Safety Data Sheet (HazCom 2012)
CS-3330 Part B Class A-2 Corrosion Inhibitive - CS3330CIBA2

Safety Data Sheet date: 1/8/2025, version 1

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: CS-3330 Part B Class A-2 Corrosion Inhibitive

Other means of identification:

SDS code: CS3330CIBA2

Recommended use of the chemical and restrictions on use

Recommended use:

Restrictions on use:

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Manufacturers:

Flamemaster Corp., 13576 Desmond Street, Pacoima, CA 9 133 1 - USA CAGE Code: 14439

Distributors:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Competent person responsible for the safety data sheet:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Emergency phone number:

CHEMTEL: +1-813-248-0585 (International); 1-800-255-3924 (USA)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Warning, Flam. Liq. 4, Combustible liquid.

Warning, Acute Tox. 4, Harmful if swallowed.

Warning, Skin Irrit. 2, Causes skin irritation.

Warning, Eye Irrit. 2A, Causes serious eye irritation.

Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Label elements

Hazard pictograms:

Warning

Hazard statements:

H227 Combustible liquid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Immediately call a POISON CENTER/doctor/... if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of water/...
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/attention if you feel unwell.
P330 Rinse mouth.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use CO2, dry sand, dry chemical, alcohol-resistant foam, or water to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
None

Hazards not otherwise classified identified during the classification process:
None

Ingredient(s) with unknown acute toxicity:
None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
N.A.

Mixtures
Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 30% - < 40% Manganese Dioxide
CAS: 1313-13-9
 A.1/4/Oral Acute Tox. 4 H302

 A.1/4/Inhal Acute Tox. 4 H332

 A.2/2 Skin Irrit. 2 H315

 A.3/2A Eye Irrit. 2A H319

 A.9/2 STOT RE 2 H373 (Inhalation)

>= 15% - < 20% Ammonium molybdate(VI)
CAS: 12054-85-2
US-HAE/A3 Aquatic Acute 3 H402

>= 10% - < 12.5% Disodium molybdate
CAS: 7631-95-0
 A.1/4/Inhal Acute Tox. 4 H332

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.
Remove contaminated clothing immediately and dispose of safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
No particular treatment.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use CO2, dry sand, dry chemical, alcohol-resistant foam, or water to extinguish.

Unsuitable extinguishing media

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

Hazardous combustion products:

Carbon oxides.
Nitrogen oxides.
Metal oxides.
Maganese compounds.
Sulfur oxides.
Toxic fumes.

Explosive properties: Material supports combustion
Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

For containment:
Contain spillage with commerically available chemical berms and absorbant pads.
For cleaning up:

Practice good industrial hygiene when handling this product. Use appropriate personal protective equipment. Evacuate spill area and ventilate properly.
Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear all appropriate Personal Protective Equipment (PPE). Wear appropriate respiratory protection and ensure adequate ventilation at all times as vapors can accumulate over time in enclosed spaces and poorly ventilated areas. Use product in a way that minimizes splashes and/or creation of dust. Wash with soap and water thoroughly after each use.
Advice on general occupational hygiene:
Practice good industrial hygiene when handling this product.
Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
Keep away from strong acids, strong bases, strong oxidizers, and strong reducing agents.
Instructions as regards storage premises:
Keep away from heat, sparks, and flame. Keep container closed when not in use. Store in a cool, dry, well-ventilated area at a temperature between 50 and 95 degrees F (10 and 35 degrees C). Do not store outside in direct sunlight.
Storage temperature:
Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Manganese Dioxide - CAS: 1313-13-9
- OEL Type: TWA - TWA: 0.1 mg/m3 - Notes: (as Mn) Inhalable fraction.

Ammonium molybdate(VI) - CAS: 12054-85-2
- OEL Type: TWA - TWA: 5 mg/m3 - STEL: 0.5 mg/m3 - Notes: USA OSHA OEL AND TLV -- Confirmed animal carcinogen with unkown relevance to humans
- OEL Type: California PEL - STEL: 0.5 mg/m3 - Notes: Title 8, Article 107

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

Appropriate engineering controls:

Ensure good general ventilation. Local exaust ventilation may be necessary to control any air contaminats to within their TLVs during the ues of this product. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Individual protection measures

Eye protection:

Wear safety glasses with side sheilds (or goggles) and a face shield.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use a NIOSH approved chemical/mechanical filter respirator designed to remove a comination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. For respirator use observe OSHA regulations (29 CFR 1910.134) or use in accordance with applicable laws and regulations of your country or locality.

