



Flamemaster Corp.

13576 Desmond Street

Pacoima, CA 91331 - USA

SAFETY DATA SHEET

AUGUST 21, 2019

File: CS1900 PTB GSA 07-10

Firewall Catalyst

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-1900 Part B

- Product Name: Firewall Catalyst

- Product reference: CS-1900 Part B

1.2. Product Use:

Firewall Catalyst

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

Emergency Contact Information :

See Below

Specification

MIL-S-38249

CATALYST PART B

NSN:	8030-00-783-8886	8030-00-783-8898	8030-00-723-5345	8030-01-033-3485	8030-01-364-7359
	6OZ cartridge(3.5)	1/2 pint kit(6oz)	pint kit(12oz)	gallon kit(96oz)	2 1/2 oz cartridge

Emergency Contact:

CHEMTEL: WWW.CHEMTELINE.COM

Flamemaster Corporation Contract Number MIS2644301

Shipments of hazardous materials within United States, Canada, Puerto Rico, and U.S. Virgin Island should reference Chemtel's toll free phone number: 1-800-255-3924 - Reference Number MIS2644301

Shipments and safety applications outside of United States, Canada, Puerto Rico, and the U.S. Virgin Islands must reference Chemtel phone number +1-813-248-0585 - Reference Number MIS2644301

Collect Calls will be accepted. To ensure a bilingual operator please call collect.

Shipments originating in U.S.A. and going overseas must use both numbers.

Shipments originating overseas and destined for US, Canada, Puerto Rico or the Virgin Islands must also use both numbers.

Calls originating on board vessels should follow normal ship to shore protocols. Use international access number and alert the ship to shore operator you are involved in an emergency incident.

Shipments of hazardous materials within the listed countries should reference Chemtel's in-country phone numbers:

Australia : 1-300-954-583 : Reference Number MIS2644301

Brazil : 0-800-591-6042 : Reference Number MIS2644301

China : 400-120-0751 : Reference Number MIS2644301

India : 000-800-100-4086 : Reference Number MIS2644301

Mexico : 01-800-099-0731 : Reference Number MIS2644301

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 Substance or Mixture:

FLAMMABLE LIQUIDS - (CATEGORY 2)

ASPIRATION HAZARD - CATEGORY 1

SKIN CORROSION / IRRITATION - (CATEGORY 2)

SERIOUS EYE DAMAGE / EYE IRRITATION - (CATEGORY 2A)

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - STOT SE - (NARCOTIC EFFECTS) - (CATEGORY 3)

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GHS LABEL ELEMENTS
HAZARD PICTOGRAMS :



HIGHLY FLAMMABLE LIQUID AND VAPOR - H225
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS - H304
CAUSES SKIN IRRITATION - H315
CAUSES SERIOUS EYE IRRITATION - H319
MAY CAUSE DROWSINESS OR DIZZINESS - H336

SIGNAL WORD : DANGER

CS 1900 Part B P-Statements

P101: If medical advise is needed, have product container or label at hand.
P102: keep out of reach of children.
P103: Read label before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking
P233: Keep container tightly closed.
P240: Ground / bond container and receiving equipment.
P241: Use explosion-proof electrical / ventilating / lighting /.../ equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves / protective clothing / eye protection / face protection.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P370+378: In case of fire: Use Universal resistant foam, CO2, water, or powder to extinguish.
P403+235: Store in a well ventilated place. Keep cool.
P501: Dispose of content / container in accordance with local / regional / national / international regulations.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER / doctor / ...
P331: Do NOT induce vomiting.
P405: Store locked up.
P264: Wash thoroughly after handling.
P302+352: IF ON SKIN: Wash with plenty of water / ...
P332+313: If skin irritation occurs: Get medical advice / attention.
P362: Take off all contaminated clothing.
P305+351+338: IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses if present and easy to do-continue rinsing.
P337+313: If eye irritation persists: Get medical advice / attention.
P261: Avoid breathing dust / fumes / gas / mist / vapors / spray.
P271: Use only outdoors or in a well - ventilated area.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER / doctor /... / if you feel unwell.
P403+233: Store in a well ventilated place. Keep container tightly closed.

SUPPLEMENTAL LABEL ELEMENTS:

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of concentrations above recommended limits causes headaches, drowsiness and nausea and could lead to unconsciousness or possibly death.
1-component mixtures: formaldehyde is released during the curing phase. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause the skin to become sensitized.
Avoid any contact with skin or clothing and wash thoroughly after handling.
Emits toxic fumes when heated.

