

SAFETY DATA SHEET

1. Identification

Product Name
Recommended Use

GrenoClean⁺
Laboratory chemicals.

Details of the supplier of the safety data sheet

Company

Grenova, Inc
1900 Ellen Rd.
Richmond, VA 23230
Tel: 866-374-8797
Fax: 804-299-5208
Email: support@grenovasolutions.com
www.grenovasolutions.com

2. Hazard(s) Identification

Classification

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

Oxidizing solids	Category 3
Acute oral toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 1

Label Elements

Signal Word

Danger

Hazard Statements

May intensify fire, oxidizer
Harmful if swallowed
Causes serious eye damage



Precautionary Statements

Prevention

Wash face, hands, and any exposed skin thoroughly after handling
Do not eat, drink, or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep/Store away from clothing/ other combustible materials
Take any precaution to avoid mixing with combustibles

Eyes

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 or doctor/physician

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Disposal

These chemicals and mixtures have been verified to be of low concern based on experimental and modeled data from the EPA.
All chemicals and mixtures have met the Safer Choice Criteria, "Green circle Criteria" ●
<https://www.epa.gov/saferchoice/safer-ingredients#searchList>

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No
GrenoClean+*	Mixture 15630-89-4 7681-38-1

* Proprietary

4. First-Aid Measures

General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Get medical attention if symptoms occur.
Most important symptoms and effects	None reasonably foreseeable. Causes severe eye damage.
Notes to Physician	Treat symptomatically

5. Fire-Fighting Measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available
Method - No information available

Autoignition Temperature Not applicable

Explosion Limits

Upper No data available

Lower No data available

Oxidizing Properties Oxidizer

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.). If this product is involved in a fire, the following can be released: Carbon monoxide, carbon dioxide, and sodium oxide.

Hazardous Combustion Products

Thermal decomposition may produce oxides of sulfur and sodium.

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.

NFPA

Health
2

Flammability
0

Instability
0

Physical hazards
OX

6. Accidental Release Measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up	Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Reference to other sections	For protective measures see Section 8. For disposal see Section 13.

7. Handling and Storage

Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Keep away from clothing and other combustible materials.
Storage	Keep in a dry, cool, and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Keep away from heat, sparks, and flame. Do not store near combustible materials. Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep at temperatures below 40°C.
Specific end use(s)	For use in laboratories

8. Exposure Controls / Personal Protection

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure 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.
<u>Personal Protective Equipment</u>	
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	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirators if exposure limits are exceeded or if irritation or other symptoms are experienced.
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:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink, and animal feeding stuff. Do not eat, drink, or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.
Environmental exposure controls	Prevent product from entering drains. Do not allow material to contaminate ground water system.

9. Physical and Chemical Properties

Physical State	Powder Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	9.10 ± 0.10
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid, gas)	Contact with combustible material may cause fire
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	Not applicable
Decomposition Temperature	No information available
Viscosity	Not applicable

10. Stability and Reactivity

Reactive Hazard	May intensify fire, oxidizer
Stability	Moisture sensitive. Stable. Oxidizer: Contact with combustible/organic material may cause fire.
Conditions to Avoid	Excess heat. Incompatible products. Exposure to moist air or water. Combustible material.
Incompatible Materials	Acids, Bases, Water, finely powdered metals, Organic materials, Reducing Agent, Finely powdered metals, Strong reducing agents, Combustible material
Hazardous Decomposition Products	None under normal use conditions
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological Information

Acute Toxicity

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	There are no known carcinogenic chemicals in this product.
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.

12. Ecological Information

Ecotoxicity effects: Contains a substance which is hazardous for the environment.

Aquatic toxicity: Contains a substance that is toxic to aquatic organisms.

Persistence: Soluble in water, Persistence is unlikely, based on available information

Degradability: Not Relevant for inorganic substances

Degradation in sewage treatment plant: Contains substances known to be hazardous to the environment or not degradable in wastewater treatment plants.

Bioaccumulative potential: Bioaccumulation is unlikely.

Mobility in soil: 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.

General Notes:

Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Results of PBT and vPvB assessments

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available

13. Disposal Considerations

Waste Disposal Methods

Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

14. Transport Information

DOT

UN-No	UN1479
Hazard Class	5.1
Packing Group	II

TDG

UN-No	UN1479
Hazard Class	5.1
Packing Group	II

IATA

UN-No	UN1479
Hazard Class	5.1
Packing Group	II

IMDG/IMO

UN-No	UN1479
Hazard Class	5.1
Packing Group	II

15. Regulatory Information

United States of America

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance inventory

Canada

All components of this product are listed on the Canadian Domestic Substances List (DSL)

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.
U.S. State Right-to-Know Regulations	Not applicable.
U.S. Department of Transportation	
Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available.
UK	Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment
EU	Regulation (EC) No 649/2012 of the European Parliament and the Council of 4 July 2012 concerning the export and import of dangerous chemicals is not applicable.

16. Other Information

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 SDS