Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

I Identification of the substance/mixture and of the supplier

I.I GHS Product identifier

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

Product number: 2510, 2512, 2540

CAS No: 7727-54-0

1.2 Application of the substance / the mixture: Cleaning material

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer: Supplier:

Alconox Inc.

30 Glenn St Not applicable

White Plains, NY 10603

(914) 948-4040

Emergency telephone number:

ChemTel Inc

North America: 1-888-255-3924 International: +1 813-248-0573

2 Hazards identification

2.1 Classification of the substance or mixture:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard-determining components of labeling:

Inorganic Persulfate

2.2 Label elements:

Acute toxicity - Oral,	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing Solids	Category 3

Hazard pictograms:







Signal word: Danger Hazard statements:

H315 Causes skin irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 May cause respiratory irritation

H319 Causes serious eye irritation.

H317 May cause an allergic reaction

H302 Harmful if swallowed

H272 may intensify fire; oxidizer

Precautionary statements:

P261 Avoid breathing dust/ fume/gas/ mist/ vapors/ spray

P285 In case of inadequate ventilation wear respiratory protection

P271 Use only outdoors or in a well-ventilated area

P210 Keep away from heat/sparks/open flames/hot surfaces - No Smoking

P220 Keep/Store away from clothing/combustible materials

P221 Take any precaution to avoid mixing with combustibles

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 If Swallowed: Call a Poison Center or doctor if you feel unwell.

P302+P352 If on skin: Wash with plenty of water.

P304 + P341 If Inhaled: If breathing is difficult, remove to fresh air and keep at rest in a

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

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.

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

P370 + P378 In case of fire: Use water for extinction

P403+ P233 Store in a well-ventilated place. Keep container tightly closed

P501 Dispose of contents and container as instructed in Section 13.

Additional information: Risk of decomposition by heat or by contact with incompatible materials.

Hazards Not Otherwise Classified (HNOC): None

Information concerning particular hazards for humans and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to EC regulation No. 1272, 29CFR1910/1200 and GHS requirements, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

- 3.1 Chemical characterization: None
- **3.2 Description**: None

3.3 Hazardous components (percentages by weight)

Identification	Chemical Name	W t. %
CAS number: 7727-54-0	Inorganic Persulfate	<u>></u> 98%

3.4 Additional Information: None.

4 First aid measures

4.1 Description of first aid measures

General information: None.

After inhalation:

Maintain an unobstructed airway. Loosen clothing as necessary and position individual in a comfortable position. Call a physician immediately.

After skin contact:

Wash affected area with soap and water.

Seek medical attention if symptoms develop or persist.

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.

Remove contact lens (es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth. Drink 1 or 2 glasses of water.

4.2 Most important symptoms and effects, both acute and delayed

Itching; Redness; Coughing and/or wheezing

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Water. Cool containers with flooding quantities of water until well after fire is out.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition by fire forming conditions releases oxygen that intensifies fires.

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Additional information:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols. Avoid contact with skin, eyes and clothing.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Keep off any unprotected persons. Avoid contact with skin and eyes. Avoid breathing dust. Wear appropriate personal protective equipment. Never add other substances or combustible waste to product residues.

6.2 Environmental precautions:

Knock down dust with water spray. Avoid penetration into waterways, sewers, soil or groundwater. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up:

Vacuum, shovel or pump waste into a drum and label contents for disposal. Avoid dust formation. Store in closed container. Clean up spill area and treat as special waste. Dispose of waste as indicated in section 13.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling: Wear personal protective equipment. Avoid breathing dust. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Avoid contact with skin and eyes. Remove and wash contaminated clothing before re-use.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store closed upright and in a cool dry place, should be 15 - 30°C or 60 - 90°F. Do not store near combustible materials. Acids, bases, halides, oxidizing agents, strong reducing agents, combustible materials.

7.2 Specific end use(s):

No additional information.

