

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NOCHROMIX® - Crystals
 Chemical Family : Peroxygen
 Chemical Formulation : Proprietary*

Details of the supplier of the safety data sheet

Manufacturer : Godax Laboratories, Inc. Telephone: (240) 505-4178
 P.O. Box 422 Emergency: (240) 505-4178
 Cabin John, MD 20818

2. HAZARDS IDENTIFICATION

Classification of the substance

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

Oxidizing solids (Category 3), H272
 Acute toxicity, Oral (Category 4), H302
 Acute toxicity, Dermal (Category 4), H312
 Skin irritation (Category 2), H315
 Eye irritation (Category 2A), H319
 Respiratory sensitization (Category 1), H334
 Skin sensitization (Category 1), H317
 Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335
 Acute aquatic toxicity (Category 3), H402
 Chronic aquatic toxicity (Category 3), H412

GHS Label elements, including precautionary statements

Pictogram



Hazard statement(s)

H272 May intensify fire; oxidizer
 H302 + H312 Harmful if swallowed or in contact with skin
 H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H335 May cause respiratory irritation
 H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P210 Keep away from heat
 P220 Keep/Store away from clothing/combustible materials
 P221 Take any precaution to avoid mixing with combustibles
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
 P264 Wash skin thoroughly after handling
 P270 Do not eat, drink or smoke when using this product
 P271 Use only outdoors or in a well-ventilated area
 P272 Contaminated work clothing should not be allowed out of the workplace
 P273 Avoid release to the environment
 P280 Wear protective gloves/ protective clothing / eye protection/ face protection

*New Jersey Trade Registration: TSRN 801000-5000

P285	In case of inadequate ventilation wear respiratory protection
P301 + P312	IF SWALLOWED: Call a Poison Center or doctor/ physician if you feel unwell
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P322	Specific measures (see Section 4)
P330	Rinse mouth
P333 + P313	If skin irritation or rash occurs: get medical advice/ attention
P337 + P313	If eye irritation persists: Get medical advice/ attention
P342 + P311	If experiencing respiratory symptoms: call a POISON CENTER or doctor/ physician
P362	Take off contaminated clothing and wash before reuse
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up
P501	Dispose of contents/ container to an approved waste disposal plant

EC Risk Phases

Risk Phrase: R 8, 22, 36, 37, 38, 42, 43

R8	-Contact with combustible material may cause fire
R22	-Harmful if swallowed
R36, 37, 38	-Irritating to eyes, respiratory system and skin
R42, 43	-May cause sensitization by inhalation or by skin contact

Safety Phrases: S2, 22, 24, 26, 37

S2	-Keep out of reach of children
S22	-Do not breathe dust
S24	-Avoid contact with eyes, rinse immediately with plenty of water and seek medical advice
S26	-In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S37	-Wear suitable gloves

Hazards not otherwise classified (HNOC) or not covered by GHS – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Molecular weight: 228.20 g/mol

Hazardous Components

Component	Classification	Concentration
Inorganic persulfate	Ox. Sol. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Sens. 1; Skin Sens. 1; STOT SE 3; Aquatic Acute 3; H272, H302, H315, H317, H319, H334, H335, H402	90 – 100 %

4. FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES**Suitable extinguishing media**

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

Special hazards arising from the substance or mixture

Nitrogen oxides (NO_x), Sulphur oxides
Container explosion may occur under fire conditions.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

May intensify fire; oxidizer. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

Environmental precautions

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

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulation (see section 13).

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation in places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat.

Storage

Store unopened in a cool, clean, dry well-ventilated place away from point sources of heat (e.g. radiant heater or steam pipes). Keep away from combustible material. Do not smoke. Use first in first out storage system. Avoid contamination of opened product. If possible reseal product airtight in original pouch. Will decompose on exposure to moist air or water. Stable under recommended storage conditions. In case of a fire or decomposition (fuming/smoking) deluge with plenty of water to control decomposition. For storage refer to NFPA Bulletin 430 on storage of oxidizing materials. NFPA Hazard Class 1 oxidizer.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – nitrogen oxides (NO_x), sulphur oxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplaces control parameters

Component	CAS-No.	Value	Control parameters	Basis
inorganic persulfate	-	TWA	0.1 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Skin irritation varies		

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves (e.g. nitrile, silver shield). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the substance at the specific workplace.

Respiratory Protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- | | |
|---|---|
| a) Appearance | Form: powder
Colour: white |
| b) Odor | No data available |
| c) pH | 1.0 – 2 at 228 g/l at 25 °C (77 °F) |
| d) Melting point/ freezing point | Decomposes |
| e) Initial boiling point and boiling range | No data available |
| f) Flash point | No data available |
| g) Flammability (solid, gas) | No data available |
| h) Upper/lower flammability or explosive limits | No data available |
| i) Vapor pressure | No data available |
| j) Vapor density | 7.88 – (Air = 1.0) |
| k) Relative density | 1.980 g/cm ³ |
| l) Water solubility | 228 g/l at 20 °C (68 °F) – completely soluble |
| m) Auto-ignition temperature | No evidence of combustion up to 800 °C |
| n) Decomposition temperature | Decomposition will occur upon heating |
| o) Explosive properties | No data available |
| p) Oxidizing properties | The substance or mixture is classified as oxidizing with the category 3 |
| q) Bulk density | 900 kg/m ³ |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions; will decompose on exposure to moist air or water

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, moisture, strong reducing agents

