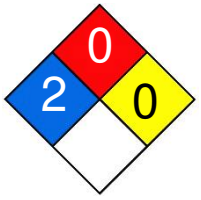
Material Safety Data Sheets



Revision 2

1. IDENTIFICATION

Product Name	Sodium Oxalate
Other Names	Sodium Ethanedioate; Oxalate of Sodium
Uses	Laboratory reagent; used in chemical synthesis, analytical chemistry, and various industrial applications.
Chemical Family	Inorganic Salts
Chemical Formula	$Na_2C_2O_4$
Chemical Name	No Data Available
Product Description	No Data Available

Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories

Acute Toxicity, Oral: Category 4
Skin Irritation: Category 2
Eye Irritation: Category 2

Signal Word Warning

Hazard Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary Statements

Prevention

P260	Do not breathe dust.
P264	Wash skin thoroughly after handling.
P280	Wear protective gloves, protective clothing, and eye protection.
P302 + P352	IF SWALLOWED: Rinse mouth. Do not induce vomiting; seek medical advice immediately.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for at least 15 minutes; remove contact lenses if present and seek medical attention.
P273	Avoid release to the environment.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Oxalate	$Na_2C_2O_4$	127-59-4	<= 99 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

Eye After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

Skin In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

Inhaled After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

Advice to Doctor Consult a doctor in case of discomfort showing the SDS for the product.

5. FIRE FIGHTING MEASURES

General Measures Sodium oxalate is a non-combustible solid and does not support combustion under normal conditions. However, under fire conditions, decomposition may occur with the release of toxic products such as oxalic acid vapors and carbon monoxide.

Flammability Conditions No Data Available

Extinguishing Media Use extinguishing agents appropriate to the surrounding fire conditions (e.g., dry chemical, water spray, or foam).

Fire and Explosion Hazard No Data Available

Hazardous Products of Combustion No Data Available

Special Fire Fighting Instructions Firefighters should wear full protective equipment, including a self-contained breathing apparatus (SCBA). If safe, cool surrounding containers with a water spray to prevent heat buildup.

Personal Protective Equipment No Data Available

Flash Point No Data Available

Lower Explosion Limit No Data Available

Upper Explosion Limit No Data Available

Auto Ignition Temperature No Data Available

Hazchem Code No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure Evacuate the area and restrict access. Avoid generating dust and ensure adequate ventilation.

Clean Up Procedures Sweep up the dust using non-sparking tools.Collect the material in a suitable, sealable container.Prevent dispersion into the environment.Clean the area with a damp cloth and dispose of the waste according to local regulations.

Containment Secure and isolate the spill area until proper disposal measures can be implemented.

Decontamination No Data Available

Environmental Precautionary Measures Do not let product enter drains.

Evacuation Criteria No Data Available

Personal Precautionary Measures. Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

7. HANDLING AND STORAGE

Handling	Handle under conditions that minimize dust formation.Use appropriate personal protective equipment (PPE) such as gloves, dust masks, and safety goggles.Avoid contact with incompatible substances, particularly strong acids.
Storage	Protected from light.Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Recommended storage temperature see product label.
Container	Keep containers tightly closed

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General

Exposure Limits	No specific occupational exposure limits established for sodium oxalate; minimize dust exposure.
Biological Limits	No Data Available
Engineering Measures	Employ local exhaust ventilation or dust collection systems in areas where dust generation is possible.
Personal Protection Equipment	Eye/Face Protection: Safety goggles or face shield . Skin Protection: Use protective gloves (nitrile or equivalent) and a lab coat.Respiratory Protection: In situations where dust is generated, use a dust mask or appropriate respirator.
Special Hazards Precaustions	No Data Available
Work Hygienic Practices	Avoid eating, drinking, or smoking during handling. Wash hands and face after handling the substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White crystalline powder
Odour	No Data Available
Colour	white
pH	Neutral to slightly alkaline (depending on concentration)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	> 600 °C (decomposes on heating)
Freezing Point	No Data Available
Solubility	Soluble (approximately 13–15 g/100 mL at 20 °C)
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No information available.
Evaporation Rate	No Data Available
Bulk Density	Approximately 1.35 g/cm³
Corrosion Rate	No Data Available
Decomposition Temperature	> 600 °C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	134.0 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	No information available.
Reactions That Release Gases or Vapours	No information available.
Release of Invisible Flammable Vapours and Gases	No information available. No information available.

10. STABILITY AND REACTIVITY

General Information	Possibility of hazardous reactions Risk of explosion with: Alkali metals Risk of ignition or formation of inflammable gases or vapours with: halogen-halogen compounds
Chemical Stability	Chemically stable under recommended storage conditions.
Conditions to Avoid	Contact with strong acids (which can convert sodium oxalate to oxalic acid). Excessive moisture which may lead to clumping.
Materials to Avoid	Strong acids Strong oxidizing agents
Hazardous Decomposition Products	On decomposition (e.g., due to fire), toxic gases such as carbon monoxide and oxalic acid vapors may be released.
Hazardous Polymerisation	No data available

11. TOXICOLOGICAL INFORMATION

General Information

Acute Toxicity:Oral: Harmful if ingested.
May cause gastrointestinal irritation (estimated LD50, rat, oral ≈ 2900 mg/kg).Dermal: May cause skin irritation on contact.Inhalation: Dust exposure may irritate the respiratory tract.Chronic Health Effects: Repeated or prolonged inhalation or skin exposure to dust may lead to respiratory discomfort or irritation and—at significant exposures—renal effects due to oxalate accumulation.Other Considerations: Ingestion may result in nausea, abdominal pain, and diarrhea. No evidence presents sodium oxalate as a carcinogen when handled properly.

Acute

12. ECOLOGICAL INFORMATION

Ecotoxicity	Sodium oxalate may be harmful to aquatic organisms if large amounts are released into water systems.
Persistence/Degradability	Readily soluble in water and is expected to biodegrade under normal environmental conditions.
Mobility	High water solubility suggests potential migration in aquatic environments.
Environmental Fate	No Data Available
Bioaccumulation Potential	Low bioaccumulation potential.
Environmental Impact	Uncontrolled release into the environment, particularly into waterways, may have adverse effects on aquatic life.

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of sodium oxalate and any contaminated packaging in accordance with local, regional, and national regulations.
Special Precautions for Land Fill	Do not dispose of with regular waste.Collect waste in a sealed container clearly marked as hazardous waste.Use a licensed hazardous waste disposal contractor for proper disposal.Special Precautions: Prevent any material release into the environment. Refer to Section 6 for spill clean-up procedures.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	Sodium Oxalate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
EPG	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

Sea Transport

Proper Shipping Name	Sodium Oxalate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	no

Air Transport

Proper Shipping Name	Sodium Oxalate
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available

15. OTHER INFORMATION

Revision 2

Key/Legend

< Less Than
> Greater Than
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius
deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight