Target Molecule

Material Safety Data Sheet

Reversion Date 12/02/2016

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Camostat mesilate

Catalog No.: T2391 CAS No.: 59721-29-8

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company: Target Molecule Corp.

Tel: +1 (857) 239-0968 Fax: +1 832 582-8590

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation (Category 2) H315

Serious eye damage/eye irritation (Category 2A) H319

Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3) H335

Hazardous to the aquatic environment, acute hazard (Category 1) H400 Hazardous to the aquatic environment, long-term hazard (Category 1) H410

2.2 GHS Label elements, including precautionary statements:

Pictogram :





GHS Signal Word : Warning

Hazard statement(s) :

H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s) :

P264 Wash face, hands and any exposed skin thoroughly after handling

P273 Avoid release to the environment.

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

protection.

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.

P321 Specific treatment (see supplemental first aid instructions on this

label)

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
P337+P313 IF eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Synonyms : 4-[[4-[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-

(dimethylamino)-2-oxoethyl ester methanesulfonate; FOY 305; FOY-S 980;

Foipan mesylate

Formula : $C_{21}H_{26}N_4O_8S$ Molecular weight : 494.52 mg/mol CAS-No. : 59721-29-8

4. FIRST AID MEASURES

4.1 Description of first aid measures

4.11 In Case of Inhalation

Remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration.

4.12 In Case of Skin Contact

Flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

4.13 In Case of Eye Contact:

Check for and remove contact lenses and flush with copious amounts of water; assure adequate flushing by separating the eye lids with fingers; call a physician.

4.14 In Case of Ingestion

Wash out mouth with copious amounts of water; call a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2).

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.3 Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Avoid breathing dust. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

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Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: Store at -20°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

8.2.1 Engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protective equipment

Eye protection Safety goggles with side-shields.

Hand protection Protective gloves. Skin and body protection Impervious clothing. Respiratory protection Suitable respirator.

Environmental exposure Do not let product enter drains.

controls

Odor

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

No data available Odor threshold No data available No data available Melting/freezing point No data available No data available

Boiling point/range Flash point No data available

No data available Evaporation rate

Flammability (solid, gas) No data available

Upper/lower flammability or

explosive limits

No data available

No data available Vapor pressure Vapor density No data available Relative density No data available Water solubility No data available Partition coefficient:

noctanol/water

No data available

Auto-ignition temperature No data available No data available Decomposition temperature Viscosity No data available No data available **Explosive properties**

Oxidizing properties No data available

9.2 Other safety information

No data available

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10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Materials to avoid

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - see section 5

Other decomposition products - no data available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 3,000 mg/kg

LD50 Oral - mouse - 3,000 mg/kg

Inhalation: no data available

Dermal: no data available

LD50 Intravenous - rat - 152 mg/kg

LD50 Subcutaneous - rat - 1,320 mg/kg

LD50 Intravenous - mouse - 200 mg/kg

LD50 Subcutaneous - mouse - 1,400 mg/kg

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

Respiratory or skin sensitisation

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at a level equal to or greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by ACGIH.

NTP: No component of this product present at a level equal to or greater than 0.1% is identified as a anticipated or confirmed carcinogen by NTP.

OSHA: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by OSHA.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

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Additional Information

RTECS: Not available

The toxicological effects of this product have not been thoroughly studied.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

BT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Very toxic to aquatic life.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Dispose substance in accordance with prevailing country, federal, state and local regulations.

Contaminated packaging

Dispose substance in accordance with prevailing country, federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (4-[[4-

[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-(dimethylamino)-2-oxoethyl ester

methanesulfonate)

Marine pollutant: Marine pollutant

IATA

UN number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (4-[[4-

[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-(dimethylamino)-2-oxoethyl ester

methanesulfonate)

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard.

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

4-[[4-[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-(dimethylamino)-2-oxoethyl ester

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methanesulfonate CAS-No.: 59721-29-8

Revision Date

New Jersey Right to Know Components

4-[[4-[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-(dimethylamino)-2-oxoethyl ester methanesulfonate

CAS-No.: 59721-29-8 Revision Date

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

The above information is believed to be correct based on the present state of our knowledge but does not purport to be complete. The product is for research and trained personnel use only. Target Molecule disclaims all liability for any damage resulting from handling or from contact with the above product.

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