

# SAFETY DATA SHEET MAY 2016

File: CS3213AB GSA 7-10 CORROSION INHIBITING SEALANT

Pacoima, CA 91331 - USA

| 1.1. Product Identifier: CS-3213 PART A CLASS B (TYPE 2) - Product Name: Corrosion Inhibiting Sealant / Base compound Part-A - Product reference: CS-3213 PT A CLASS B BASE COMPOUND  1.2. Product Use: - CORROSION INHIBITING SEALANT  1.3. Manufacturer's Name: CAGE Code: 14439 Flamemaster Corp. Chem Seal Division 13576 Desmond Street  Page image CA 91333 LISA |                                                | •                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------|
| - Product reference: CS-3213 PT A CLASS B BASE COMPOUND  1.2. Product Use: - CORROSION INHIBITING SEALANT  1.3. Manufacturer's Name: CAGE Code: 14439 Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                        | - Product Name: Corrosion Inhibiting Sealant / | Dana annual and Dank A                       |
| 1.2. Product Use: - CORROSION INHIBITING SEALANT  1.3. Manufacturer's Name: CAGE Code: 14439 Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                 |                                                | Base compound Part-A                         |
| - CORROSION INHIBITING SEALANT  1.3. Manufacturer's Name: CAGE Code: 14439 Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                                   | - Product reference: CS-3213 PT A CLASS B BAS  | E COMPOUND                                   |
| 1.3. Manufacturer's Name:  CAGE Code: 14439  Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                                                                 | 1.2. Product Use:                              |                                              |
| CAGE Code: 14439 Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                                                                                             | - CORROSION INHIBITING SEALANT                 |                                              |
| Flamemaster Corp. Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                                                                                                              | 1.3. Manufacturer's Name:                      | 1.3.1 Suppliers Name ( if not manufacturer ) |
| Chem Seal Division 13576 Desmond Street                                                                                                                                                                                                                                                                                                                                | CAGE Code: 14439                               |                                              |
| 13576 Desmond Street                                                                                                                                                                                                                                                                                                                                                   | Flamemaster Corp.                              |                                              |
|                                                                                                                                                                                                                                                                                                                                                                        | Chem Seal Division                             |                                              |
| Pagaima CA 01222 LICA                                                                                                                                                                                                                                                                                                                                                  | 13576 Desmond Street                           |                                              |
| Pacolilia, CA 91333 – USA                                                                                                                                                                                                                                                                                                                                              | Pacoima, CA 91333 – USA                        |                                              |
| Technical Contact: 1.4. Emergency Telephone:                                                                                                                                                                                                                                                                                                                           | Technical Contact:                             | 1.4. Emergency Telephone:                    |
| Flamemaster Corp. Chemtrec – Chemtrec International                                                                                                                                                                                                                                                                                                                    | Flamemaster Corp.                              | Chemtrec – Chemtrec International            |
| <b>Tel</b> : 818-890-1401 800-424-9300 ( North America )                                                                                                                                                                                                                                                                                                               | <b>Tel</b> : 818-890-1401                      | 800-424-9300 ( North America)                |
| <b>Fax:</b> 818-890-6001 703-527-3887 (Outside North America))                                                                                                                                                                                                                                                                                                         | Fax: 818-890-6001                              | 703-527-3887 (Outside North America))        |
| www.flamemaster.com_                                                                                                                                                                                                                                                                                                                                                   | www.flamemaster.com_                           |                                              |
| Specification STM 40-111/MIL-PRF-81733 Base PT A CLASS B                                                                                                                                                                                                                                                                                                               | Specification STM 40                           | -111/MIL-PRF-81733 Base PT A CLASS B         |

| Specification | STM 40-111/MIL-PRF-81733 |                    | Base PT A            | CLASS B          |                     |
|---------------|--------------------------|--------------------|----------------------|------------------|---------------------|
| NSN:          | 8030-01-184-0330         | 8030-01-196-1958   | 8030-01-124-7622     | 8030-00-009-5023 | 8030-00-008-7200    |
| INSIN.        | CS3213CLB-2 6OZ          | CS3213CLB-2 2.5OZ  | CS3213CLB-2 1/2 PT   | CS3213CLB-2 PT   | CS3213CLB-2 QT      |
|               | 8030-00-518-3439         | 8030-01-333-3953   | 8030-01-184-0328     | 8030-01-184-0329 | 8030-01-124-7622    |
|               | CS3213CLB-2 GALLON       | CS3213CLB-2 50 GAL | CS3213 CLB1/2 2.5 OZ | CS3213CLB1/2 6OZ | CS3213CLB1/2 1/2 PT |
|               | 8030-00-008-7198         | 8030-00-470-9154   | 8030-01-097-4519     | 8030-01-480-4270 |                     |
|               | CS3213CLB1/2 PT          | CS3213CLB1/2 QT    | CS3213CLB1/2 GALLON  | CS3213CLB PT     |                     |

