

SAFETY DATA SHEETS

According to the UN GHS revision 8

			Version: 1.0
			Creation Date: July 15, 2019
			Revision Date: July 15, 2019
SECTIC	ON 1: Identification		
1.1 Gł	HS Product identifier		
Product n	ame	Calmagite	
1.2 Ot	Other means of identification		
Other nan	nes		
1.3 Re	Recommended use of the chemical and restrictions on use		
lde	entified uses	Industrial and scientific research uses.	
Us	es advised against	no data available	
1.4 Su	upplier's details		
Co	ompany	Target Molecule Corp.	
Ad	dress	Suite 260, 36 Washington Street, Wellesley Hills, Massachusetts, USA	
Tel	l/Fax	+1 (857) 239-0968	
1.5 En	mergency phone numb	er	
Em	nergency phone number	400-821-2233	
Se	rvice hours	Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).	

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Skin irritation, Category 2 Eye irritation, Category 2 Specific target organ toxicity – single exposure, Category 3

2.2 GHS label elements, including precautionary statements

Pictogram(s)

Signal word	Warning
Hazard statement(s)	H315 Causes skin irritation
	H319 Causes serious eye irritation
	H335 May cause respiratory irritation
Precautionary statement(s)	
Prevention	P264 Wash thoroughly after handling.
	P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing
	protection/
	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
	P271 Use only outdoors or in a well-ventilated area.
Response	P302+P352 IF ON SKIN: Wash with plenty of water/
	P321 Specific treatment (see on this label).

	P332+P317 If skin irritation occurs: Get medical help.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P319 Get medical help if you feel unwell.
Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
	P405 Store locked up.
Disposal	P501 Dispose of contents/container to an appropriate treatment and disposal facility in
	accordance with applicable laws and regulations, and product characteristics at time of
	disposal.

2.3 Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number		Concentration
3-hydroxy-4-(6-hydroxy-m-	3-hydroxy-4-(6-hydroxy-m-	3147-14-		
tolylazo)naphthalene-1-sulphonic acid	tolylazo)naphthalene-1-sulphonic acid	6	563-0	100%

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

lf inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2 Most important symptoms/effects, acute and delayed

no data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

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

5.2 Specific hazards arising from the chemical

no data available

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

Recommended storage temperature: Store at -20°C

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	dark brown crystalline powder
Colour	no data available
Odour	no data available
Melting point/freezing point	330°C(lit.)
Boiling point or initial boiling poin	t 147°C/15mmHg(lit.)
and boiling range	
Flammability	no data available
Lower and upper explosion	no data available
limit/flammability limit	
Flash point	94°C(lit.)
Auto-ignition temperature	no data available
Decomposition temperature	no data available
рН	no data available
Kinematic viscosity	no data available
Solubility	no data available
Partition coefficient n-	no data available

octanol/waterVapour pressureno data availableDensity and/or relative density1.48 g/cm3Relative vapour densityno data availableParticle characteristicsno data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- · Toxicity to microorganisms: 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 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

14.1 UN Number

	ADR/RID: UN1993 (For reference only, please check.)	IMDG: UN1993 (For reference only, please check.)	IATA: UN1993 (For reference only, please check.)
14.2	UN Proper Shipping Name		
	ADR/RID: FLAMMABLE LIQUID, N.O.S. (For reference only, please check.)	IMDG: FLAMMABLE LIQUID, N.O.S. (For reference only, please check.)	IATA: FLAMMABLE LIQUID, N.O.S. (For reference only, please check.)
14.3	Transport hazard class(es)		
	ADR/RID: 3 (For reference only, please check.)	IMDG: 3 (For reference only, please check.)	IATA: 3 (For reference only, please check.)
14.4	Packing group, if applicable		
	ADR/RID: I (For reference only, please check.)	IMDG: I (For reference only, please check.)	IATA: I (For reference only, please check.)
14.5	Environmental hazards		
	ADR/RID: No	IMDG: No	IATA: No
14.6	Special precautions for user		
	no data available		

14.7 Transport in bulk according to IMO instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
3-hydroxy-4-(6-hydroxy-m-tolylazo)naphthalene-1- sulphonic acid	3-hydroxy-4-(6-hydroxy-m-tolylazo)naphthalene-1- sulphonic acid	3147-14-6	221-563-0
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Not Listed.

SECTION 16: Other information

Information on revision

Creation Date	July 15, 2019
Revision Date	July 15, 2019

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- eChemPortal The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en
- CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- ECHA European Chemicals Agency, website: https://echa.europa.eu/

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.