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HAZARDS NOT OTHERWISE CLASSIFIED:

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

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

Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

GHS CLASSIFICATION: 2-PROPANOL

FLAMMABLE LIQUIDS (CATEGORY2)

SKIN IRRITATION (CATEGORY3)

EYE IRRITATION (CATEGORY 2A)

SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY3)

N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS)

SKIN IRRITATION (CATEGORY 2)

EYE IRRITATION (CATEGORY 2A)

STOT-SINGLE EPOSURE (CATEGORY 1)

N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

FLAMMABLE LIQUIDS (CATEGORY 4) H227

SKIN IRRITATION (CATEGORY 2) H315

SERIOUS EYE DAMAGE (CATEGORY 1) H318

SKIN SENSITISATION (CATEGORY1) H317

SUBSTANCE % by weight in the product	H&P Statements	CAS	EINECS/ELINCS
2-Propanal (Isopropyl Alcohol) ≤70%	H225,H316,H319,H336,P210, P261,P305+P351+P338	67-63-0	200-661-7
<40%	N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE		
	H315,H319,H335,P210,P233,P240 P241,P242,P243,P260,P264, P270,P271,P280,P301+P310, P303+P361+P353,P304+P340, P305+P351+P338,P307+P311 P322,P330,P332+P313,P337+ P313,P361,P370+P378,P403+ P233,P403+P235,P405,P501	68845-16-9	272-453-4
<40%	N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE		
	H227,H315,H317,H318,P210, P261,P264,P272,P280,P302+ P352,P305+P351+P338,P310, P321,P333+P313,P362,P370+ P378,P403+P235,P501	1760-24-3	217-164-6

Section -4. FIRST-AID MEASURES

General: When in doubt or symptoms persist, seek medical attention. Have Material 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. 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

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 BUT MAY NOT BE LIMITED TO THE FOLLOWING:

- Carbon monoxide
- Oxides of Nitrogen, Carbon, Sulfur
- Sulfur oxides
- Toxic Fumes

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.

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.

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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 TLV
2-Propanal (Isopropyl Alcohol) *	400 ppm	400 ppm
N,N'-BIS[3-(TRIMETHOXSILYL)PROPYL]ETHYLENEDIAMINE *	Not Established	Not Established
N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXSILANE *	Not Established	Not Established
* 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

- | | |
|--|---|
| <ul style="list-style-type: none">• Physical state at: 68 ° F (20 ° C) Liquid• Flash point:> 54 ° F (12.2 ° C) Method: TCC• Specific gravity at: 68 ° F (20 ° C) 1.01 g/cm3• Vapor Density: 2.1• Lower Explosive Limit (% vol.): 2.0• Upper Explosive Limit '(% vol.): 12.0• Miscibility in water at 20 ° C: Moderate | <ul style="list-style-type: none">• Ph : 8.5• % Volatile by Volume:80• Vapor pressure at: 68 ° F (20 ° C) 30 mm Hg• Color: Clear or Amber• Appearance: liquid• Odor: Amine odor• Boiling Point: 180 ° F |
|--|---|

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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
- Oxides of Nitrogen, Carbon, Sulfur
- Sulfur oxides
- Toxic Fumes

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 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)

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.

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: § 172.101 HAZARDOUS MATERIALS TABLE

UN Number: 1133

Proper Shipping Name: Adhesives

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: 4620 SUB.5 – CL.60

Schedule B # 3506.91.0000

IATA:

UN Number: 1133

Proper Shipping Name: Adhesives

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: 1133

Proper Shipping Name: Adhesives

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 (Reporting Value)
2-Propanal	67-63-0	<70%	Unknown
N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE	68845-16-9	<40%	Unknown
N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE	1760-24-3	<40%	Unknown

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

	2-Propanal	67-63-0	<70%	
California Proposition 65 (Developmental – Female)				>= 1.0%
Massachusetts				>= 1.0%
New Jersey				>= 1.0%
Pennsylvania				>= 1.0%
Rhode Island				>= 1.0%
N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE	68845-16-9	<40%		
California Proposition 65 (Developmental – Female)				>= 1.0%
Massachusetts				>= 1.0%
New Jersey				>= 1.0%
Pennsylvania				>= 1.0%
Rhode Island				>= 1.0%
N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE	1760-24-3	<40%		
California Proposition 65 (Developmental – Female)				>= 1.0%
Massachusetts				>= 1.0%
New Jersey				>= 1.0%
Pennsylvania				>= 1.0%
Rhode Island				>= 1.0%

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.

