

Safety Data Sheet date: 1/23/2025, version 1

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: F-77 Mastic

Other means of identification:

SDS code: F77M

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 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

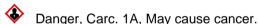
Emergency phone number:

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

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

Warning, Eye Irrit. 2B, Causes eye irritation.



Warning, Repr. 2, Suspected of damaging fertility or the unborn child.

Lact., May cause harm to breast-fed children.

Danger, STOT SE 1, Causes damage to organs.

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

Aquatic Acute 2, Toxic to aquatic life.

Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Label elements

Hazard pictograms:



Danger



Hazard statements:

H320 Causes eve irritation.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H362 May cause harm to breast-fed children.

H370 Causes damage to organs.

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

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

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

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

P263 Avoid contact during pregnancy/while nursing.

P264 Wash hands thoroughly after handling.

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

P273 Avoid release to the environment.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

P405 Store locked up.

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:

>= 5% - < 7% FELDSPAR

CAS: 68476-25-5, EC: 270-666-7 A.3/2A Eye Irrit. 2A H319



A.8/3 STOT SE 3 H335

>= 5% - < 7% MMVF note Q fibers [Man-made vitreous (silicate) fibers with random orientation with alkaline and alkali earth oxides (Na2O+K20+CaO+MgO+BaO) content greater than 18% by weight)

CAS: 65997-17-3, EC: 926-099-9



A.2/2 Skin Irrit. 2 H315

A.3/2B Eye Irrit. 2B H320



A.8/3 STOT SE 3 H335

A.9/2 STOT RE 2 H373

>= 3% - < 5% Dodecaboron tetrazinc docosaoxide heptahydrate

CAS: 138265-88-0

♠ A.7/2 Repr. 2 H361d

US-HAE/A1 Aquatic Acute 1 H400

US-HAE/C2 Aquatic Chronic 2 H411

>= 3% - < 5% ATO Diantimony Trioxide

CAS: 1309-64-4

A.6/2 Carc. 2 H351

US-HAE/A3 Aquatic Acute 3 H402

>= 3% - < 5% 1,1'-(ethane-1,2-diyl)bis[pentabromobenzene] CAS: 84852-53-9

A.6/2 Carc. 2 H351

>= 3% - < 5% Alkanes, C14, chloro

CAS: 63449-39-8 A.7/Lact. Lact. H362

US-HAE/A1 Aquatic Acute 1 H400

US-HAE/C1 Aquatic Chronic 1 H410

>= 1% - < 3% Crystalline Silica (Quartz SiO2) CAS: 14808-60-7, EC: 238-878-4

4.3/2A Eye Irrit. 2A H319

A.6/1A Carc. 1A H350

A.8/1 STOT SE 1 H370

A.8/3 STOT SE 3 H335

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:



Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not induce vomiting. Obtain a medical examination.

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:

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

N.A.

N.A.

Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties:
Oxidizing properties:

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

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

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:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.



Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

MMVF note Q fibers [Man-made vitreous (silicate) fibers with random orientation with alkaline and alkali earth oxides (Na2O+K20+CaO+MgO+BaO) content greater than 18% by weight) - CAS: 65997-17-3

- OEL Type: OSHA PEL - TWA: 15 mg/m3

- OEL Type: NIOSH - TWA: 5 mg/m3

ATO Diantimony Trioxide - CAS: 1309-64-4

- OEL Type: ACGIH - TWA: 0.02 mg/m3

- OEL Type: NIOSH REL - TWA: 0.5 mg/m3

Crystalline Silica (Quartz SiO2) - CAS: 14808-60-7

- OEL Type: OSHA PEL - TWA: 0.05 mg/m3

- OEL Type: TWA - TWA: 0.1 mg/m3 - Notes: respirable fraction

- OEL Type: ACGIH - TWA: 0.025 mg/m3

- OEL Type: IDLH - TWA: 50 mg/m3 - Notes: respirable dust

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: | White | | | |
| Odour: | Slight | | | |
| Odour threshold: | N.A. | | | |
| pH: | 7.4 | | | |
| Melting point / freezing | N.A. | | | |
| point: | | | | |
| Initial boiling point and | N.A. | | | |



| boiling range: | | |
|---|------|------|
| Flash Point (°F): | N.A. | |
| Flash point (°C): | N.A. | |
| 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.A. | |
| (n-octanol/water): | | |
| Auto-ignition temperature: | N.A. | |
| Decomposition | N.A. | |
| temperature: | | |
| 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 | N.A. | | |
| relevant properties | | | |

