local exhaust ventilation providing good general extraction as to keep air-borne concentration below the Occupational Exposure Limits (OEL).

If local / area ventilation is not sufficient to comply with OEL, suitable (NIOSH) respiratory protection to be provided. Always provide suitable (NIOSH) respiratory protection when sanding, grinding or otherwise abrading cured material.

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### 8.2 Exposure limits

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Work place exposure limits ( 8 hour )

Substance	ACGIH TLV
Manganese Dioxide	TWA: 0.1mg/m <sup>3</sup> (as Mn) 8 hours (Inhalable Fraction)
	TWA: 0.02mg/m <sup>3</sup> (as Mn) 8 hours (Respirable Fraction)
Terphenyl, Hydrogenated	TWA: 4.9 mg/m <sup>3</sup> 8 hours
	TWA: 0.5 ppm 8 hours
Zeolites	TWA: 1mg/m <sup>3</sup> 8 hours (Respirable Fraction)
Talc	TWA: 2mg/m <sup>3</sup> 8 hours (Respirable Fraction)
Carbon Black	TWA: 3mg/m <sup>3</sup> 8 hours ( Inhalable Fraction)
Terphenyl	C: 5mg/m <sup>3</sup>
	C: 0.53 ppm
MAGNESIUM CARBONATE	TWA: 5mg/m <sup>3</sup> (Respirable Fraction)
	TWA: 15 mg/m <sup>3</sup> 8 hours (Total Dust)

### 8.3 Personal protection

All Personal Protective Equipment, including Respiratory Protection, used to control exposure to hazardous substances must be selected to meet the requirements of OSHA Regulations.

#### Respiratory protection :

Appropriate respiratory protection equipment should be selected according to the type of contaminants, following regulatory (OSHA / NIOSH) and manufacturers instructions including proper fitting of devices.

#### Hand protection :

For prolonged or repeated contact, recommend gloves type: polyvinyl alcohol, nitrile rubber, latex rubber (some people may exhibit sensitivity to Latex). Barrier creams may help to protect exposed areas of the skin. However, they should not be applied post exposure.

#### Eye protection :

Use safety glasses with side shields to protect against splashes. Face shields may also be worn.

#### Skin protection :

Protective clothing made of antistatic and fire resistant fibers. All parts of the body should be washed after contact. Use good hygiene and industrial practices, keep working clothes clean.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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- Physical state at: 68 ° F (20 ° C) Liquid
  - Flash point: 200 ° F (93 ° C) Method: TCC
  - Specific gravity at: 68 ° F (20 ° C) 2.0
  - Vapor Density: N/A
  - Lower Explosive Limit (% vol.): N/A
  - Upper Explosive Limit (% vol.): N/A
  - Miscibility in water at 20 ° C: NEGLIGIBLE
  - Material Supports Combustion. : Yes
- Ph : 9.0
  - % VOLATILE BY VOLUME - 2.0
  - Vapor pressure at: 68 ° F (20 ° C) N/A
  - Color: BLACK
  - Appearance: PASTE
  - Odor: NEGLIGIBLE OILY ODOR
  - Boiling Point: Unknown

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**10. STABILITY AND REACTIVITY**

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Stable under recommended storage and handling conditions (see SDS section 7). In case of combustion, may produce hazardous decomposition products such as :

- Carbon monoxide
- Sulfur oxides
- Carbon Dioxide
- Oxides of nitrogen
- Metal Oxide / Oxides
- Manganese Compounds

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**11. TOXICOLOGICAL INFORMATION**

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There are no data available on the preparation itself. See (SDS Sections 3 and 15) for details.

Exposure to component solvents vapors at concentrations in excess of the stated Occupational Exposure Limits may result in adverse health

**ACUTE TOXICITY:**

PRODUCT:	RESULT	SPECIES	DOSE	EXPOSURE
Manganese Dioxide	LD50 ORAL	Rat	3478 mg/kg	-
Terphenyl,Hydrogenated	LD50 ORAL	Rat	17500 mg/kg	-
Zeolites	LD50 ORAL	Rat	>5 g/kg	-
Carbon Black	LD50 Dermal	Rabbit	>3 g/kg	-
	LD50 Oral	Rat	>15400mg/kg	-
Terphenyl	LD50 Oral	Rat	>1400 mg/kg	-
1, 3-Diphenylguanidine	LD50 Oral	Rat	323mg/kg	-
Magnesium Carbonate	LD50 Oral	Rat	8000mg/kg	

**Acute Toxicity Estimates:**

Oral: 1099.7 mg/kg

Inhalation (gases): 10532.1 ppm

Inhalation (vapors) : 25.75 mg/l

Inhalation (Dust and Mist): 3.511mg/l

**Specific Target Organ Toxicity (STOT)- Single Exposure**

1,3-Diphenylguanidine - (Category 3)

Zeolites - (Category 3)

Talc - (Category 3)

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Manganese Dioxide - (Category 2)

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**CARCINOGENICITY:**

INGREDIENT	IARC	OSHA	NTP
Zeolites	3	-	-
Carbon Black, Respirable Powder	2B	-	-

This Product is Harmful if Swallowed or Inhaled.

This Product also Causes Serious Eye Irritation.

This Product Causes Skin Irritation, Defatting of the Skin, and May Cause an Allergic Reaction.

**Target Organs:** lungs, skin, central nervous system, blood, kidneys, nervous system, liver, spleen, lymphatic system, cardiovascular system, upper respiratory tract, bone marrow, eye, lens, cornea

**Potential chronic health effects include the following:**

May cause damage to organs through prolonged or repeated exposure. May lead to defatting of the skin and / or irritation.

