

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-5306 Part-A Class-B Base (all application times)
 - Product Name: Polythioether Quick Repair Fuel Sealant/ Base compound Part-A
 - Product reference: CS-5306-B

1.2. Product Use:
 - Polythioether Quick Repair 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

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

Specification: AMS 3277 TYPE 1 Base PART A CLASS B

NSN:	8030-01-290-5134 CS5306B1/4 2.5 OZ	8030-01-290-5135 CS5306B1/4 6OZ	8030-01-290-5136 CS5306B1/2 2.5OZ	8030-01-290-5137 CS5306B1/2 6OZ	8030-01-330-6571 CS5306B1/2 1/2 PT
	8030-01-330-8631 CS5306B1/2 PINT	8030-01-330-8632 CS5306B1/2 QUART	8030-01-330-6569 CS5306B1/2 GAL	8030-01-330-6570 CS5306B1/2 5-GAL	8030-01-330-6572 CS5306B-1 50-GAL
	8030-01-331-0694 CS5306B-1 1/2 PT	8030-01-330-9114 CS5306B-1 PINT	8030-01-330-9500 CS5306B-1 QUART	8030-01-330-9501 CS5306B-1 GAL	8030-01-331-0693 CS5306B-1 5-GAL
	8030-01-331-3233 CS5306B-1 50 GAL	8030-01-290-5138 CS5306B-2 2.5 OZ	8030-01-290-5139 CS5306B-2 6OZ	8030-01-438-4103 CS5306 B2 GAL	

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:

SKIN CORROSION / IRRITATION - CATEGORY 2

SERIOUS EYE DAMAGE / EYE IRRITATION - CATEGORY 2A

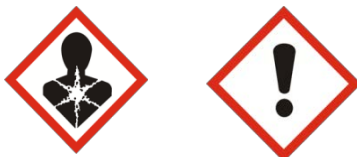
CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (STOT SE) (SINGLE EXPOSURE) (RESPIRATORY TRACT IRRITATION) - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 71.8 %

GHS LABEL REQUIREMENTS

HAZARD PICTOGRAMS



SIGNAL WORD : WARNING

HAZARD STATEMENTS:

CAUSES SERIOUS EYE IRRITATION

CAUSES SKIN IRRITATION

SUSPECTED OF CAUSING CANCER

MAY CAUSE RESPIRATORY IRRITATION

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.

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.

HAZARDS NOT OTHERWISE CLASSIFIED:

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

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.

Section -3. COMPOSITION / INFORMATION ON INGREDIENTS**Chemical family** : Mixture of organic compounds

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

PROPRIETARY POLYTHIOETHER

SKIN CORROSION / IRRITATION - CATEGORY 2

SERIOUS EYE DAMAGE / EYE IRRITATION - CATEGORY 2A

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

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

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)

ALUMINUM HYDROXIDE

NOT CONSIDERED A HAZARDOUS SUBSTANCE

2,2'- THIODIETHANETHIOL

FLAMMABLE LIQUID: CATEGORY 4

SUBSTANCE % by weight in the product	H&P STATEMENTS	CAS	EINECS/ELINCS
PROPRIETARY POLYTHIOETHER <70%	H319,H335,H315,	NOT AVAILABLE	NOT AVAILABLE
2-BUTANONE (MEK) <15%	H225,H303+H333,H319,H336,P210, P261,P305+P351+P338	78-93-3	201-159-0
Titanium Dioxide <10%	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
ALUMINUM HYDROXIDE <15%	NOT CONSIDERED HAZARDOUS	21645-51-2	244-492-7
2,2'-THIODIETHANETHIOL <5%	H227	3570-55-6	226-671-0

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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, 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.

HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE: CARBON DIOXIDE, CARBON MONOXIDE, OXIDES OF NITROGEN, METAL OXIDE / OXIDES, AND SMOKE

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.

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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
CALCIUM CARBONATE *	5 mg/m ³ (RESPIRABLE FRACTION)	3 mg/m ³ (RESPIRABLE FRACTION)
CALCIUM CARBONATE *	15mg/m ³ (TOTAL DUST)	10 mg/m ³ (TOTAL DUST)
TITANIUM DIOXIDE *	15mg/m ³ (TOTAL DUST)	10 mg/m ³
ALUMINUM HYDROXIDE *		1 mg/m ³ (RESPIRABLE FRACTION)
* can be absorbed through skin		

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 ° F (20 ° C) Liquid
- Flash point: 150 ° F (65.56 ° C) Method: TCC
- Specific gravity at: 68 ° F (20 ° C) 1.55 g/cm³
- Vapor Density: N/A
- Lower Explosive Limit (% vol.): 1.8
- Density (lbs / Gal) : 12.1
- Miscibility in water at 20 ° C: Negligible
- VOC : 33 g/l
- Ph : Not Available
- % Solids (w/w) 97.5
- Vapor pressure : Not Available
- Color: White
- Appearance: Paste
- Odor: Mercapton odor
- Boiling Point: Not Available
- Material Supports Combustion : Yes

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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
- Metal Oxide / Oxides
- Carbon Dioxide
- Oxides of Carbon and Nitrogen
- Smoke

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

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	-
2,2'-thiodiethanethiol	LC50 Inhalation Dust & Vapor	Rat	160 mg/m ³	4 Hours
	LD50 ORAL	Rat	0.164 g/kg	-
Titanium Dioxide	LD50 ORAL	Rat	>10g/kg	-

CARCINOGENICITY:

INGREDIENT	IARC	OSHA	NTP	CAS#
TITANIUM DIOXIDE :	2B	-	-	13463-67-7

SPECIFIC TARGET ORGAN TOXICITY-STOT (SINGLE EXPOSURE)

PROPRIETARY POLYTHIOETHER - Category 3

BUTANONE - Category 3

2,2'-thiodiethanethiol - Category 3

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

ATE VALUE : Oral - 34128.1 mg/kg

CAUSES SERIOUS EYE IRRITATION

CAUSES SKIN IRRITATION

SUSPECTED OF CAUSING CANCER

MAY CAUSE RESPIRATORY IRRITATION

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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

Bioaccumulative Potential :

Product / Ingredient	LogP(ow)	BCF	Potential
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.

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)
	Proprietary Polythioether	Not Available	<70 %	unknown
	2-BUTANONE	78-93-3	<15%	unknown
	Calcium Carbonate	72608-12-9	<35%	unknown
	Aluminum Hydroxide	21645-51-2	<15%	unknown
	Titanium Dioxide	*13463-67-7	< 3%	unknown
	2,2'thiodiethanethiol	3570-55-6	<5%	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 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)	proprietary polythioether	NOT AVAILABLE	<70%	>=1.0%
Massachusetts	proprietary polythioether	NOT AVAILABLE	<70%	>=1.0%
New Jersey	proprietary polythioether	NOT AVAILABLE	<70%	>=1.0%
Pennsylvania	proprietary polythioether	NOT AVAILABLE	<70%	>=1.0%
Rhode Island	proprietary polythioether	NOT AVAILABLE	<70%	>=1.0%
California Proposition 65 (Developmental – Female)	2-BUTANONE	78-93-3	<15%	>=1.0%
Massachusetts	2-BUTANONE	78-93-3	<15%	>=1.0%
New Jersey	2-BUTANONE	78-93-3	<15%	>=1.0%
Pennsylvania	2-BUTANONE	78-93-3	<15%	>=1.0%
Rhode Island	2-BUTANONE	78-93-3	<15%	>=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	<10%	>=1.0%
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%
California Proposition 65 (Developmental – Female)	ALUMINUM HYDROXIDE	21645-51-2	<15%	>=1.0%
Massachusetts	ALUMINUM HYDROXIDE	21645-51-2	<15%	>=1.0%
New Jersey	ALUMINUM HYDROXIDE	21645-51-2	<15%	>=1.0%
Pennsylvania	ALUMINUM HYDROXIDE	21645-51-2	<15%	>=1.0%
Rhode Island	ALUMINUM HYDROXIDE	21645-51-2	<15%	>=1.0%
California Proposition 65 (Developmental – Female)	2,2'-THIODIETHANETHIOL	3570-55-6	<5%	>=1.0%
Massachusetts	2,2'-THIODIETHANETHIOL	3570-55-6	<5%	>=1.0%
New Jersey	2,2'-THIODIETHANETHIOL	3570-55-6	<5%	>=1.0%
Pennsylvania	2,2'-THIODIETHANETHIOL	3570-55-6	<5%	>=1.0%
Rhode Island	2,2'-THIODIETHANETHIOL	3570-55-6	<5%	>=1.0%

