



FLAMEMASTERR
Flamemaster Corp.

13576 Desmond Street

Pacoima, CA 91331 - USA

SAFETY DATA SHEET

APRIL 28, 2021

File: CS3204BC GSA 07-10

INTEGRAL FUEL TANK

SEALANT CATALYST

Section -1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier: CS-3204 Part B Class C (all application times)

- Product Name: Integral Fuel Tank Sealant / Catalyst Part B

- Product reference: CS-3204-B

1.2. Product Use:

-Integral 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

Emergency Contact Information :

See Below

Specification: IAW AMS-S-8802		Catalyst Part B		CLASS C	
NSN:	8030-01-048-3772 CS3204 C20 PINT				

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.

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

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Section -2. HAZARD (S) IDENTIFICATION

ASPIRATION HAZARD - CATEGORY 1

ACUTE TOXICITY (ORAL) 4, H302

ACUTE TOXICITY (INHALATION) 4, H332

SKIN SENSITIZATION 1, H317

CARCINOGENICITY 2, H351

TOXIC TO REPRODUCTION (FERTILITY) 2, H361f

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

SKIN CORROSION/IRRITATION - Category 2

REPRODUCTIVE TOXICITY, EFFECTS ON OR VIA LACTATION

AQUATIC (CHRONIC) - CATEGORY 4

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

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

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

Human and Environmental Hazards:

HAZARD STATEMENTS:

May be fatal if swallowed and enters airways

Harmful by Inhalation and / or Swallowing

May Cause an Allergic Skin Reaction

Suspected of Damaging Fertility

Suspected of Causing Cancer

May Cause Damage to Organs through Prolonged or Repeated Exposure

Causes serious eye irritation

Causes skin irritation

May cause harm to breast-fed children

May cause long lasting harmful effects to aquatic life

HAZARD PICTOGRAMS:



SIGNAL WORD:

DANGER

GENERAL PRECAUTIONARY STATEMENTS:

P101: If medical advice is needed, have product container or label at hand.

P102: keep out of reach of children.

P103: Read label before use.

SPECIFIC PRECAUTIONARY STATEMENTS ASSOCIATED WITH THIS PRODUCT:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust / fumes / gas / mist / vapors / spray.

P261: Avoid breathing dust / fumes / gas / mist / vapors / spray.

P263: Avoid contact during pregnancy / while nursing.

P264: Wash thoroughly after handling.

P270: Do not eat, drink, or smoke when using this product.

P271: Use only outdoors or in a well - ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P281: Use personal protection equipment as required.

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P301+310: IF SWALLOWED: Immediately call a POISON CENTER / doctor / ...
 P302+352: IF ON SKIN: Wash with plenty of water / ...
 P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+351+338: IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses if present and easy to do-continue rinsing.
 P308+313: If exposed: Call a POISON CENTER or doctor / physician.
 P312: Call a POISON CENTER / doctor /... / if you feel unwell.
 P314: Get medical advise / attention if you feel unwell.
 P321: Specific treatment...See Label Information
 P331: Do NOT induce vomiting.
 P332+313: If skin irritation occurs: Get medical advice / attention.
 P333+313: If skin irritation or a rash occurs: Get medical advice / attention.
 P337+313: If eye irritation persists: Get medical advice / attention.
 P362: Take off all contaminated clothing.
 P363: Wash contaminated clothing before reuse.
 P405: Store locked up.
 P501: Dispose of contents / containers in accordance with local / regional / national / international regulations

HAZARDS NOT OTHERWISE CLASSIFIED: OXIDISING POTENTIAL: Contact with combustible material may result in fire. Keep away from combustible materials. This material increases the risk of fire and may aid in combustion. Prolonged or repeated exposure may dry skin and cause 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

Chemical family : Mixture of organic compounds

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

CHEMICAL NAME: MANGANESE DIOXIDE	CAS# 1313-13-9	EC# 215-202-6	<65% by weight
OSHA HAZARDS: TARGET ORGAN EFFECT, TOXIC BY INHALATION			
TARGET ORGANS: NERVES, LUNGS			
GHS CLASSIFICATION:			
ACUTE TOXICITY, ORAL (CATEGORY 4) - H302			
ACUTE TOXICITY, INHALATION (CATEGORY 4) - H332			
CHEMICAL NAME: TERPHENYL, HYDROGENATED	CAS# 61788-32-7	EC# 262-967-7	<50% by weight
AQUATIC CHRONIC (CATEGORY 4) - H413			
CHEMICAL NAME: TERPHENYL	CAS# 26140-60-3	EC# 247-477-3	<10% by weight
AQUATIC ACUTE (CATEGORY 1) - H400			
AQUATIC CHRONIC (CATEGORY 1) - H410			
CHEMICAL NAME: 1,3 DIPHENYLGUANIDINE	CAS# 102-06-7	EC# 203-002-1	<3% by weight
ACUTE TOXICITY (CATEGORY 4) - H302			
SKIN IRRITATION (CATEGORY 2) - H315			
EYE IRRITATION (CATEGORY 2) - H319			
REPRODUCTIVE (CATEGORY 2) - H361f (FERTILITY)			
STOT-SINGLE EXPOSURE (CATEGORY 3) - H335			
AQUATIC CHRONIC (CATEGORY 2) - H411			

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Sodium Hydroxide may be present in Reportable Quantity as an impurity. Cas# 1310-73-2 % Range .6% - 1.9%

Section -4. FIRST-AID MEASURES

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

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

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

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

Ingestion: If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. 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.

