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

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)
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 (CATEGORY 2)
SKIN IRRITATION (CATEGORY 3)
EYE IRRITATION (CATEGORY 2A)
SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE (CATEGORY 3)

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 EXPOSURE (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 (CATEGORY 1) H317

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>H&amp;P Statements</th>
<th>CAS</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol (Isopropyl Alcohol) &lt;=70%</td>
<td>H225, H316, H319, H336, P210, P261, P305+P351+P338</td>
<td>67-63-0</td>
<td>200-661-7</td>
</tr>
</tbody>
</table>

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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. Firefighters 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

<table>
<thead>
<tr>
<th>Substance</th>
<th>OSHA</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanal (Isopropyl Alcohol) *</td>
<td>400 ppm</td>
<td>400 ppm</td>
</tr>
<tr>
<td>N,N'-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE *</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE *</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

* 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: > 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
- 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 waterways. 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

Schedule B # 3506.91.0000

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## 15. REGULATORY INFORMATION

### US Regulations Federal

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<tr>
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<th>CAS No</th>
<th>Weight %</th>
<th>Threshold limit (Reporting Value)</th>
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<tbody>
<tr>
<td>2-Propanal</td>
<td>67-63-0</td>
<td>&lt;70%</td>
<td>Unknown</td>
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<tr>
<td>N,N’-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE</td>
<td>68845-16-9</td>
<td>&lt;40%</td>
<td>Unknown</td>
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<tr>
<td>N-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE</td>
<td>1760-24-3</td>
<td>&lt;40%</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>State</th>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>Threshold limit (Reporting Value)</th>
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<tbody>
<tr>
<td>California Proposition 65</td>
<td>2-Propanal</td>
<td>67-63-0</td>
<td>&lt;70%</td>
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<tr>
<td>(Developmental – Female)</td>
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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-(2-AMINOETHYL)-3-AMINOPROPYLTRIMETHOXYSILANE cas# 1760-24-3, N,N’-BIS[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE cas# 68845-16-9

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16. OTHER INFORMATION

<table>
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<tr>
<th>NFPA</th>
<th>HMIS</th>
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</table>

* 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:**

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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