



MATERIAL SAFETY DATA SHEET

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Issue Date:

1- Chemical Product Information and Company Identification.

Product Name: : D-(-)-Tartaric acid reference standard, AnStan[®].
Synonym: : Butanedioic acid.
Product code: : BS14401.
CAS Number: : 147-71-7.
Company Name: : Briti Scientific.
Company Address: : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.
Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
147-71-7.	Butanedioic acid.	C ₄ H ₆ O ₆ .

Section 3- Hazards Identification.

Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met.

Health hazards

Serious Eye Damage/Eye Irritation: Category 1 (H318).

Environmental hazards.

Based on available data, the classification criteria are not met.

Label Elements



Signal Word: Danger.

Hazard Statements

H318 - Causes serious eye damage.

Precautionary Statements

P280 - Wear eye protection/ face protection.



USA: #1004, Boston, Massachusetts, 02116, United States. India: Jeedimetla, Hyderabad-500 055, Telangana.

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P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/physician.

Hazards not otherwise classified (HNOC)

None identified

Section 4- First Aid Measures.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Self-Protection of the First Aider: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Ingestion: Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects: Causes eye burns.

Notes to Physician: Treat symptomatically.

Section 5- Fire Fighting Measures.

Suitable Extinguishing Media: Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media: No information available.

Flash Point: No information available.

Method - No information available.

Autoignition Temperature: No information available.

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact: No information available.

Sensitivity to Static Discharge: No information available.

Specific Hazards Arising from the Chemical

Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.





Section 6- Accidental Release Measures.

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions: Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up:

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 7- Handling and Storage.

Handling: Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage: Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Section 8- Exposure Control/Personal Protection.

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological limit values: This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Engineering Measures: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal Protective Equipment

Eye/face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

Large scale/emergency use: Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143.

Small scale/Laboratory use: Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask: Valve filtering: EN405; or; Half mask: EN140; plus filter, EN141

When RPE is used a face piece Fit Test should be conducted





Section 9- Physical and Chemical Properties.

Appearance:	White to Almost white powder to crystal.
Odor:	No information available.
Odor Threshold:	No information available.
pH:	No information available.
Melting Point/Range:	169°C.
Boiling Point/Range:	No information available.
Flash Point:	210 °C / 410 °F.
Evaporation Rate:	No information available.
Flammability (solid,gas):	Not applicable.
Flammability or explosive limits:	
Upper	No information available.
Lower	No information available.
Vapor Pressure:	No information available.
Density:	1.76 g/cm ³ .
Solubility:	Soluble in water.
Partition coefficient; n-octanol/water:	No data available.
Autoignition Temperature:	427 °C / 800.6 °F.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Molecular fomula:	C ₄ H ₆ O ₆ .
Molecular Weight:	150.09 g/mol.

Section 10- Stability and Reactivity.

Reactive Hazard: None known, based on information available
Stability: Stable under normal conditions.
Conditions to Avoid: Avoid dust formation, Incompatible products, Excess heat.
Incompatible Materials: Bases, Fluorine, Metals, Reducing Agent.
Hazardous Decomposition Products: Carbon monoxide (CO), Carbon dioxide (CO₂).
Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

Section 11- Toxicological Information.

Acute Toxicity

Product Information: No acute toxicity information is available for this product.

Component Information

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.
Mutagenic Effects: No information available.
Reproductive Effects: No information available.
Developmental Effects: No information available.
Teratogenicity: No information available.
STOT - single exposure None known
STOT - repeated exposure None known
Aspiration hazard: No information available.
Symptoms / effects, both acute and delayed: No information available.
Endocrine Disruptor Information: No information available
Other Adverse Effects: The toxicological properties have not been fully investigated.

Section 12- Ecological Information.

Ecotoxicity: Do not empty into drains.
Persistence and Degradability: Soluble in water, Persistence is unlikely, based on information available.
Bioaccumulation/ Accumulation: Bioaccumulation is unlikely.
Mobility in soils: The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility, highly mobile in soils.

Section 13- Disposal Considerations.

Waste Disposal Methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14- Transport Information.

DOT: Not regulated.
TDG: Not regulated.
IATA: Not regulated.
IMDG/IMO: Not regulated.

Section 15- Regulatory Information.

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710).

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export: Not applicable.

U.S. Federal Regulations

SARA 313: Not applicable.

SARA 311/312 Hazard Categories See section 2 for more information.





CWA (Clean Water Act): Not applicable.

Clean Air Act: Not applicable.

OSHA - Occupational Safety and Health Administration: Not applicable.

CERCLA: Not applicable.

California Proposition 65: This product does not contain any Proposition 65 chemicals.

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