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,
N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE- CAS# 68845-16-9

N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE- CAS# 1760-24-3

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16. OTHER INFORMATION



NFPA



HMIS

* Customer and / or end user is responsible for determining Personal Protection Equipment

Preparer:	Flamemaster / Compliance	Revision Date: 08/21/2019	Conversion to ANSI format
Containers:	plastic jars, metal cans cartridge kits		
Limited Quantity	See SDS Section 14		
Maximum container size	50 Gallons / 190 Liters		

Notice to reader:

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

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

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

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

End of Safety Data Sheet

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-1900 Part A Fire Retardant
 - Product Name: Fire Retardant / Base compound Part-A
 - Product reference: CS-1900 Part A Base

1.2. Product Use:
 - Flame Retardent

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

Emergency Contact Information :
 See Below

Specification	MIL-S-38249			Base PART A	
NSN:	8030-00-783-8886 6 oz cartridge(3.5 oz)	8030-00-783-8898 1/2 pint kit (6oz)	8030-00-723-5345 pint kit (12oz)	8030-01-033-3485 gallon kit (96oz)	8030-01-364-7359 2 1/2 oz cart. (2oz)

Emergency Contact:

CHEMTEL: WWW.CHEMTELINC.COM

Flamemaster Corporation Contract Number MIS2644301

Shipments of hazardous materials within United States, Canada, Puerto Rico, and U.S. Virgin Island should reference Chemtel's toll free phone number: 1-800-255-3924 - Reference Number MIS2644301

Shipments and safety applications outside of United States, Canada, Puerto Rico, and the U.S. Virgin Islands must reference Chemtel phone number +1-813-248-0585 - Reference Number MIS2644301

Collect Calls will be accepted. To ensure a bilingual operator please call collect.

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Shipments originating overseas and destined for US, Canada, Puerto Rico or the Virgin Islands must also use both numbers.

Calls originating on board vessels should follow normal ship to shore protocols. Use international access number and alert the ship to shore operator you are involved in an emergency incident.

Shipments of hazardous materials within the listed countries should reference Chemtel's in-country phone numbers:

Australia : 1-300-954-583 : Reference Number MIS2644301

Brazil : 0-800-591-6042 : Reference Number MIS2644301

China : 400-120-0751 : Reference Number MIS2644301

India : 000-800-100-4086 : Reference Number MIS2644301

Mexico : 01-800-099-0731 : Reference Number MIS2644301

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:

FLAMMABLE LIQUIDS - Category 2

ASPIRATION HAZARD - (CATEGORY 1)

ACUTE TOXICITY (INHALATION) - CATEGORY 4

SKIN SENSITIZATION - Category 1

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION (UNBORN CHILD) - Category 2

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

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**GHS LABEL REQUIREMENTS
HAZARD PICTOGRAMS**



SIGNAL WORD : DANGER

HAZARD STATEMENTS:

HIGHLY FLAMMABLE LIQUID AND VAPOR - (H225)
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS - (H304)
HARMFUL IF INHALED - (H332)
CAUSES SERIOUS EYE IRRITATION - (H319)
MAY CAUSE AN ALLERGIC SKIN REACTION - (H317)
SUSPECTED OF DAMAGING THE UNBORN CHILD - (H361d)
SUSPECTED OF CAUSING CANCER - (H351)
MAY CAUSE RESPIRATORY IRRITATION - (H335)

CS1900 Part A P-statements

P101: If medical advise is needed, have product container or label at hand.
P102: keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking
P233: Keep container tightly closed.
P240: Ground / bond container and receiving equipment.
P241: Use explosion-proof electrical / ventilating / lighting /.../ equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P280: Wear protective gloves / protective clothing / eye protection / face protection.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P370+378: In case of fire: Use Universal resistant foam, CO2, water, or powder to extinguish.
P403+235: Store in a well ventilated place. Keep cool.
P501: Dispose of content / container in accordance with local / regional / national / international regulations.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER / doctor / ...
P331: Do NOT induce vomiting.
P405: Store locked up.
P281: Use personal protection equipment as required.
P261: Avoid breathing dust / fumes / gas / mist / vapors / spray.
P271: Use only outdoors or in a well - ventilated area.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P304+312: IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
P305+351+338: IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses if present and easy to do-continue rinsing.
P264: Wash thoroughly after handling.
P337+313: If eye irritation persists: Get medical advice / attention.
P272: Contaminated work clothing should not be allowed out of the workplace.
P302+352: IF ON SKIN: Wash with plenty of water / soap
P333+313: If skin irritation or a rash occurs: Get medical advice / attention.
P363: Wash contaminated clothing before reuse.
P308+313: If exposed: Call a POISON CENTER or doctor / physician.
P403+233: Store in a well ventilated place. Keep container tightly closed.