Thermal Hazards:

Keep away from heat and sources of ignition

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes
Physical state:	Paste	--	--
Colour:	Black	--	--
Odour:	NEGLIGIBLE OILY ODOR	--	--
Odour threshold:	N.A.	--	--
pH:	9.0	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash Point (°F):	199 °F (Method: TCC)	--	--
Flash point (°C):	93 °C (Method: TCC)	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	2.0	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	Material supports combustion	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes

Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Stable at normal pressures and temperatures.

Possibility of hazardous reactions

Hazardous polymerisation will not occur under normal conditions.
Combustion may release hazardous decomposition products.

Conditions to avoid

Eliminate all possible sources of ignition (sparks or flames).
Heat. Limit exposure to air and light. Contamination.

Incompatible materials

Strong acids, strong bases, strong oxidizers, strong reducing agents.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

CS-3330 Part B Class A-2 Corrosion Inhibitive

Acute toxicity

The product is classified: Acute Tox. 4 H302
ATEmix - Oral 1548.03 mg/kg bw
ATEmix - Inhalation (Vapours) 24.9637 mg/l

Skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

Serious eye damage/irritation

The product is classified: Eye Irrit. 2A H319

Respiratory or skin sensitisation

Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity

Not classified
Based on available data, the classification criteria are not met

Carcinogenicity

Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity

Not classified
Based on available data, the classification criteria are not met

STOT-single exposure

Not classified
Based on available data, the classification criteria are not met

STOT-repeated exposure

The product is classified: STOT RE 2 H373

Aspiration hazard

Not classified
Based on available data, the classification criteria are not met

Adverse health effects

Exposure to component 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 kidneys, liver, and central nervous system.

Systems and signs of overexposure include headache, dizziness, fatigue, muscular weakness, drowsiness, reduced fetal weight, increase in fetal deathsl, skeletal malformations, and in extreme cases loss of conciousness.

Repeated or prolonged contact with the preparation may cause defatting of the skin resulting in non-allergic dematitis 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.

Toxicological information of the main substances found in the product:

Manganese Dioxide - CAS: 1313-13-9

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat >= 14900 mg/kg

Ammonium molybdate(VI) - CAS: 12054-85-2

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Notes: OECD Test Guideline 420

Test: LC50 - Route: Inhalation (dust, mist) - Species: Rat > 5.05 mg/l - Notes: OECD Test Guideline 420

Disodium molybdate - CAS: 7631-95-0

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 4040 mg/kg - Source: OECD 401

Test: LC50 - Route: Inhalation (dust, mist) - Species: Rat 1.93 mg/l - Source: OECD 401

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

None.

Substance(s) listed as OSHA Carcinogen(s):

None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

CS-3330 Part B Class A-2 Corrosion Inhibitive

Not classified for environmental hazards

Based on available data, the classification criteria are not met

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

No harmful effects expected.

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Please consult Technical Data Sheet for details.

14. TRANSPORT INFORMATION

UN number

Not classified as dangerous in the meaning of ADR, IATA and IMDG transport regulations.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group

N.A.

Environmental hazards

ADR-Enviromental Pollutant: No

IMDG-Marine pollutant: No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

N.A.

Special precautions

N.A.

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: All the components of this product are listed as active on or are exempt from the TSCA Inventory..

TSCA sections for substances listed in section 3:
Manganese Dioxide is listed in TSCA Section 8b
Ammonium molybdate(VI) is listed in TSCA Section 8b
Disodium molybdate is listed in TSCA Section 8b.

SARA - Superfund Amendments and Reauthorization Act

Section 302 Extremely Hazardous Substances: no substances listed.
Section 304 Hazardous substances: no substances listed.
Section 313 Toxic chemical list: no substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

No substances listed.

CAA - Clean Air Act

CAA listed substances:
None.

CWA - Clean Water Act

CWA listed substances:
None.

USA - State specific regulations

California Proposition 65
Substance(s) listed under California Proposition 65:
None.
Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
No substances listed.
New Jersey Right to know
Substance(s) listed under New Jersey Right to know:
No substances listed.
Pennsylvania Right to know
Substance(s) listed under Pennsylvania Right to know:
No substances listed.

The following substance(s) in this product has/have an identification by CAS number either in countries not affected by the REACH regulation or in regulations not yet updated to reflect the new naming convention for hydrocarbon solvents:

16. OTHER INFORMATION

Full text of phrases referred to in Section 3:
H302 Harmful if swallowed.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 (Inhalation) May cause damage to organs through prolonged or repeated exposure if inhaled.
H402 Harmful to aquatic life.

According to TSCA section 3(2)(B)(i) : a hydrated form of a chemical substance is considered a mixture of the corresponding anhydrous form and water.

Disclaimer:
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.
This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.

ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
TOTAL VOC'S (TVOC) / NONEXEMPT VOC'S (CVOC): Using California South Coast Air Quality Management District (SCAQMD) Rule 1143.	
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average

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