# Section -2. HAZARD (S) IDENTIFICATION

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

#### **CLASSIFICATION OF THE MIXTURE:**

ASPIRATION HAZARD - (CATEGORY 1)
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (UNBORN CHILD) - Category 2

GHS LABEL REQUIREMENTS HAZARD PICTOGRAMS





**SIGNAL WORD: DANGER** 

#### **HAZARD STATEMENTS:**

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS - (H304) CAUSES SERIOUS EYE IRRITATION - (H319) CAUSES SKIN IRRITATION - (H315) SUSPECTED OF DAMAGING THE UNBORN CHILD - (H361d) SUSPECTED OF CAUSING CANCER - (H351)

# 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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The conditions of handling, storage, use and disposal are beyond our control and may be beyond our knowledge. Page 2 of 11

#### HAZARDS NOT OTHERWISE CLASSIFIED:

Prolonged or repeated exposure may dry skin and / or cause skin irritation.

Sanding and grinding dust may be harmful if inhaled. Sanding and grinding dust may form combustible concentrations in air.

In the event of sanding, grinding, or abrading:

H372 Causes damage to organs through prolonged or repeated exposure.

# Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical family: Mixture of organic compounds

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

# 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)

#### FORMALDEHYDE. POLYMER WITH METHYLPHENOL AND PHENOL:

NOT A CLASSIFIED SUBSTANCE OR MIXTURE BY GHS-US

#### **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

## 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

# **CALCIUM CARBONATE:**

GHS CLASSIFICATION: CALCIUM CARBONATE

EYE DAMAGE (CATEGORY 1)

SKIN IRRITATION (CATEGORY 2)

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

## **TITANIUM DIOXIDE**

OSHA HAZARDS: CARCINOGEN

GHS CLASSIFICATION: TITANIUM DIOXIDE

SKIN IRRITATION: (CATEGORY 3) CARCINOGENICITY (CATEGORY 2)

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| SUBSTANCE                        | H&P STATEMENTS                                                                                        | CAS        | EINECS/ELINCS |
|----------------------------------|-------------------------------------------------------------------------------------------------------|------------|---------------|
| % by weight in the product       |                                                                                                       |            |               |
| LIQUID POLYSULFIDE-POLYMER < 71% | H319,H335,H315,H412,<br>P210,P270,P305+P351+P338<br>+P313,P306+P361,P370+P260                         | N/A        | POLYMER       |
| 2-BUTANONE (MEK) <2%             | H225,H303+H333,H319,H336,P210, P261,P305+P351+P338                                                    | 78-93-3    | 201-159-0     |
| TOLUENE (Methylbenzene) < 3%     | H225,H304,H315,H319,H332,H336,<br>H361,H371,H401,<br>P210P260,P281,P301+P310,P305+ P351+<br>P338,P331 | 108-88-3   | 203-625-9     |
| Titanium Dioxide < 10%           | H319,H335,H315,H332,H312,H302<br>H373,P305+P351+P313,P280+<br>P281,P262,P102,P280                     | 13463-67-7 | 236-675-5     |
| Calcium Carbonate <45%           | 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:** Remove any contact lenses if present and easy to do. Irrigate with clean, fresh water for at least 15 minutes, holding the eye lids apart, and 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.

May be fatal if swallowed or vomited and enters lungs and/or airways. Never give anything by mouth to an unconscious person.

# Section -5. FIRE-FIGHTING MEASURES

## **Extinguishing agents**

Recommended: Universal resistant foam, CO2, 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.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

In case of inhalation of decomposition products released in a fire, symptoms may be delayed. Exposed persons may need to be kept under medical surveillance for at least 48 hours.

**HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE:** CARBON DIOXIDE, CARBON MONOXIDE, HALOGENATED COMPOUNDS, METAL OXIDE / OXIDES, FORMALDEHYDE, SULFUR OXIDES, UNIDENTIFIED ORGANIC COMPOUNDS.

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## **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.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

# Section -7. HANDLING AND STORAGE

#### 7.1 Handling:

No smoking, eating and drinking during handling. Wash hands and face before eating, drinking, or smoking.

Avoid exposure during pregnancy/while nursing.

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)

| Substance                      | OSHA                           | ACGIH TWA                     |
|--------------------------------|--------------------------------|-------------------------------|
| 2-BUTANONE (MEK) *             | 200 ppm                        | 200 ppm                       |
| ALIPHATIC POLYSULFIDE-POLYMER  | Not known                      | Not known                     |
| TOLUENE (Methylbenzene)*       | 200 ppm                        | 20 ppm                        |
| CALCIUM CARBONATE *            | 5 mg/m³ ( RESPIRABLE FRACTION) | 3 mg/m³ (RESPIRABLE FRACTION) |
| CALCIUM CARBONATE *            | 15mg/m³ (TOTAL DUST)           | 10 mg/m³ (TOTAL DUST)         |
| TITANIUM DIOXIDE *             | 15mg/m³ (TOTAL DUST)           | 10 mg/m³ (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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

• Physical state at: 68 º F (20 º C) Liquid

• Flash point: 200 ° F (93 ° C) Method: TCC

• Specific gravity at: 68 ° F (20 ° C) 1.52

• Vapor Density: NIL

• Lower Explosive Limit (% vol.): N/A

• Upper Explosive Limit '(% vol.): N/A

• Miscibility in water at 20 º C: NEGLIGIBLE

• VOC: 16 g/l

• Ph: 8.5

• Volatile by VOLUME: 2%

• Vapor pressure at: 68 ° F (20 ° C) NIL

• Color: White

• Appearance: PASTE

• Odor: Polysulfide Odor

• Boiling Point: Unknown

• Material Supports Combustion: Yes

## 10. STABILITY AND REACTIVITY

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

• Carbon Monoxide

• Halogenated Compounds

• Sulfur Oxides

• Oxides of Carbon, Nitrogen, Sulfur Dioxide, Trace Hydrogen Sulfide

• Carbon Dioxide

• Metal Oxide / Oxides

Formaldehyde

• Smoke • Unidentified Organic Compounds

In case of inhalation of decomposition products released in a fire, symptoms may be delayed. Exposed persons may need to be kept under medical surveillance for at least 48 hours.

## 11. TOXICOLOGICAL INFORMATION

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

Formaldehyde is released during curing.

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## **ACUTE TOXICITY:**

| PRODUCT:          | RESULT                | SPECIES | DOSE       | EXPOSURE |
|-------------------|-----------------------|---------|------------|----------|
| Butanone          | LC50 Inhalation Vapor | Rat     | 11243 ppm  | 4 Hours  |
|                   | LD50 Dermal           | Rabbit  | 6480 mg/kg | -        |
|                   | LD50 ORAL             | Rat     | 2737 mg/kg | -        |
| Calcium Carbonate | LD50 ORAL             | Rat     | 6450 mg/kg | -        |
| Toluene           | LC50 Inhalation Vapor | Rat     | 49 g/m³    | 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)

**LIQUID POLYMER - CATEGORY 3** 

TOLUENE - CATEGORY 3
BUTANONE - 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)

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

# Toxicity:

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

# Persistance and Degradability:

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

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# **Bioaccumulative Potential:**

| Product / Ingredient | LogP(ow) | BCF  | Potential |
|----------------------|----------|------|-----------|
| Toluene              | 2.73     | 8.32 | low       |
| Butanone             | .29      | -    | 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 curing agent and dispose of as hazardous waste per Federal, State and local regulations. Recommended incineration or land fill.