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:

F-77 Mastic

Acute toxicity

Not classified

Based on available data, the classification criteria are not met

Skin corrosion/irritation



Not classified

Based on available data, the classification criteria are not met

Serious eye damage/irritation

The product is classified: Eye Irrit. 2B H320

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

The product is classified: Carc. 1A H350

Reproductive toxicity

The product is classified: Repr. 2 H361;Lact. H362

STOT-single exposure

The product is classified: STOT SE 1 H370

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:

Dodecaboron tetrazinc docosaoxide heptahydrate - CAS: 138265-88-0

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 4.95 mg/l

ATO Diantimony Trioxide - CAS: 1309-64-4

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 34600 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5.2 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 8300 mg/kg

1,1'-(ethane-1,2-diyl)bis[pentabromobenzene] - CAS: 84852-53-9

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 500 mg/kg

Crystalline Silica (Quartz SiO2) - CAS: 14808-60-7

Acute toxicity:

Test: LD50 - Route: Oral 500 mg/kg

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

ATO Diantimony Trioxide

Crystalline Silica (Quartz SiO2).

Substance(s) listed on the IARC Monographs:

MMVF note Q fibers [Man-made vitreous (silicate) fibers with random orientation with alkaline and alkali earth oxides (Na2O+K20+CaO+MgO+BaO) content greater than 18% by weight) -

Group 3

ATO Diantimony Trioxide - Group 2A

Crystalline Silica (Quartz SiO2) - Group 1.

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

Crystalline Silica (Quartz SiO2).

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

Crystalline Silica (Quartz SiO2).

12. ECOLOGICAL INFORMATION

Ecotoxicity



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

F-77 Mastic

The product is classified: Aquatic Acute 2 - H401; Aquatic Chronic 2 - H411

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.

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:

FELDSPAR is listed in TSCA Section 8b

MMVF note Q fibers [Man-made vitreous (silicate) fibers with random orientation with alkaline and alkali earth oxides (Na2O+K20+CaO+MgO+BaO) content greater than 18% by weight) is listed in TSCA Section 8b

Dodecaboron tetrazinc docosaoxide heptahydrate is listed in TSCA Section 8b ATO Diantimony Trioxide is listed in TSCA Section 8b

1,1'-(ethane-1,2-diyl)bis[pentabromobenzene] is listed in TSCA Section 8b, Section 5a - SNUR, Section 12b

Alkanes, C14, chloro is listed in TSCA Section 8b

Crystalline Silica (Quartz SiO2) is listed in TSCA Section 8b.



SARA - Superfund Amendments and Reauthorization Act

Section 302 Extremely Hazardous Substances: no substances listed.

Section 304 Hazardous substances: ATO Diantimony Trioxide.

Section 313 Toxic chemical list: ATO Diantimony Trioxide.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA: ATO Diantimony Trioxide - Reportable quantity:

1000 pounds.

Reportable quantity for mixture: 20637.96327 pounds.

CAA - Clean Air Act

CAA listed substances:

None.

CWA - Clean Water Act

CWA listed substances:

ATO Diantimony Trioxide is listed in CWA Section 311.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

ATO Diantimony Trioxide - Listed as carcinogen.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

ATO Diantimony Trioxide

Alkanes, C14, chloro

Crystalline Silica (Quartz SiO2).

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

ATO Diantimony Trioxide

Crystalline Silica (Quartz SiO2).

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

ATO Diantimony Trioxide

Crystalline Silica (Quartz SiO2).

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:

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H315 Causes skin irritation.

H320 Causes eye irritation.

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

H361d Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H351 Suspected of causing cancer.

H402 Harmful to aquatic life.

H362 May cause harm to breast-fed children.

H410 Very toxic to aquatic life with long lasting effects.

H350 May cause cancer.



H370 Causes damage to organs.

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.

VOC'S (TVOC) / NONEXEMPT VOC'S (CVOC): Using California South Coast Air Quality Management District

TOTAL



(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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