

**Safety Data Sheet (HazCom 2012)**  
**CS-4406 Part B Class B - CS4406BB**

**Safety Data Sheet date: 1/15/2025, version 1**

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## 1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: CS-4406 Part B Class B

Other means of identification:

SDS code: CS4406BB

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses

Sealant

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 91331 - USA CAGE Code: 14439

Distributors:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, [www.flamemaster.com](http://www.flamemaster.com)

Competent person responsible for the safety data sheet:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, [www.flamemaster.com](http://www.flamemaster.com)

Emergency phone number:

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

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## 2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Warning, Flam. Liq. 4, Combustible liquid.



Warning, Acute Tox. 4, Harmful if swallowed.



Warning, Acute Tox. 4, Harmful if inhaled.



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.

H332 Harmful if inhaled.

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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.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

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

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 Alcohol foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water spray/water fog 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.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

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

>= 60% - < 70% 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

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### 4. FIRST-AID MEASURES

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### 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 ophthalmologist immediately.  
Protect uninjured eye.

#### In case of Ingestion:

Do NOT induce vomiting.  
Give nothing to eat or drink.

#### In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.  
In case of inhalation, consult a doctor immediately and show the packing or label.

#### 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.

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## 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media:

In case of fire: Use Alcohol foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water spray/water fog 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:

None

#### Explosive properties:

N.A.

#### 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.

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## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Provide adequate ventilation.  
Use appropriate respiratory protection.  
See protective measures under point 7 and 8.

#### Methods and materials for containment and cleaning up

Wash with plenty of water.

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## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.  
Do not use on extensive surface areas in premises where there are occupants.

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Use localized ventilation system.  
 Don't use empty container before they have been cleaned.  
 Before making transfer operations, ensure that there aren't any incompatible material residuals in the containers.  
 See also section 8 for recommended protective equipment.  
 Advice on general occupational hygiene:  
 Contaminated clothing should be changed before entering eating areas.  
 Do not eat or drink while working.  
 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:  
 None in particular.  
 Instructions as regards storage premises:  
 Cool and adequately ventilated.  
 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/m<sup>3</sup> - Notes: (as Mn) Inhalable fraction.  
 DNEL Exposure Limit Values  
 N.A.  
 PNEC Exposure Limit Values  
 N.A.  
 Appropriate engineering controls:  
 None  
 Individual protection measures  
 Eye protection:  
 Use close fitting safety goggles, don't use eye lens.  
 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 adequate protective respiratory equipment.  
 Thermal Hazards:  
 None

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Black	--	--
Odour:	Negligible Oily Odor	--	--
Odour threshold:	N.A.	--	--
pH:	9	--	--
Melting point / freezing	N.A.	--	--

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point:			
Initial boiling point and boiling range:	N.A.	--	--
Flash Point (°F):	200	--	--
Flash point (°C):	93	--	--
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:	N.A.	--	--
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:	N.A.	--	--
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 under normal conditions

Possibility of hazardous reactions

None

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

## 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

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Acute toxicity

The product is classified: Acute Tox. 4 H302; Acute Tox. 4 H332

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ATEmix - Oral 756.876 mg/kg bw  
ATEmix - Inhalation (Vapours) 16.6513 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  
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

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.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity

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

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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.

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## 13. DISPOSAL CONSIDERATIONS

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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.

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**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-Environmental 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.

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**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.

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:

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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 May cause damage to organs through prolonged or repeated exposure if inhaled.

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.



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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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