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.
Avoid any contact with skin or clothing and wash thoroughly after handling.
Emits toxic fumes when heated.
Sanding and grinding dust may be harmful if inhaled.

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

Section -3. COMPOSITION / INFORMATION ON INGREDIENTS

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

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.

4-METHYL-2-PENTANONE

OSHA HAZARDS: FLAMMABLE LIQUID,CARCINOGEN, TARGET ORGAN EFFECT,IRRITANT
 TARGET ORGANS: NERVES
 OTHER HAZARDS THAT DO NOT RESULT IN CLASSIFICATION: MAY FORM EXPLOSIVE PEROXIDES
 GHS CLASSIFICATION: 4-METHYL-2-PENTANONE
 FLAMMABLE LIQUIDS: (CATEGORY2)
ACUTE TOXICITY,ORAL (CATEGORY 5)
 ACUTE TOXICITY,INHALATION (CATEGORY4)
 SKIN IRRITATION (CATEGORY3)
 EYE IRRITATION (CATEGORY2A)
 SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY 3) RESPIRATORY SYSTEM

PHENOLIC POLYMER (EPON RESIN)

FLAMMABLE LIQUID - CATEGORY 2
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - CATEGORY 1
 SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE - (NARCOTIC EFFECTS) - CATEGORY 3

SUBSTANCE % by weight in the product	H&P STATEMENTS	CAS	EINECS/ELINCS
2-BUTANONE (MEK) <=35%	H225,H303+H333,H319,H336,P210, P261,P305+P351+P338	78-93-3	201-159-0
4 Methyl-2-Pentanone <=30%	H225,H303,H316,H319,H332, H335,P210,P233,P240,P241, P242,P243,P261,P264,P271, P280,P303+P361+P353,P304+ P340,P305+P351+P338,P312 P337+P313,P370+P378,P403+ P233,P403+P235,P405,P501	108-10-1	203-550-1
PHENOLIC POLYMER	H225, H315, H319, H317, H335, H336	25036-25-3	N/A

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.

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.

Emits toxic fumes when heated.

HAZARDOUS DECOMPOSITION PRODUCTS INCLUDE: CARBON DIOXIDE, CARBON MONOXIDE, HALOGENATED COMPOUNDS, AND METAL OXIDE / OXIDES, SMOKE, CARBON OXIDES, OTHER TOXIC FUMES

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.

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.

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 -7. HANDLING AND STORAGE

7.1 Handling:

No smoking, eating and drinking during handling.

Avoid exposure during pregnancy.

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

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

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

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

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

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

7.2 Storage:

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Engineering measures:

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

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

8.2 Exposure limits

Work place exposure limits (8 hour)

Substance	OSHA	ACGIH TLV
2-BUTANONE (MEK) *	200 ppm	200 ppm
4-Methyl-2-Pentanone *	100 ppm	20 ppm
PHENOLIC RESIN *	5 mg/m ³ (Respirable)	10 mg/m ³ Inhalable Particulate
* 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

- | | |
|---|---|
| <ul style="list-style-type: none"> • Physical state at: 68 ° F (20 ° C) Liquid • Flash point: -1.11 Deg. C--- 30 Deg. F Method: TCC • Specific gravity at: 68 ° F (20 ° C) 1.2 g/cm³ • Vapor Density: 2.41 • Lower Explosive Limit-2.3 • Upper Explosive Limit- 11.0 • Miscibility in water at 20 ° C: Moderate | <ul style="list-style-type: none"> • Ph : 6.7 • Volatile by weight: 13.0 % by volume: 15.0 % • Vapor pressure at: 68 ° F (20 ° C) 70 mm Hg • Color: Black • Appearance: Paste • Odor: Ketone odor • Boiling Point: > 37.78 Deg. C (>100 Deg F) • 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 including but not limited to the following:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Carbon Monoxide • Carbon Dioxide • Smoke | <ul style="list-style-type: none"> • Halogenated Compounds • Oxides of Carbon and Nitrogen • Metal Oxide / Oxides |
|--|--|

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

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	-
Methyl Isobutyl Ketone	LC50 Inhalation Vapor	Rat	32772 mg/m ³	4 Hours
	LD50 ORAL	Rat	2.08 g/kg	-
PHENOLIC POLYMER	LD50 ORAL	RAT	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-

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Harmful if Inhaled
 Suspected of Causing Cancer. Risk depends on level and duration of exposure.
 Causes Serious Eye Irritation
 May Cause Respiratory Irritation
 May Cause an Allergic Skin Reaction
 Suspected of Damaging the Unborn Child.