Empty containers and/or liners may contain material residue. Empty contaminated packagings thoroughly. Dispose in accordance with all Federal, State, and local health and environmental regulations.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

# **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    | Chemical Name     | CAS No             | Weight % | Threshold limit   |
| requirements of section 313 of Title III |                   |                    |          | (Reporting Value) |
| and of 40 CFR 372 (SARA)                 | !                 |                    |          |                   |
|                                          | TOLUENE           | 108-88-3           | <3%      | Unknown           |
| į<br>                                    | (Methylbenzene)   | ľ                  |          |                   |
|                                          | 2-BUTANONE        | 78-93-3            | <2%      | unknown           |
| ¦<br>                                    |                   |                    |          | ļ                 |
|                                          | LIQUID POLYMER    | N/A                | <70%     | Unknown           |
|                                          | Calcium Carbonate | 72608-12-9         | <45%     | Unknown           |
|                                          | Titanium Dioxide  | *13463-67-7        | < 10%    | Unknown           |
| <u> </u>                                 | *(DELE            | TED 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** 

| ulations State_           |                    |            |      |          |
|---------------------------|--------------------|------------|------|----------|
| California Proposition 65 | TOLUENE            | 108-88-3   | <3%  | >= 1.0%  |
| (Developmental – Female)  |                    | 100 00 3   |      | 2.070    |
| Massachusetts             | TOLUENE            | 108-88-3   | <3%  | >= 1.0%  |
| New Jersey                | TOLUENE            | 108-88-3   | <3%  | >= 1.0%  |
| Pennsylvania              | TOLUENE            | 108-88-3   | <3%  | >= 1.0%  |
| Rhode Island              | TOLUENE            | 108-88-3   | <3%  | >= 1.0%  |
| California Proposition 65 | 2-BUTANONE         | 78-93-3    | <2%  | >= 1.0%  |
| (Developmental – Female)  | <br> <br>          |            |      |          |
| Massachusetts             | 2-BUTANONE         | 78-93-3    | <2%  | >= 1.0%  |
| New Jersey                | 2-BUTANONE         | 78-93-3    | <2%  | >= 1.0%  |
| Pennsylvania              | 2-BUTANONE         | 78-93-3    | <2%  | >= 1.0%  |
| Rhode Island              | 2-BUTANONE         | 78-93-3    | <2%  | >= 1.0%  |
| California Proposition 65 | LIQUID POLYMER     | N/A        | <70% | >= 1.0%  |
| (Developmental – Female)  |                    |            |      | >= 1.0%  |
| Massachusetts             | LIQUID POLYMER     | N/A        | <70% | >= 1.0%  |
| New Jersey                | LIQUID POLYMER     | N/A        | <70% | >= 1.0%  |
| Pennsylvania              | LIQUID POLYMER     | N/A        | <70% | >= 1.0%  |
| Rhode Island              | LIQUID POLYMER     | N/A        | <70% | >= 1.0%  |
| California Proposition 65 | Calcium Carbonate  | 72608-12-9 | <45% | >= 1.0%  |
| (Developmental – Female)  | i<br> <br> -<br> - |            |      | >= 1.070 |
| Massachusetts             | Calcium Carbonate  | 72608-12-9 | <45% | >= 1.0%  |
| New Jersey                | Calcium Carbonate  | 72608-12-9 | <45% | >= 1.0%  |
| Pennsylvania              | Calcium Carbonate  | 72608-12-9 | <45% | >= 1.0%  |
| Rhode Island              | Calcium Carbonate  | 72608-12-9 | <45% | >= 1.0%  |
| California Proposition 65 | Titanium Dioxide   | 13463-67-7 | <10% | >= 1.0%  |
| (Developmental – Female)  |                    |            | <10% | /- 1.U/U |
| Massachusetts             | Titanium Dioxide   | 13463-67-7 | <10% | >= 1.0%  |
| New Jersey                | Titanium Dioxide   | 13463-67-7 | <10% | >= 1.0%  |
| Pennsylvania              | Titanium Dioxide   | 13463-67-7 | <10% | >= 1.0%  |
| Rhode Island              | Titanium Dioxide   | 13463-67-7 | <10% | >= 1.0%  |
|                           |                    |            |      |          |

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

Information On Ingredients: None Were Found

Sara 311/312

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

**Information On Ingredients:** 

Polysulfide Polymer: Immediate (acute) Health Hazard

Butanone: Fire Hazard, Immediate (acute) Health Hazard

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

Titanium Dioxide: Delayed (chronic) Health Hazard

Sudden Release Of Pressure: No Products

Reactivity: No Products

## 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 CAS# 108-88-3

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

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

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

# **16. OTHER INFORMATION**

| HEALTH       | 2 |  |
|--------------|---|--|
| FLAMMABILITY | 0 |  |
| REACTIVITY   | 0 |  |
|              |   |  |

| HEALTH       | 2 |  |
|--------------|---|--|
| FLAMMABILITY | 0 |  |
| REACTIVITY   | 0 |  |
|              |   |  |

Customer and / or end user is responsible for determining PPE.

NFPA HMIS

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Preparer:

Flamemaster / Compliance
Rev-A 6/02/2015
Supersedes (conversion)

Containers:

Preparer:

Revision Notes: A

Conversion to ANSI format
Revision Notes: A

Conversion to ANSI format

Conversion to ANSI format

Conversion to ANSI format

Revision Notes: A

Conversion to ANSI format

Conversion to ANSI format

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** 



# SAFETY DATA SHEET MAY 2016

File: CS3213BB GSA 07-10 CORROSION INHIBITING SEALANT-CATALYST

Pacoima, CA 91331 - USA

| Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION     | DN                                           |
|-------------------------------------------------------------|----------------------------------------------|
| 1.1. Product Identifier: CS-3213 Part B Class B             |                                              |
| - Product Name: Corrosion Inhibiting Sealant / Catalyst Par | t B                                          |
| - Product reference: CS-3213-B                              |                                              |
| 1.2. Product Use:                                           |                                              |
| - Corrosion Inhibiting Sealant                              |                                              |
| 1.3. Manufacturer's Name:                                   | 1.3.1 Suppliers Name ( if not manufacturer ) |
| CAGE Code: 14439                                            |                                              |
| Flamemaster Corp.                                           |                                              |
| Chem Seal Division                                          |                                              |
| 13576 Desmond Street                                        |                                              |
| Pacoima, CA 91333 – USA                                     |                                              |
| Technical Contact:                                          | 1.4. Emergency Telephone:                    |
| Flamemaster Corp.                                           | Chemtrec – Chemtrec International            |
| <b>Tel</b> : 818-890-1401                                   | 800-424-9300 ( North America)                |

Fax: 818-890-6001 703-527-3887 (Outside North America))

www.flamemaster.com

STA 40 414 (AML DEF 81733

|   | Specification | STM 4              | 0-111/MIL-PRF-81   | .733 C               | ATALYST PART B   | CLASS B             |
|---|---------------|--------------------|--------------------|----------------------|------------------|---------------------|
|   | NICNI.        | 8030-01-184-0330   | 8030-01-196-1958   | 8030-01-124-7622     | 8030-00-009-5023 | 8030-00-008-7200    |
|   | NSN:          | CS3213CLB-2 6OZ    | CS3213CLB-2 2.5OZ  | CS3213CLB-2 1/2 PT   | CS3213CLB-2 PT   | CS3213CLB-2 QT      |
| Г |               | 8030-00-518-3439   | 8030-01-333-3953   | 8030-01-184-0328     | 8030-01-184-0329 | 8030-01-124-7622    |
|   |               | CS3213CLB-2 GALLON | CS3213CLB-2 50 GAL | CS3213 CLB1/2 2.5 OZ | CS3213CLB1/2 6OZ | CS3213CLB1/2 1/2 PT |
| Г | <u> </u>      | 8030-00-008-7198   | 8030-00-470-9154   | 8030-01-097-4519     | 8030-01-480-4270 |                     |
|   |               | CS3213CLB1/2 PT    | CS3213CLB1/2 QT    | CS3213CLB1/2 GALLON  | CS3213CLB PT     |                     |

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# Section -2. HAZARD (S) IDENTIFICATION

**ASPIRATION HAZARD - (CATEGORY 1)** 

**ACUTE TOXICITY (ORAL) - CATEGORY 4** 

**ACUTE TOXICITY (INHALATION) - CATEGORY 4** 

SKIN CORROSION / IRRITATION - CATEGORY 2

SERIOUS EYE DAMAGE / EYE IRRITATION - CATEGORY 2

SKIN SENSITIZATION - CATEGORY 1

**GERM CELL MUTAGENICITY - CATEGORY 1B** 

**CARCINOGENICITY - CATEGORY 1A** 

TOXIC TO REPRODUCTION (FERTILITY) - CATEGORY 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - STOT SE - (RESPIRATORY TRACT IRRITATION) - CATEGORY 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - STOT RE - CATEGORY 2

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

Human and Environmental Hazards:

## **HAZARD STATEMENTS:**

May Be Fatal if Swallowed and Enters Airways
Harmful by Inhalation and / or Swallowing
Causes Serious Eye Irritation
Causes Skin Irritation
May Cause An Allergic Skin Reaction
May Cause Genetic Defects
Suspected of Causing Cancer
Suspected of Damaging Fertility
May Cause Respiratory Irritation
May Cause Damage to Organs Through Prolonged or Repeated Exposure

HAZARD PICTOGRAMS:





**DANGER** 

SIGNAL WORD:

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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.

**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. Sanding and grinding dust may be harmful if inhaled. Sanding and grinding dust may form combustible concentrations in air.

## Other Hazards that do not result in classification:

Prolonged or repeated exposure may dry skin and / or cause irritation

In the event of sanding, grinding, or abrading:

**NOT CLASSIFIED** 

H372 Causes damage to organs through prolonged or repeated exposure.

# Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical family: Mixture of organic compounds For the hazards of the composition, (SDS see Section 2). **CHEMICAL NAME: MANGANESE DIOXIDE** CAS# 1313-13-9 EC# 215-202-6 <65% by weight 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 CHEMICAL NAME: TERPHENYL, HYDROGENATED CAS# 61788-32-7 EC# 262-967-7 <50% by weight AQUATIC CHRONIC (CATEGORY 4) - H413 **CHEMICAL NAME: ZEOLITES** CAS#1318-02-1 EC# 215-283-8 <15% by weight

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**CHEMICAL NAME: MAGNESIUM CHROMATE** 

ACUTE TOXICITY, ORAL (CATEGORY 3), H301 CARCINOGEN, (CATEGORY 1A) H350I

CARCINOGEN, (CATEGORY 1A) H350

SKIN CORROSIVE, (CATEGORY 1A) H314

EYE DAMAGE, (CATEGORY 1) H314

AQUATIC ACUTE, (CATEGORY 1) H400

AQUATIC CHRONIC, (CATEGORY 1) H410

**CHEMICAL NAME: TERPHENYL** 

CAS# 26140-60-3

EC# 247-477-3

EC# 236-540-0

<10% by weight

<40% by weight

AQUATIC ACUTE (CATEGORY 1) - H400

AQUATIC CHRONIC (CATEGORY 1) - H410

**CHEMICAL NAME: 1,3 DIPHENYLGUANIDINE** 

CAS# 102-06-7

Cas# 13423-61-5

EC# 203-002-1

<3% by weight

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

CHEMICAL NAME: BIS(PIPERIDINOTHIOCARBONYL) TETRASULFIDE

CAS# 120-54-7

EC# 204-406-0

<3% by weight

SKIN SENSITIVITY (CATEGORY 1) - H317

CHEMICAL NAME: POLYPHENYL, QUATER AND HIGHER

CAS# 68956-74-1

<10% by weight

## 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: Irrigate with clean, fresh water for at least 15 minutes, holding the eyelids apart, and seek 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.

May be fatal if swallowed or vomited and enters lungs and/or airways. Never give anything by mouth to an unconscious person.

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# Section -5. FIRE-FIGHTING MEASURES

## **Extinguishing agents**

**Recommended:** Universal resistant foam, CO2, 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.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

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

If exposed to hazardous decomposition products, symptoms may be delayed. Patient may require medical surveillance for up to 48 hours.

# 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/while nursing.

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

# 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.

| · ·                     | xposure limits  Work place exposure limits ( 8 hour )      |  |  |  |
|-------------------------|------------------------------------------------------------|--|--|--|
| Substance               | ACGIH TLV / OSHA PEL                                       |  |  |  |
| Manganese Dioxide       | TWA: 0.1mg/m³ (as Mn) 8 hours (Inhalable Fraction) ACGIH   |  |  |  |
|                         | TWA: 0.02mg/m³ (as Mn) 8 hours (Respirable Fraction) ACGII |  |  |  |
|                         | CEIL: 5mg/m³ OSHA PEL                                      |  |  |  |
| Terphenyl, Hydrogenated | TWA: 4.9 mg/m <sup>3</sup> 8 hours - ACGIH                 |  |  |  |
|                         | TWA: 0.5 ppm 8 hours - ACGIH                               |  |  |  |
| Zeolites                | TWA: 1mg/m³ 8 hours (Respirable Fraction) - ACGIF          |  |  |  |
| Terphenyl               | C: 5mg/m³ - ACGIH                                          |  |  |  |
|                         | C: 0.53 ppm - ACGIH                                        |  |  |  |
|                         | CEIL: 9 mg/m³ - OSHA PEL                                   |  |  |  |
|                         | CEIL : 1 ppm - OSHA PEI                                    |  |  |  |
| Magnesium Chromate      | TWA: 0.05 mg/m³ (measured as Cr) 8 hours (Soluble) - ACGI  |  |  |  |
|                         | CEIL: 1 mg/10 m³ OSHA PEL Z2                               |  |  |  |
|                         | TWA: 0.005mg/m³ (asCr) 8 hours - OSHA PE                   |  |  |  |

# 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.

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# 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.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state at: 68 º F (20 º C) Liquid
Flash point: 200 ° F (93 ° C) Method: TCC

• Specific gravity at: 68 ° F (20 ° C) N/A

• Vapor Density: N/A

Lower Explosive Limit (% vol.): N/A
Upper Explosive Limit '(% vol.): N/A

 $\bullet$  Miscibility in water at 20  ${\tt o}$  C: NEGLIGIBLE

• Material Supports Combustion. : Yes

• Ph : N/A

•% VOLATILE BY VOLUME - N/A

• Vapor pressure at: 68 º F (20 º C) N/A

• Color: BLACK

• Appearance: PASTE

• Odor: NEGLIGIBLE OILY ODOR

• Smoke

• Boiling Point: N/A

## 10. STABILITY AND REACTIVITY

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

Carbon monoxide

Oxides of nitrogenMetal Oxide / Oxides

Sulfur oxidesCarbon Dioxide

• Manganese Compounds

In case of inhalation of decomposition products released in a fire, symptoms may be delayed. Exposed persons may need to be kept under medical surveillance for at least 48 hours.

#### 11. TOXICOLOGICAL INFORMATION

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     | -        |
| Terphenyl               | LD50 Oral | Rat     | >1400 mg/kg | -        |
| 1, 3-Diphenylguanidine  | LD50 Oral | Rat     | 323mg/kg    | -        |

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## **CARCINOGENICITY:**

| INGREDIENT         | IARC | OSHA | NTP                            |
|--------------------|------|------|--------------------------------|
| Magnesium Chromate | 1    | +    | Known to be a human carcinogen |
| Zeolites           | 3    | -    | -                              |

# Specific Target Organ Toxicity (STOT)- Single Exposure

Magnesium Chromate - (Category 3) 1,3-Diphenylguanidine - (Category 3) Zeolites - (Category 3)

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

Manganese Dioxide - (Category 2)

## Potential chronic health effects include the following:

May be Fatal if Swallowed and Enters Airways Harmful by Inhalation and / or Swallowing Causes Serious Eye Irritation Causes Skin Irritation May Cause An Allergic Skin Reaction May Cause Genetic Defects Suspected of Causing Cancer

Suspected of Causing Cancel
Suspected of Damaging Fertility

May Cause Respiratory Irritation

May Cause Damage to Organs Through Prolonged or Repeated Exposure

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, nose / sinuses

#### **ASPIRATION HAZARD:**

May Be Fatal if Swallowed and Enters Airways

# 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)

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

## **Bioaccumulative Potential:**

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

# **Mobility in Soil:**

Not Available

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# 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.

Empty containers and/or liners may contain material residue. Empty contaminated packagings thoroughly. Dispose in accordance with all Federal, State, and local health and environmental regulations.

Never allow this material, any solutions, or any by-products, as well as any run-off, to come into contact with soil, waterways, wildlife habitats, drains, sewers, and / or the ocean. Avoid release into environment.

## 14. TRANSPORT INFORMATION

DOT

**DOT:** Not regulated

**UN Number:** Not regulated **NMFC:** 4620 SUB.5 – CL.60 **Schedule B #** 3506.91.0000

**IMDG** 

**UN NUMBER** - 3082

UN PROPER SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MAGNESIUM CHROMATE)

TRANSPORT CLASS - 9
PACKING GROUP - III

**ENVIRONMENTAL HAZARDS - YES** 

**MARINE POLLUTANT - MAGNESIUM CHROMATE** 

IATA

**UN NUMBER - 3082** 

UN PROPER SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MAGNESIUM CHROMATE)

TRANSPORT CLASS - 9
PACKING GROUP - III

**ENVIRONMENTAL HAZARDS - YES** 

**MARINE POLLUTANT - MAGNESIUM CHROMATE** 

# **15. REGULATORY INFORMATION**

Other EU Regulations:

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

SARA 311/312

Classification: Immediate (acute) health hazard

Delayed (chronic) health hazard

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.

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# **Composition of Ingredients:**

Manganese Dioxide: Immediate (acute) health hazard

Delayed (chronic) health hazard

Magnesium Chromate: Fire Hazard

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

Zeolites : Immediate (acute) health hazard

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

| -8                                       |                    |            |          |                   |
|------------------------------------------|--------------------|------------|----------|-------------------|
| chemical (s) subject to the reporting    | Chemical Name      | CAS No     | Weight % | Threshold limit   |
| requirements of section 313 of Title III |                    |            |          | (Reporting Value) |
| and of 40 CFR 372 (SARA)                 |                    |            |          |                   |
|                                          | Manganese Dioxide  | 1313-13-9  | <65%     | Unknown           |
|                                          | Magnesium chromate | 13423-61-5 | <40%     | 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

**US Regulations State** 

| MANGANESE DIOXIDE  | 1313-13-9                                                                                                                                           | < 65%                                                                                                                                                                                                                                                                                                                                                                         | >= 1.0%                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| MANGANESE DIOXIDE  | 1313-13-9                                                                                                                                           | < 65%                                                                                                                                                                                                                                                                                                                                                                         | >= 1.0%                                           |
| MANGANESE DIOXIDE  | 1313-13-9                                                                                                                                           | < 65%                                                                                                                                                                                                                                                                                                                                                                         | >= 1.0%                                           |
| MANGANESE DIOXIDE  | 1313-13-9                                                                                                                                           | <65%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MANGANESE DIOXIDE  | 1313-13-9                                                                                                                                           | <65%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MAGNESIUM CHROMATE | 13423-61-5                                                                                                                                          | <40%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MAGNESIUM CHROMATE | 13423-61-5                                                                                                                                          | <40%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MAGNESIUM CHROMATE | 13423-61-5                                                                                                                                          | <40%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MAGNESIUM CHROMATE | 13423-61-5                                                                                                                                          | <40%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
| MAGNESIUM CHROMATE | 13423-61-5                                                                                                                                          | <40%                                                                                                                                                                                                                                                                                                                                                                          | >= 1.0%                                           |
|                    | MANGANESE DIOXIDE MANGANESE DIOXIDE MANGANESE DIOXIDE MANGANESE DIOXIDE MAGNESIUM CHROMATE MAGNESIUM CHROMATE MAGNESIUM CHROMATE MAGNESIUM CHROMATE | MANGANESE DIOXIDE         1313-13-9           MANGANESE DIOXIDE         1313-13-9           MANGANESE DIOXIDE         1313-13-9           MANGANESE DIOXIDE         1313-13-9           MAGNESIUM CHROMATE         13423-61-5           MAGNESIUM CHROMATE         13423-61-5           MAGNESIUM CHROMATE         13423-61-5           MAGNESIUM CHROMATE         13423-61-5 | MANGANESE DIOXIDE         1313-13-9         < 65% |

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# California Prop 65 Warning:

This Product contains one or more ingredients known by the state of California to cause cancer, birth defects, or other reproductive harm.



materials Division 2: Materials Causing Other Toxic Effects: Manganese Dioxide CAS#1313-13-9 Magnesium Chromate Cas#13423-61-5

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 Magnesium Chromate Cas# 13423-61-5

## **Section 16 Other Information**

HEALTH 3 HEALTH 3
FLAMMABILITY 1 FLAMMABILITY 1
REACTIVITY 1 REACTIVITY 1

Customers and/or end users are responsible for determining PPE codes.

# NFPA HMIS

Preparer-Flamemaster/Compliance Rev A JUNE 2015 Supercedes(Conversion) Revision Notes: A

Conversion to ANSI format

Containers: Plastic Jars, Metal Cans, Cartridge Kits

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

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