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.

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.

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

Emits toxic fumes when heated.

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.

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.

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Section -7. HANDLING AND STORAGE

7.1 Handling:

No smoking, eating and drinking during handling.

Avoid exposure during pregnancy/while nursing.

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

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

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

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

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

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

7.2 Storage:

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

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
Manganese Dioxide	TWA: 0.1mg/m ³ (as Mn) 8 hours (Inhalable Fraction)
	TWA: 0.02mg/m ³ (as Mn) 8 hours (Respirable Fraction)
Terphenyl, Hydrogenated	TWA: 4.9 mg/m ³ 8 hours
	TWA: 0.5 ppm 8 hours
Terphenyl	C: 5mg/m ³
	C: 0.53 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.

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Eye protection :

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

Skin protection :

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

9. PHYSICAL AND CHEMICAL PROPERTIES

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

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

Emits toxic fumes when heated.

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

11. TOXICOLOGICAL INFORMATION

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

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

ACUTE TOXICITY:

PRODUCT:	RESULT	SPECIES	DOSE	EXPOSURE
Manganese Dioxide	LD50 ORAL	Rat	3478 mg/kg	-
Terphenyl,Hydrogenated	LD50 ORAL	Rat	17500 mg/kg	-
Terphenyl	LD50 Oral	Rat	>1400 mg/kg	-
1, 3-Diphenylguanidine	LD50 Oral	Rat	323mg/kg	-

Acute Toxicity Estimates:

Oral: 1099.7 mg/kg

Inhalation (gases): 10532.1 ppm

Inhalation (vapors) : 25.75 mg/l

Inhalation (Dust and Mist): 3.511mg/l

Specific Target Organ Toxicity (STOT)- Single Exposure

1,3-Diphenylguanidine - (Category 3) - Target Organ - Respiratory Tract Irritation

Zeolites - (Category 3) - Target Organ- Respiratory Tract Irritation

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Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Manganese Dioxide - (Category 2) - Target Organs - Not Determined

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)

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	LogPow	BCF	Potential
1,3 Diphenylguanidine	1.69	19.95	Low

Terphenyl, Hydrogenated - Partially Biodegradable

Terphenyl, Hydrogenated BioConcentration Factor (BCF) : 700-5,200

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.

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.

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.

14. TRANSPORT INFORMATION

DOT: Not regulated

UN Number: Not regulated

IATA: Not regulated

IMDG/IMO: Not regulated

NMFC: 4620 SUB.5 – CL.60

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15. REGULATORY INFORMATION

Other EU Regulations:

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

SARA 311/312Classification: Immediate (acute) health hazard
Delayed (chronic) health hazard**Composition of Ingredients :****Manganese Dioxide : Immediate (acute) health hazard**
Delayed (chronic) health hazard**Polyphenyls, quater and higher : Immediate (acute) health hazard****Terphenyl : Immediate (acute) health hazard****1,3-Diphenylguanidine : Fire Hazard**
Immediate (acute) health hazard
Delayed (chronic) health hazard**US Regulations Federal**

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

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

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

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US Regulations State

California Proposition 65 (Developmental – Female)	MANGANESE DIOXIDE	1313-13-9	< 65%	>= 1.0 %
Massachusetts	MANGANESE DIOXIDE	1313-13-9	< 65%	>= 1.0 %
New Jersey	MANGANESE DIOXIDE	1313-13-9	< 65%	>= 1.0 %
Pennsylvania	MANGANESE DIOXIDE	1313-13-9	<65%	>= 1.0 %
Rhode Island	MANGANESE DIOXIDE	1313-13-9	<65%	>= 1.0 %
Massachusetts	Sodium Hydroxide	1310-73-2	.6%- 1.9%	>= 1.0%
New Jersey	Sodium Hydroxide	1310-73-2	.6%- 1.9%	>= 1.0%
Pennsylvania	Sodium Hydroxide	1310-73-2	.6%- 1.9%	>= 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):Manganese Dioxide cas#1313-13-9

HEALTH	3	HEALTH	3	
FLAMMABILITY	1	FLAMMABILITY	1	Customer and / or end user is responsible
REACTIVITY	1	REACTIVITY	1	for determining PPE.

NFPA

HMIS

Section 16 Other Information

Preparer-Flamemaster/Compliance

Revision Date: 04/28/2021 Conversion to ANSI format

Containers: Plastic Jars, Metal Cans, Cartridge Kits

Maximum Container Size: 50 Gallons/190 Liters

Notice to reader:

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

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

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

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

END OF SAFETY DATA SHEET

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