8 Exposure controls/personal protection





Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

8.1 Control parameters:

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Inorganic Persulfate	TWA: 0.1 mg/m ³	N/A	N/A	N/A
7727-54-0				
Chamical manes	Duitiale Calumbia	0	O . I . '. TWAEV	All . I .
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Ensure adequate ventilation.

Respiratory protection:

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn: particulate filtering face piece respirators.

Protection of skin:

Select glove material impermeable and resistant to the substance, such as polyvinylchloride and neoprene.

Eye protection:

Safety goggles or glasses, chemical goggles consistent with EN 166 or equivalent.

General hygienic measures:

Keep away from food and drink. Do not eat, drink or smoke when using this product. Wash hands before breaks and after shifts. Keep work clothes separate, remove contaminated clothing – launder after open handling of product. Protective engineering solutions should be implemented and in use before personal protective equipment (PPE) is considered.

9 Physical and chemical properties

Appearance (physical state, color):	Crystalline solid, white odorless	Explosion limit lower: Explosion limit upper:	Not explosive.
Odor:	Odorless.	Vapor pressure at 20°C:	1.47E-23 mm Hg at 25°C.
Odor threshold:	N/A.	Vapor density:	Not determined or not available.
pH-value:	5 (1% solution)	Bulk density:	1.05 g/cm³ (loose)
Melting/Freezing point:	120 °C.	Solubility:	Not determined or not available.
Boiling point/Boiling range:	Decomposes on heating.	Partition coefficient (noctanol/water):	Not determined or not available.
Water Solubility	600 g/l @ 25°C	Oxidizing properties	oxidizer
Density at 20°C:	1.98 g/cm ³	Molecular weight	Not determined or not available.
Flash point (closed cup):	N/A	Auto/Self-ignition temperature:	Not determined or not available up to 600°C.
Evaporation rate:	N/A	Decomposition temperature:	>100°C
Flammability (solid, gaseous):	Not flammable	Viscosity:	a. Kinematic: Notdetermined or not available.b. Dynamic: Not determined or not available.

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

10 Stability and reactivity

IO.I Reactivity: Strong oxidizer

10.2 Chemical stability: Stable under recommended storage conditions

10.3 Possibility hazardous reactions:

Use of persulfates in chemical reactions requires appropriate precautions and design considerations for pressure and thermal relief.

Decomposing persulfates will evolve large volumes of gas and/or vapor, can accelerate exponentially with heat generation, and create significant and hazardous pressures if contained and not properly controlled or mitigated.

Use with alcohols in the presence of water has been demonstrated to generate conditions that require rigorous adherence to process safety methods and standards to prevent escalation to an uncontrolled reaction.

- 10.4 Conditions to avoid: Heat (decomposes at extreme heat); Moisture
- **10.5 Incompatible materials:** Bases, halides, oxidizing agents, strong reducing agents, combustible materials, and acids.

10.6 Hazardous decomposition products: Oxygen which supports combustion; Sulfur oxides

II Toxicological information

II.I Information on toxicological effects:

Acute Toxicity:

Oral: LD50 740 mg/ kg (rat)- product
Dermal: LD50 >2000 mg/kg (rat)
Inhalation: LD50 >2.95 mg/L (rat) 4-hr

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Minimally irritating

Serious eye damage/irritation:

Irritating to eyes

Respiratory or skin sensitization: No additional information.

Carcinogenicity: Has not shown carcinogenic effects in animal experiments.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity: No additional information.

 $\label{lem:Reproductive toxicity: No additional information.} \textbf{Reproductive toxicity: } No additional information.$

STOT-single and repeated exposure: May cause respiratory irritation

Subchronic toxicity: Oral (NOAEL) = 41.1 mg/kg bw, Inhalation (NOAEC)=10.3mg/m³

Additional toxicological information: No additional information.