Incompatible materials

Strong reducing agents, organic materials, powdered metals, combustible materials, nitric acid, hydrochloric acid, halides, silver salts

Hazardous decomposition products

Oxygen that supports combustion and oxides of sulfur and nitrogen. In the event of fire: see section 5

Precautionary Statement

Use of persulfates in chemical reactions requires appropriate precautions and design considerations for pressure and thermal relief. Decomposing persulfates will evolve gas and/or vapor, which can accelerate exponentially with heat generation, and create significant and hazardous pressure if contained and not properly controlled and mitigated.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral – rat – 689 mg/kg

Inhalation: No data available

LD50 Dermal – rat - > 2,000 mg/kg

Skin corrosion/irritation

Skin-rabbit Result: no skin irritation

Respiratory or skin sensitization

Guinea-pig Result: causes sensitization
(OECD Test guideline 406)

Germ cell mutagenicity

No data available

Carcinogenicity

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

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

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

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

Reproductive toxicity

No data available

Specific target organ toxicity

Single exposure- May cause respiratory irritation

Aspiration hazard

No data available

Additional information

RTECS: SEO350000

To the best of our knowledge, the chemical, physical and toxicological properties haven't been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

13. PROCEDURE FOR ACCIDENTAL RELEASE OR SPILL AND DISPOSAL CONSIDERATIONS

Waste treatment methods

Spilled material should be put into an approved DOT container (polyethylene-lined fiber container) and isolated for disposal. Pick up and arrange material for disposal without creating dust. Isolated material should be monitored for signs of decomposition (fuming/smoking). If spilled material is wet, dissolve with large quantities of water and allow to stand until it has lost its oxidative potential. After total decomposition, product should be neutralized and should be disposed of as a hazardous waste in accordance with all local, state and federal environmental laws, regulations and standards. Because acceptable methods of disposal may vary by location, and because regulatory requirements may change, the appropriate regulatory agencies should be contacted prior to disposal. It is recommended to contact a licensed professional waste disposal service to dispose of this material.

Product

For bulk quantities burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1479	Class: 5.1	Packing group: III
Proper shipping name:	Oxidizing solid, n.o.s.	
Reportable quantity (RQ):		
Marine pollutant: No		
Poison inhalation hazard: No		

IMDG

UN number: 1479	Class: 5.1	Packing group: III	EMS-No: F-A, S-Q
Proper shipping name:	Oxidizing solid, n.o.s.		
Marine pollutant: No			

IATA

UN number: 1479	Class: 5.1	Packing group: III
Proper shipping name:	Oxidizing solid, n.o.s.	

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

The following components are subject to reporting levels established by SARA Title III, Section 313:

Inorganic persulfate	CAS-No.	Revision date
	7727-54-0	2007-03-01

SARA 311/312 Hazards

Reactivity Hazard, acute health hazard

Massachusetts right to know components

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

Pennsylvania right to know components

Inorganic persulfate	Revision date
	2007-03-01

New Jersey right to know components

Inorganic persulfate	Revision date
	2007-03-01

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.

TSCA (Toxic Substance Control Act)

TSCA inventory status (40 CFR 710):	Listed
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RCRA (Resource Conservation and Recovery Act)

RCRA identification of hazardous waste (40 CFR 261):
Waste Number: D001

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class

C	Oxidizing materials
D2A	Very toxic materials
D2B	Toxic materials

16. OTHER INFORMATION

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Health Hazard	2
Chronic Health Hazard	*
Flammability	0
Physical Hazard	1
NFPA Rating	
Health Hazard	2
Fire Hazard	0
Reactivity Hazard	1
Special Hazard.I:	OX

To Whom It May Concern:

This is to certify that NOCHROMIX[®] glass cleaning compound, manufactured by Godax Laboratories, Inc., is a confidential composition covered under the "Trade Secret" disclosure. The ingredients are listed in the Chemical Abstract Register as well as the EPA TSCA Inventory List.

In case of a medical emergency, the material will be identified when the treating physician so requests. Subsequently, a written statement is to be signed to keep the information confidential, to prevent disclosure of the Trade Secret.

In non-emergency situations, the request for information must be in writing and must describe with reasonable detail the medical or occupational health need for the information. The request of a health official will be considered if the information will be used for one or more of the following activities:

- To assess the hazards of the chemicals to which employees will be exposed.
- To conduct or assess sampling of the work place atmosphere to determine employee exposure levels.
- To conduct pre-assignment or periodic surveillance of exposed employees.
- To provide medical treatment to exposed employees
- To select or assess appropriate personal protective equipment for exposed employees.
- To design or assess engineering controls or other protective measures for exposed employees.
- To conduct studies to determine the health effect of exposure

The health professional must also specify why alternative information is insufficient, and include the procedures to be used to protect the confidentiality of the information. It must include an agreement not to use the information for any purpose other than the health need stated nor release it under any circumstances except to OSHA.

NOTE: Godax Laboratories believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. Godax Laboratories, Inc. furnishes the data contained herein in good faith at the customer's request and without liability or legal responsibility for same whatsoever and no warranty or guarantee expressed or implied is made with respect to such data. The SDS cannot include information on every unique application of the material, but considers the hazardous exposure resulting from customary, reasonable, and foreseeable occupational use or misuse in handling and storage. **The SDS furnished is for the NOCHROMIX[®] Crystals only, as supplied by the manufacturer.** The data is offered solely for your information and consideration. User assumes all responsibility and risk.