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United States Inventory(TSCA 8B) : All Components are Listed or Exempted
 Australia Inventory (AICS) : All Components are Listed or Exempted
 Canada Inventory (DSL) : All Components are Listed or Exempted
 China Inventory (IECSC) : All Components Are Listed Or Exempted
 Japan Inventory (ENCS) : All Components are Listed or Exempted
 Korea Inventory (KECI) : All Components are Listed or Exempted
 New Zealand (NZIoC) : All Components are Listed or Exempted
 Philippines Inventory (PICCS) : All Components are Listed or Exempted
Europe Inventory (REACH) : Please contact your supplier concerning the status of this material

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:

Butanone: Fire Hazard, Immediate (acute) Health Hazard

Proprietary Polythioether: Immediate (acute) Health Hazard

Titanium Dioxide: Delayed (chronic) Health Hazard

2,2'-thiodiethanethiol: Immediate (acute) 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.

Canada



Class B – Flammable

2-BUTANONE
 2,2'-thiodiethanethiol



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

Proprietary Polythioether
 2-BUTANONE CAS#78-93-3
 Titanium Dioxide CAS# 13463-67-7
 Calcium Carbonate CAS# 72608-12-9
 2,2'-thiodiethanethiol CAS# 3570-55-6
 Aluminum Hydroxide CAS# 21645-51-2

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):

2-BUTANONE CAS#78-93-3	Proprietary Polythioether CAS# Not Available
Calcium Carbonate CAS#72608-12-9	Titanium Dioxide CAS#13463-67-7
Aluminum Hydroxide CAS# 21645-51-2	2,2'-thiodiethanethiol CAS# 3570-55-6

16. OTHER INFORMATION

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
PPE	H

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
PPE	H

Customer and / or end user is responsible for determining PPE

NFPA

HMIS

Preparer:

Flamemaster / Compliance
Rev-A 4/20/2015
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

End of Safety Data Sheet

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-5306 Part B All Classes (all application times)
 - Product Name: Polythioether Quick Repair Fuel Tank Sealant / Catalyst Part B
 - Product reference: CS-5306-B

1.2. Product Use:
 - Polythioether Quick Repair 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

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

Specification: AMS 3277 TYPE 1

Catalyst Part B

ALL CLASSES

NSN:	8030-01-330-0726 CS5306A1/4 2.5OZ	8030-01-330-6568 CS5306A1/2 2.5 OZ	8030-01-330-0730 CS5306A1/2 6OZ.	8030-01-330-0728 CS5306 A1/2 1/2 PT	8030-01-330-0729 CS5306 A1/2 PINT
	8030-01-330-0732 CS5306A1/2 QUART	8030-01-330-0731 CS5306A1/2 GAL	8030-01-330-0733 CS5306A1/2 5-GAL	8030-01-330-0734 CS5306A1/2 50-GAL	8030-01-330-0745 CS5306A1 2.5 OZ
	8030-01-330-3437 CS5306A1 6OZ.	8030-01-329-9999 CS5306A1 1/2 PINT	8030-01-330-2578 CS5306A1 PINT	8030-01-330-0737 CS5306A1 QUART	8030-01-330-0736 CS5306A1 GAL
	8030-01-330-2579 CS5306A1 5-GAL	8030-01-329-9998 CS5306A1 50-GAL	8030-01-331-3233 CS5306B-1 50 GAL	8030-01-290-5138 CS5306B-2 2.5 OZ	8030-01-290-5139 CS5306B-2 6OZ
	8030-01-290-5134 CS5306B1/4 2.5 OZ	8030-01-290-5135 CS5306B1/4 6OZ	8030-01-290-5136 CS5306B1/2 2.5OZ	8030-01-290-5137 CS5306B1/2 6OZ	8030-01-330-6571 CS5306B1/2 1/2 PT
	8030-01-330-8631 CS5306B1/2 PINT	8030-01-330-8632 CS5306B1/2 QUART	8030-01-330-6569 CS5306B1/2 GAL	8030-01-330-6570 CS5306B1/2 5-GAL	8030-01-330-6572 CS5306B-1 50-GAL
	8030-01-331-0694 CS5306B-1 1/2 PT	8030-01-330-9114 CS5306B-1 PINT	8030-01-330-9500 CS5306B-1 QUART	8030-01-330-9501 CS5306B-1 GAL	8030-01-331-0693 CS5306B-1 5-GAL
	8030-01-438-4103 CS5306 B2 GAL				

Section -2. HAZARD (S) IDENTIFICATION

SKIN CORROSION / IRRITATION - CATEGORY 2

SERIOUS EYE DAMAGE / EYE IRRITATION - CATEGORY 2A

SKIN SENSITIZATION 1,

CARCINOGENICITY 2,

Percentage of mixture with ingredients of unknown toxicity is 27.4%

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

Human and Environmental Hazards:

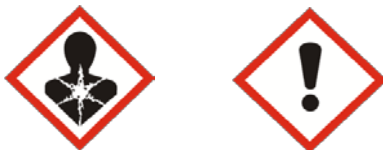
HAZARD STATEMENTS:

Causes Serious Eye Irritation

Causes Skin Irritation

May Cause An Allergic Skin Reaction

Suspected of Causing Cancer

HAZARD PICTOGRAMS:**SIGNAL WORD:****WARNING**

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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ADDITIONAL LABEL ELEMENTS: Dust from grinding or abrading may be harmful if inhaled. Trimethoxysilanes may form methanol if hydrolyzed or ingested. If ingested, methanol may be harmful or cause blindness. It may also be fatal. This product emits toxic (poisonous) fumes when heated and (or) burned.

HAZARDS NOT OTHERWISE CLASSIFIED: None Known

Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical family : Mixture of organic compounds

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

BISPHENOL-A-EPOXY RESIN	CAS# 25068-38-6	EC# 500-033-5	<65% By Weight
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OSHA HAZARDS: Skin Sensitiser,Irritant

GHS CLASSIFICATION: EPOXY RESIN

SKIN IRRITATION (CATEGORY 2)

EYE IRRITATION (CATEGORY 2A)

SKIN SENSITIZATION (CATEGORY 1)

ACUTE AQUATIC TOXICITY (CATEGORY 2)

CHRONIC AQUATIC TOXICITY (CATEGORY 2)

HYDANTOIN EPOXY RESIN	CAS# 15336-82-0	EC# 239-366-3	< 10% By Weight
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THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

MAY BE CORROSIVE

CAUSES EYE BURNS (RISK OF SERIOUS DAMAGE TO EYES)

TOXIC BY INGESTION

CAUSES SKIN IRRITATION

CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA

CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS

VERY TOXIC BY INHALATION

MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: LIVER

CHEMICAL NAME: CARBON BLACK	CAS# 1333-86-4	EC# 215-609-9	<10% By Weight
------------------------------------	----------------	---------------	----------------

NOT CLASSIFIED

CHEMICAL NAME:

Poly[(phenyl glycidyl ether)-co-formaldehyde]	CAS# 28064-14-4	EC# N/A	<40% By Weight
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NOT CLASSIFIED

CHEMICAL NAME: CALCIUM CARBONATE	CAS# 471-34-1	EC# N/A	<35% By Weight
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CHEMICAL NAME: IRON OXIDE (SYNTHETIC)	CAS# 12227-89-3	EC# 235-442-5	<20% By Weight
--	-----------------	---------------	----------------

Hazards Identification: This product may auto-oxidize if exposed to heat. Inhalation can cause lung irritation or fibrosis.

THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

Due to its potential to auto-oxidize (self heat).