May lead to allergic reactions.

Suspected of causing cancer.

Suspected of damaging fertility

**12. ECOLOGICAL INFORMATION**

There is no data available on the preparation itself. Do not allow the product to enter drains or water ways. See (SDS Sections 3 and 15)

**Bioaccumulative Potential:**

Product	LogPow	BCF	Potential
1,3 Diphenylguanidine	1.69	19.95	Low
Bis(piperidinothiocarbonyl) tetrasulfide	2.8	16.98	Low

**Mobility in Soil:**

Not Available

**13. DISPOSAL CONSIDERATIONS**

Recommended incineration or land fill as hazardous waste per Federal, State and local regulations.

React with base and dispose of as hazardous waste per Federal, State and local regulations. Recommended incineration or land fill.

**14. TRANSPORT INFORMATION**

**DOT:** Not regulated

**UN Number:** Not regulated

**IATA:** Not regulated

**IMDG/IMO:** Not regulated

**NMFC:** 4620 SUB.5 – CL.60

**Schedule B #** 3506.91.0000

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**15. REGULATORY INFORMATION**

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**Other EU Regulations:**

1,3-Diphenylguanidine - Reproductive (Category 2) H361f (Fertility)

**SARA 311/312**

Classification: Immediate (acute) health hazard  
Delayed (chronic) health hazard

**Composition of Ingredients :**

**Manganese Dioxide : Immediate (acute) health hazard**  
**Delayed (chronic) health hazard**

**Zeolites : Immediate (acute) health hazard**

**Polyphenyls, quater and higher : Immediate (acute) health hazard**

**Talc : Immediate (acute) health hazard**

**Carbon Black : Fire Hazard**  
**Delayed (chronic) health hazard**

**Terphenyl : Immediate (acute) health hazard**

**1,3-Diphenylguanidine : Fire Hazard**  
**Immediate (acute) health hazard**  
**Delayed (chronic) health hazard**

**Bis(piperidinothiocarbonyl) : Fire Hazard**  
**tetrasulfide Immediate (acute) health hazard**

**US Regulations Federal**

chemical (s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 (SARA)	Chemical Name	CAS No	Weight %	Threshold limit (Reporting Value)
	Manganese Dioxide	1313-13-9	<65%	unknown

SARA notifications must remain attached to this SDS. Any copies and /or distribution of this SDS must include all SARA notifications.

All remaining Constituents are non-hazardous per FED-STD-313 All Constituents are listed in TSCA inventory; complete mixture is excluded Per TSCA Par. 710.4 (d) 95 (6) (7) Constituents are not listed in TSCA 12b CORR. LIST  
This sds is provided without any warranty expressed or implied regarding its correctness or suitability for specific situations. The conditions of handling,storage,use and disposal are beyond our control and may be beyond our knowledge.

**US Regulations State**

California Proposition 65 (Developmental – Female)	<b>MANGANESE DIOXIDE</b>	1313-13-9	< 65%	>=1.0%
Massachusetts	<b>MANGANESE DIOXIDE</b>	1313-13-9	< 65%	>=1.0%
New Jersey	<b>MANGANESE DIOXIDE</b>	1313-13-9	< 65%	>=1.0%
Pennsylvania	<b>MANGANESE DIOXIDE</b>	1313-13-9	<65%	>=1.0%
Rhode Island	<b>MANGANESE DIOXIDE</b>	1313-13-9	<65%	>=1.0%

**California Prop 65 Warning :**

This Product contains one or more ingredients known by the state of California to cause cancer.



materials Division 2: Materials Causing  
Other Toxic Effects:  
Manganese Dioxide CAS#1313-13-9

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR. Listed National Pollutant Release Inventory (NPRI):Manganese Dioxide cas#1313-13-9

HEALTH 3  
FLAMMABILITY 1  
REACTIVITY 1  
(OSHA) PPE G

HEALTH 3  
FLAMMABILITY 1  
REACTIVITY 1

Customer and / or end user is responsible  
for determining PPE

**NFPA**

**HMIS**

**Section 16 Other Information**

**Full Text of H Statements Associated with this Compound:**

- ACUTE TOXICITY (ORAL) 4, H302
- ACUTE TOXICITY (INHALATION) 4, H332
- SKIN SENSITIZATION 1, H317
- CARCINOGENICITY 2, H351
- TOXIC TO REPRODUCTION (FERTILITY) 2, H361f
- SPECIFIC TARGET ORGAN TOXICITY (STOT) REPEATED EXPOSURE 2, H373
- AQUATIC CHRONIC 4, H413

**Full Text of Classifications Associated with this Compound:**

- Acute Tox. 4, H302 : ACUTE TOXICITY (ORAL) - CATEGORY 4
- Acute Tox. 4, H332 : ACUTE TOXICITY (INHALATION) - CATEGORY 4
- Reproductive 2, H361f : TOXIC TO REPRODUCTION (FERTILITY) - CATEGORY 2
- Skin Sensitization 1, H317 : SKIN SENSITIZATION - CATEGORY 1
- STOT RE 2, H373 : SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - CATEGORY 2
- Carcinogenicity 2, H351 : CARCINOGENICITY - CATEGORY 2
- May Cause long lasting harmful effects to aquatic life - H413

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Preparer-Flamemaster/Compliance  
Rev A April 2015  
Supercedes(Conversion)

Revision Notes: A

Conversion to ANSI format

Containers: Plastic Jars, Metal Cans, Cartridge Kits

Maximum Container Size: 50 Gallons/190 Liters

END OF SAFETY DATA SHEET