12 Ecological information

12.1 Toxicity for:

Inorganic Persulfate (772	27-54-0)			
Active Ingredient(s)	Duration	Species	Value	Units
Inorganic Persulfate	96 h LC50	Onchorhyneus mykiss	76.3	mg/L
Inorganic Persulfate	48 h EC50	Water flea	120	mg/L
Inorganic Persulfate	72 h EC50	Marine algae	136	mg/L
Inorganic Persulfate	96 h LC50	Turbot	107.6	mg/L
Inorganic Persulfate	18 h EC10	Pseudonomas Putida	36	mg/L
Inorganic Persulfate	5 d	Abra Alba	11	mg/L
Inorganic Persulfate	96 h LC50	Grass shrimp	391	mg/L
Inorganic Persulfate	24 h EC50	Daphnia magna	635.7	mg/L

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning **I2.2 Persistence and degradability:** No additional information

12.3 Bioaccumulative potential: No additional information.

12.4 Mobility in soil: No additional information.General notes: No additional information.12.5 Results of PBT and vPvB assessment:

PBT: No additional information.

PBT: No additional information. **vPvB:** No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)

Relevant Information:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11). US EPA Waste Number D001

14 Transport information		
14.1 DOT:		
UN/ID no	1444	
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
14.2 TDG:		
UN/ID no	1444	
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
14.3 ICAO/IATA:		
UN/ID no	1444	
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
Раскіну бібир		
14.4 IMDG/IMO:		
UN/ID no	1444	
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
14.5 ADR/RID:		
UN/ID no	1444	
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
14.6 ADN:		
Proper Shipping Name	Ammonium Persulfate	
Hazard Class	5.1	
Packing Group	III	
14.7 Other Information: Protect from physi	ical damage. Do not store near acids, moisture or heat.	

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

I5 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

North American

SARA (Sections 313,311 and 312)

This product doesn't contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the CFR part 372. This product contains the following hazards under The Emergency Planning and Community Right-to-Know rule (EPCRA Tier II)

- Oxidizer
- Acute toxicity
- > Serious eye damage/eye irritation
- > Skin corrosion/irritation
- > Respiratory/skin sensitization
- > Specific Target Organ Toxicity (STOT) Single Exposure

CERCLA/EPCRA (Comprehensive Environmental Response, Clean up and Liability Act)

This product, as supplied, does not contain any substances regulated per 40CFR302 and 40CFR355

Clean Water Act (40CFR122.21 and 42):

This product does not contain any substances listed in the above CFRs

TSCA (Toxic Substances Control Act)

This product is listed as active under TSCA

Proposition 65 (California): This product does not contain any Proposition 65 chemicals

US State Right-to-know Regulations: Ammonium Persulfate is listed in the state of New jersey

Canadian Domestic Substances List (DSL)

On List

Canadian National Pollutant Release Inventory & Environmental Emergency regulations:

No reportable substances

EU

REACH Article 57 (SVHC): None of the ingredients are listed.

Germany MAK: Not classified.

Mexico - Grade Slight risk, Grade I

Effective date: 23 Jan 2024 Revision: 23 Jan 2024

Trade Name: ALNOCHROMIX® Oxidizing acid additive for glass cleaning

Australia

Australian Inventory of Chemical Substances (AICS): All ingredients are listed.

China

Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed.

Japan

Inventory of Existing and New Chemical Substances (ENCS): All ingredients are listed.

Korea

Existing Chemicals List (ECL): All ingredients are listed.

New Zealand

New Zealand Inventory of Chemicals (NZOIC): All ingredients are listed.

Philippines

Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients are listed.

Taiwan

Taiwan Chemical Substance Inventory (TSCI): All ingredients are listed.

16 Other information

Manufacturer Statement:

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 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.

NFPA: 1-0-1 (Health Hazards-Flammability) – Special Hazards – Oxidizing Agent

HMIS: 1-0-1 (Health Hazards-Physical hazard) - Special precautions - J