CHEMICAL NAME:

(3-Glycidyloxypropyl)trimethoxysilane	CAS#2530-83-8	EC#219-784-2	<10% By Weight
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GHS CLASSIFICATION in accordance with 29 CFR 1910 (OSHA HCS)

SERIOUS EYE DAMAGE (CATEGORY 1), H318

ACUTE AQUATIC TOXICITY (CATEGORY 3), H402

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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, 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.

Hazardous decomposition products include: Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Smoke Metal Oxide / Oxides, Halogenated Compounds

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

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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.

8.2 Exposure limits

Work place exposure limits (8 hour)

Substance	ACGIH TLV
CALCIUM CARBONATE	TWA: 3 mg/m ³ 8 hours Form : Respirable
	TWA: 10 mg/m ³ 8 hours Form Total Dust
	OSHA PEL
	TWA: 5 mg/m ³ 8 hours Form: Respirable
	TWA: 15 mg/m ³ 8 hours Form: Total Dust
CARBON BLACK	ACGIH TLV
	TWA: 3 mg/m ³ 8 hours (Inhalable Fraction)
	OSHA PEL
	TWA: 3.5 mg/m ³ 8 hours
	ACGIH TLV
Synthetic Iron Oxide	15 mg/m ³

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

- Physical state at: 68 ° F (20 ° C) Liquid
- Flash point: 200 ° F (93 ° C) Method: TCC
- Relative Density : 1.36
- 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
- VOC : 1 g/l
- % Solid (w/w) : 99.9
- Vapor pressure at: 68 ° F (20 ° C) N/A
- Color: BLACK
- Appearance: PASTE
- Odor: NEGLIGIBLE OILY ODOR
- Boiling Point: Unknown

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
- Smoke
- Carbon Dioxide
- Oxides of nitrogen
- Metal Oxide / Oxides
- Halogenated Compounds

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
Bisphenol-A-Epoxy Resin	LD50 DERMAL	Rabbit	>2 g/kg	-
	LD50 ORAL	Rat	11.4 g/kg	-
Calcium Carbonate	LD50 ORAL	Rat	6450 mg/kg	-
Carbon Black	LD50 Dermal	Rabbit	>3 g/kg	-
	LD50 Oral	Rat	>15400mg/kg	-
Trimethoxysilane	LC50 Inhalation Dust & Mist	Rat	>5300 mg/m ³	4 hours
	LD50 Dermal	Rabbit	4.3 g/kg	-
	LD50 Oral	Rat	7.01 g/kg	-
Hydantoin Epoxy Resin	LD50 Oral	Rat	300 mg/kg	-
	LD50 Dermal	Rabbit	>3000 mg/kg	-
	LC50 Inhalation	Rat	>4.1 mg/cu.m	4 hours

CARCINOGENICITY:

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

Acute Toxicity Estimates:

Dermal - 104960.8 mg/kg

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Potential chronic health effects include the following:

May cause allergic reactions.

Suspected of causing cancer.

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

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:

Not Available

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

UN Proper Shipping Name : N/A

Transport Hazard Class : N/A

Packing Group : N/A

Environmental Hazards : No

Marine Pollutant Substances : N/A

IMDG

UN Number: 3082

UN Proper Shipping Name : Environmentally Hazardous Substance, Liquid, N.O.S.
(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW<=700)

Transport Hazard Class : 9

Packing Group : III

Environmental Hazards : Yes

Marine Pollutant Substances: (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW<=700)

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IATA

UN Number:

3082

UN Proper Shipping Name :

Environmentally Hazardous Substance, Liquid, N.O.S.
(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW<=700))

Transport Hazard Class :

9

Packing Group :

III

Environmental Hazards :

Yes

Marine Pollutant Substances:

(reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Phenol, polymer with formaldehyde, glycidyl ether (MW<=700))

NMFC: 4620 SUB.5 – CL.60**Schedule B #** 3506.91.0000**15. REGULATORY INFORMATION**

United States Inventory(TSCA 8B) : All Components are Listed or Exempted
Australia Inventory (AICS) : All Components are Listed or Exempted
Canada Inventory (DSL) : All Components are Listed or Exempted
China Inventory (IECSC) : All Components are Listed or Exempted
Japan Inventory (ENCS) : All Components are Listed or Exempted
Korea Inventory (KECI) : All Components are Listed or Exempted
New Zealand (NZIoC) : All Components are Listed or Exempted
Philippines Inventory (PICCS) : All Components are Listed or Exempted
Europe Inventory (REACH) : Please contact your supplier concerning the status of this material

SARA 304 RQ : NOT REQUIRED (NO MATERIALS FOUND)**SARA 311/312**

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

Composition of Ingredients :

REACTION PRODUCT: bisphenol-A-(epichlorhydrin) epoxy resin : Immediate (Acute) Health Hazard
 Phenol, polymer with formaldehyde, glycidyl ether (MW<=700) : Immediate (Acute) Health Hazard
 Carbon Black, Respirable Powder : Fire Hazard
 : Delayed (Chronic) Health Hazard
 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane : Immediate (Acute) Health Hazard
 Synthetic Iron Oxide : Delayed (Chronic) Health Hazard

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

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)
Bisphenol A Epoxy Resin		25068-38-6	<65%	unknown
Phenol Polymer with Formaldehyde		28064-14-4	<40%	unknown
Calcium Carbonate		471-34-1	<35%	unknown
Carbon Black		1333-86-4	<10%	unknown
Trimethoxysilane		2530-83-8	<10%	unknown
Hydantoin Epoxy Resin		15336-82-0	<10%	unknown
Synthetic Iron Oxide		12227-89-3	<20%	unknown

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California Proposition 65 (Developmental – Female)	Bisphenol A Epoxy Resin	25068-38-6	<65%	>=1.0%
Massachusetts	Bisphenol A Epoxy Resin	25068-38-6	<65%	>=1.0%
New Jersey	Bisphenol A Epoxy Resin	25068-38-6	<65%	>=1.0%
Pennsylvania	Bisphenol A Epoxy Resin	25068-38-6	<65%	>=1.0%
Rhode Island	Bisphenol A Epoxy Resin	25068-38-6	<65%	>=1.0%
California Proposition 65 (Developmental – Female)	Phenol polymer with Formaldehyde	28064-14-4	<40%	>=1.0%
Massachusetts	Phenol polymer with Formaldehyde	28064-14-4	<40%	>=1.0%
New Jersey	Phenol polymer with Formaldehyde	28064-14-4	<40%	>=1.0%
Pennsylvania	Phenol polymer with Formaldehyde	28064-14-4	<40%	>=1.0%
Rhode Island	Phenol polymer with Formaldehyde	28064-14-4	<40%	>=1.0%
California Proposition 65 (Developmental – Female)	Calcium Carbonate	471-34-1	<35%	>=1.0%
Massachusetts	Calcium Carbonate	471-34-1	<35%	>=1.0%
New Jersey	Calcium Carbonate	471-34-1	<35%	>=1.0%
Pennsylvania	Calcium Carbonate	471-34-1	<35%	>=1.0%
Rhode Island	Calcium Carbonate	471-34-1	<35%	>=1.0%
California Proposition 65 (Developmental – Female)	Carbon Black	1333-86-4	<10%	>=1.0%
Massachusetts	Carbon Black	1333-86-4	<10%	>=1.0%
New Jersey	Carbon Black	1333-86-4	<10%	>=1.0%
Pennsylvania	Carbon Black	1333-86-4	<10%	>=1.0%
Rhode Island	Carbon Black	1333-86-4	<10%	>=1.0%
California Proposition 65 (Developmental – Female)	Trimethoxysilane	2530-83-8	<10%	>=1.0%
Massachusetts	Trimethoxysilane	2530-83-8	<10%	>=1.0%
New Jersey	Trimethoxysilane	2530-83-8	<10%	>=1.0%
Pennsylvania	Trimethoxysilane	2530-83-8	<10%	>=1.0%
Rhode Island	Trimethoxysilane	2530-83-8	<10%	>=1.0%
California Proposition 65 (Developmental – Female)	Hydantoin Epoxy Resin	15336-82-0	<10%	>=1.0%
Massachusetts	Hydantoin Epoxy Resin	15336-82-0	<10%	>=1.0%
New Jersey	Hydantoin Epoxy Resin	15336-82-0	<10%	>=1.0%
Pennsylvania	Hydantoin Epoxy Resin	15336-82-0	<10%	>=1.0%
Rhode Island	Hydantoin Epoxy Resin	15336-82-0	<10%	>=1.0%
California Proposition 65 (Developmental – Female)	Synthetic Iron Oxide	12227-89-3	<20%	>=1.0%
Massachusetts	Synthetic Iron Oxide	12227-89-3	<20%	>=1.0%
New Jersey	Synthetic Iron Oxide	12227-89-3	<20%	>=1.0%
Pennsylvania	Synthetic Iron Oxide	12227-89-3	<20%	>=1.0%
Rhode Island	Synthetic Iron Oxide	12227-89-3	<20%	>=1.0%

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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:

Bisphenol-A-epoxy resin

Phenol polymer with formaldehyde
carbon black

calcium carbonate

trimethoxysilane

hydantoin epoxy resin

synthetic iron oxide

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) :

Bisphenol-A-epoxy resin Cas#25068-38-6

calcium carbonate Cas#471-34-1

Phenol polymer with formaldehyde Cas#28064-14-4

trimethoxysilane Cas#2530-83-8

carbon black Cas# 1333-896-4

hydantoin epoxy resin Cas#15336-82-0

synthetic iron oxide Cas# 12227-89-3

HEALTH 2
FLAMMABILITY 0
REACTIVITY 0

HEALTH 2
FLAMMABILITY 0
REACTIVITY 0

Customer and / or end user is responsible
for determining PPE

NFPA

HMIS

Section 16 Other Information

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

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

SAFETY DATA SHEET
FEBRUARY 2014

File: CS5306 PRIMER GSA 07-10
PRIMER /BONDING AGENT

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-5306 Primer
 - Product Name: Primer
 - Product reference: CS-5306 Primer

1.2. Product Use:
 Primer/Bonding agent

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

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

Specification: AMS 3277 TYPE 1

PRIMER

NSN:					

Section -2. HAZARD (S) IDENTIFICATION

Flammable
 Possible adverse risk to the fetus.
 Skin and eye irritant.
 Harmful if swallowed.
 Harmful if inhaled.
 Possible harm to aquatic organisms.
 May cause long term adverse effects in the aquatic environment.

Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical family : Mixture of organic compounds
 For the hazards of the composition, (SDS see Section 2).

2-PROPANOL

OSHA HAZARDS: FLAMMABLE LIQUIDS,TARGET ORGAN EFFECT,IRRITANT
 OTHER HAZARDS THAT DO NOT RESULT IN CLASSIFICATION: MAY FORM EXPLOSIVE PEROXIDES
 GHS CLASSIFICATION: 2-PROPANOL
 FLAMMABLE LIQUIDS (CATEGORY2)
 SKIN IRRITATION (CATEGORY3)
 EYE IRRITATION (CATEGORY 2A)
 SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY3)

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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)

ACUTE TOXICITY,INHALATION (CATEGORY 5)

EYE IRRITATION (CATEGORY 2A)

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE(CATEGORY3) CENTRAL NERVOUS SYSTEM.

SUBSTANCE % by weight in the product	H&P Statements	CAS	EINECS/ELINCS
2-Propanal (Isopropyl Alcohol)	H225,H316,H319,H336,P210, P261,P305+P351+P338	67-63-0	200-661-7
2-Butanone(Methy Ethyl Ketone) MEK →	H225,H319,H336, P210,P261,P280,P337+P313,P403+P233	78-93-3	201-159-0

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. 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

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.

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.

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 PEL	ACGIH TLV
2-Propanal (Isopropyl Alcohol)	<15%	200 ppm	200 ppm
2-Butanone (Methyl Ethyl Ketone) MEK	<75%	200 ppm	200 ppm

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

- Physical state at: 68 ° F (20 ° C) Liquid
- Flash point: 23 ° F - (-5 ° C) Method: TCC
- Specific gravity at: 68 ° F (20 ° C) 0.82 g/cm³
- Vapor Density: 2.07
- Lower Explosive Limit (% vol.): 2.0
- Upper Explosive Limit (% vol.): 12.7
- Miscibility in water at 20 ° C: MODERATE
- Ph : 8.0
- % Volatile by Volume: 77
- Vapor pressure at: 68 ° F (20 ° C) 1.80 mm Hg
- Color: Clear
- Appearance: liquid
- Odor: Ketone odor
- Boiling Point: Mixture 181 ° F

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
- CO, CO₂, SMOKE
- Sulfur oxides

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 include headache, dizziness, fatigue, muscular weakness, drowsiness, 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 may cause irritation and damage.

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)

13. DISPOSAL CONSIDERATIONS

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

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

14. TRANSPORT INFORMATION

DOT: § 172.101 HAZARDOUS MATERIALS TABLE

UN Number: 1263

Proper Shipping Name: PAINT RELATED MATERIAL

Labels: Flammable Liquid

Hazard Class: 3 Subclass: NO

Packaging Group: II

Limited Quantity: Passenger aircraft: 1 Liter(.26 Gallons)

Cargo aircraft only: 60 Liter (15.85 Gallons)

Vessel stowage: A

ERG: 128

NMFC: 149980 Sub.2 CL.55

Schedule B # 3208.90.0000

IATA:

UN Number: 1263

Proper Shipping Name: PAINT RELATED MATERIAL

Labels: Flammable Liquid

Hazard Class: 3 Subclass: NO

Packaging Group: II

Passenger Air Packing Instruction : 353

Passenger aircraft: 5 Liter (1.32 gallon)

Cargo Air Packing Instruction : 364

Cargo aircraft only: 60 Liter (15.85 gallon)

IMDG:

UN Number: 1263

Proper Shipping Name: PAINT RELATED MATERIAL

Label: 3

Hazard Class: 3 Subclass: NO

Packaging Group: II

EMS No: F, E – S, D

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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
	2-Propanal	67-63-0	<15%	200 PPM
	2-Butanone	78-93-3	<75%	200 PPM

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

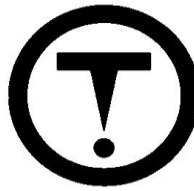
US Regulations State

California Proposition 65 (Developmental – Female)	2-propanal	67-63-0	10%-25%	unknown
California Proposition 65 (Developmental – Female)	2-Butanone	78-93-3	50%-75%	unknown
Massachusetts	2-Propanal	67-63-0	10%-25%	unknown
Massachusetts	2-Butanone	78-93-3	50%-75%	unknown
New Jersey	2-Propanal	67-63-0	10%-25%	unknown
New Jersey	2-Butanone	78-93-3	50%-75%	unknown
Pennsylvania	2-Propanal	67-63-0	10%-25%	unknown
Pennsylvania	2-Butanone	78-93-3	50%-75%	unknown
Rhode Island	2-Propanal	67-63-0	10%-25%	unknown
Rhode Island	2-Butanone	78-93-3	50%-75%	unknown

Canada



Class B – Flammable
2-propanal
2-Butanone



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

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): 2-Propanal cas#67-63-0, 2-Butanone cas#78-93-3

16. OTHER INFORMATION

HEALTH - 1
 FLAMMABILITY - 4
 REACTIVITY - 1
 PPE - H



HMIS

PPE

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Full text of P statements with N^o 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.

Full text of H statements with N^o appearing in Section 3:

- H412: Harmful to aquatic life with long lasting effects
- H360Fd: May damage fertility. Suspected of damaging the unborn child.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation
- H336: May cause drowsiness or dizziness
- H318: Causes serious eye damage
- H302+H332: Harmful if swallowed. Harmful if inhaled
- H340+H350: May cause genetic defects. May cause cancer.
- H241: Heating may cause fire or explosion
- H225: Highly flammable liquid and vapor.

Preparer:	Flamemaster / Compliance Rev-A June/09/2010 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		

End of Safety Data Sheet

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