CARCINOGENICITY:

INGREDIENT	IARC	OSHA	NTP	CAS#
4-Methyl-2-Pentanone	2B	-	-	108-10-1
PROCESSED MINERAL FIBERS	3	-	-	65997-17-3

SPECIFIC TARGET ORGAN TOXICITY-STOT (SINGLE EXPOSURE)

BUTANONE - CATEGORY 3
 4-Methyl-2-Pentanone - CATEGORY 3

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. CARDIOVASCULAR SYSTEM, NERVOUS SYSTEM.

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)
 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.

Bioaccumulative Potential :

Product / Ingredient	LogP(ow)	BCF	Potential
Butanone	.29	-	low
4-Methyl-2-Pentanone	1.31	-	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: § 172.101 HAZARDOUS MATERIALS TABLE
 UN Number: 1133
 Proper Shipping Name: Adhesives
 Labels: Flammable Liquid

IATA:
 UN Number: 1133
 Proper Shipping Name: Adhesives
 Labels: Flammable Liquid



Hazard Class: 3 Subclass: NO
 Packaging Group: II
 Passenger Air Packing Instruction : 309
 Passenger aircraft: 60 Liter (16 gallon)
 Cargo Air Packing Instruction : 310
 Cargo aircraft only: 220 Liter (58 gallon)

Hazard Class: 3 Subclass: NO
 Packaging Group: II
 Limited Quantity: Passenger aircraft: 60 Liter (16 gallon)
 Cargo aircraft only: 220 Liter (58 gallon)
 Vessel stowage: A
 ERG: 128
 NMFC: 4620 SUB.5 – CL.60
 Schedule B # 3506.91.0000

IMDG:
 UN Number: 1133
 Proper Shipping Name: Adhesives
 Label: 3
 Hazard Class: 3 Subclass: NO
 Packaging Group: II
 EMS No: F, E – S, D

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)
	2-BUTANONE	78-93-3	<=35%	Unknown
	4-Methyl-2-Pentanone	108-10-1	<=30%	Unknown
	Phenolic Polymer	25036-25-3	<=10%	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

California Proposition 65 (Developmental – Female)	4-Methyl-2-Pentanone	108-10-1	<=30%	>=1.0%
Massachusetts	4-Methyl-2-Pentanone	108-10-1	<=30%	>=1.0%
New Jersey	4-Methyl-2-Pentanone	108-10-1	<=30%	>=1.0%
Pennsylvania	4-Methyl-2-Pentanone	108-10-1	<=30%	>=1.0%
Rhode Island	4-Methyl-2-Pentanone	108-10-1	<=30%	>=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)	Phenolic Polymer	25036-25-3	<=10%	>=1.0%
Massachusetts	PHENOLIC POLYMER	25036-25-3	<=10%	>=1.0%
New Jersey	PHENOLIC POLYMER	25036-25-3	<=10%	>=1.0%
Pennsylvania	PHENOLIC POLYMER	25036-25-3	<=10%	>=1.0%
Rhode Island	PHENOLIC POLYMER	25036-25-3	<=10%	>=1.0%

US Regulations State (Continued)

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

Information On Ingredients: None Were Found

Sara 311/312

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

Information On Ingredients:

Butanone: Fire Hazard, Immediate (acute) Health Hazard

4 Methyl 2 Pentanone: Fire Hazard, Immediate (acute) Health Hazard, Delayed (chronic) Health Hazard

Phenolic Resin: Immediate (acute) Health Hazard

Sudden Release Of Pressure: No Products

Reactivity: No Products

Sara 313 Notification: *

4- Methyl 2-pentanone Cas# 108-10-1 <35% Concentration

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

California Prop. 65 : Warning

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

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.

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

2-BUTANONE CAS#78-93-3

4-Methyl 2-Pentanone Cas#108-10-1

Phenolic Polymer CAS# 25036-25-3

16. OTHER INFORMATION

HEALTH	2
FLAMMABILITY	3
REACTIVITY	0

HEALTH	2
FLAMMABILITY	3
REACTIVITY	0

* Customer and / or end user is responsible for determining Personal Protection Equipment

NFPA

HMIS

Preparer:

Flamemaster / Compliance

Revision Date: 08/14/2019

Conversion to ANSI format

Containers:

plastic jars, metal cans
cartridge kits

Limited Quantity

See SDS Section 14

Maximum container size 50 Gallons / 190 Liters

Notice to reader:

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

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

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

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

End of Safety Data Sheet

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