



SAFETY DATA SHEET

DATE: 28th August 2024

1. Identification

Product Name: Clopidogrel Bisulfate

CAS Number: 120202-66-6

Recommended use/Use advised against: No information available

Details of the Australian Supplier:

Astral Scientific Pty Ltd
29 Mangrove Lane
Taren Point NSW 2229

Company Phone Number: 02 9540 2055

Email Address: support@astralscientific.com.au

Emergency Telephone Number: 13 11 26

2. Hazard(s) Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word: Danger

Hazard Statements: H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.



Precautionary Statements:

PREVENTION: P260 Do not breathe dust. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. RESPONSE: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep

comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 + P310 for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P391 Collect spillage. DISPOSAL: P501 Dispose of contents/ container to an approved waste disposal plant.

3.Composition / Information on ingredients

Component	CAS #	Purity / Weight %
(S)-(+)-Methyl 2-(4,5,6,7-tetrahydrothieno[3,2-c]pyridin-5-yl)-2-(2chlorophenyl)acetate hydrogen sulfate	120202-66-6	<= 100 %

4.First-aid measures

General Advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, Immediately call in ophthalmologist. Remove contact lenses.
Skin Contact	Take off immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a physician.
Inhalation	Remove to fresh air. Contact physician.
Ingestion	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
Most important symptoms/effects	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Notes to physician	No data available

5.Fire-fighting measures

Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Flash Point	No information available
Method	No information available
Autoignition temperature	No information available
<u>Explosion limits</u>	

Upper No information available

Lower No information available

Sensitivity to mechanical impact No information available

Sensitivity to static discharge No information available

Specific hazards arising from the chemical

Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride gas, Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

Protective equipment and precautions for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6.Accidental release measure

Personal precautions Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions Do not let product enter drains.

Methods for containment/clean-up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

7.Handling and storage

Handling Wear personal protective equipment/face protection.
Ensure adequate ventilation. Do not get in eyes.

Storage Keep container tightly closed and store at controlled room temperature.

8.Exposure controls / personal protection

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/Face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory protection	Use a approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9.Physical and chemical properties

Physical state	Solid
Appearance	No information available
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/range	Melting point: 184 °C
Boiling point/range	No information available
Flash point	No information available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Flammability or explosive elements	
Upper	No information available
Lower	No information available
Vapor pressure	No information available
Vapor density	Not applicable
Specific gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10.Stability and reactivity

Reactive hazard	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Stability	The product is chemically stable under standard ambient conditions (room temperature) .
Conditions to avoid	No data available
Incompatible materials	Strong oxidizing agents, Strong acids and strong bases
Hazardous decomposition products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Sulfur oxides
Hazardous polymerization	No data available
Hazardous reactions	No data available

11.Toxicological information

Acute Toxicity

Product information / Component information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
(S)-(+)-Methyl 2-(4,5,6,7-tetrahydrothieno[3,2-c]pyridin-5-yl)-2-(2chlorophenyl)acetate hydrogen sulfate	Rat - 2,423 mg/kg	No data available	No data available

Toxicologically synergistic products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity No information available

Germ Cell Mutagenity

Test Type: Ames Test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Remarks: (External MSDS)

Test Type: Micronucleus test

Cell type: Bone marrow

Remarks: (External MSDS)

Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
STOT – single exposure	No information available
STOT – repeated exposure	No information available
Aspiration hazard	No information available
Symptoms/effects, both acute and delayed	No information available
Endocrine disruptor information	No information available
Other adverse effects	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

Ecotoxicity

Toxicity to daphnia and other aquatic invertebrates.

EC50 - Daphnia magna (Water flea) - 8.3 mg/l - 48 h Remarks: (External MSDS)

Persistence and degradability	Biodegradability Result: 4.07 % - Not readily biodegradable. Remarks: (External MSDS)
Bioaccumulation/accumulation	No information available
Mobility	No information available

13. Disposal considerations

Waste disposal methods	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
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14. Transport information

DOT	Not dangerous goods
TDG	Not dangerous goods
IATA	Not dangerous goods
IMDG/IMO	Not dangerous goods

15.Regulatory information

International Inventories

TSCA Not listed

Note *Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL Complies

EINECS/ELINCS Complies

ENCS This product complies with ENCS:

IECSC This product does not comply with china:

KECL Does not Comply

PICCS Does not Comply

AICS All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Revision date 28th August 2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet