



## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification

#### 1.1 Product identifiers

**Product Name :** Sodium nitrate  
**Cat No.:** BP360500; S3423; S3433; S343500  
**CAS No. :** 7631-99-4

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended uses :** Laboratory chemicals  
**Uses advised against:** Food, drug, pesticide or biocidal product use.

#### 1.3 Details of the supplier of the safety data sheet

**Company :** Krishna Solvechem Limited.  
B/503, Sahayog, S. V. Road,  
Kandivali (West), Mumbai – 400067. India.  
**Telephone :** +91-22-6123 0222  
**Email :** exports@kscl.co.in

#### 1.4 Emergency telephone number

**Emergency Phone :** +91-8657457330

### SECTION 2: Hazards identification

#### 2.1 Classification

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

Oxidizing solids	(Category 3)
Serious Eye Damage/Eye Irritation	(Category 2)
Specific target organ toxicity (repeated exposure)	(Category 2)
Target Organs - Liver, Heart, Blood	

#### 2.2 Label elements

**Pictogram :**



**Signal word**

Warning

**Hazard statement (s)**

Cause damage to organs through prolonged or repeated exposure



May intensify fire; oxidizer  
Causes serious eye irritation

**Precautionary  
statement (s)**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Store away from clothing/ other combustible materials

**Inhalation :**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

**Eyes:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage:**

Store locked up Store in a well-ventilated place.  
Keep container tightly closed



	<b>Disposal:</b> Dispose of contents/container to an approved waste disposal plant
<b>Hazards not otherwise classified (HNOC)</b>	None identified

### SECTION 3: Composition / information on ingredients

**3.1**

Component	CAS-No	Weight %
Sodium nitrate	7631-99-4	>95

### SECTION 4: First aid measures

**4.1 Description of first aid measures**

<b>General Advice:</b>	If symptoms persist, call a physician.
<b>If inhalation :</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>In case of skin contact :</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>In case of eye contact :</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion :</b>	Do NOT induce vomiting. Get medical attention
<b>4.2 Most important symptoms and effects :</b>	None reasonably foreseeable
<b>4.3 Notes to Physician :</b>	Treat symptomatically

### SECTION 5: Firefighting effects

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.
<b>Unsuitable Extinguishing Media :</b>	Carbon dioxide (CO2)

**5.2 Flash Point :** No information available  
**Method :** No information available



<b>Autoignition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available
<b>Specific Hazards Arising from the Chemical :</b>	Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.). Thermal decomposition can lead to release of irritating gases and vapors.
<b>Hazardous Combustion Products :</b>	Sodium oxides, Nitrogen oxides (NOx)

<b>5.4 Protective Equipment and Precautions for Firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.			
<b><u>NFPA:</u></b>	<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
	2	0	2	OX

## SECTION 6: Accidental release measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation
<b>6.2 Environmental precautions</b>	Avoid release to the environment. See Section 12 for additional Ecological Information.
<b>6.3 Methods and materials for containment and cleaning up</b>	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## SECTION 7: Handling and storage

<b>7.1 Precautions for safe handling</b>	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.
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## 7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Incompatible Materials. Strong oxidizing agents. Strong reducing agents. Combustible material.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

### 8.2 Exposure controls

#### 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 protection 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 respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice..

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	White solid Crystalline
b) Odour	Odorless
c) Odour Threshold	No information available
d) pH	5.5-8 5% aq. solution
e) Melting point / freezing point	306 °C / 582.8 °F
f) Initial boiling point and	380 °C / 716 °F



<b>boiling range</b>	
<b>g) Flash point</b>	No information available
<b>h) Evaporation rate</b>	No information available
<b>i) Flammability (solid, gas)</b>	Not applicable
<b>j) Upper/lower flammability or explosive limits</b>	No data available No data available
<b>k) Vapour pressure</b>	No information available
<b>l) Vapour density</b>	Not applicable
<b>m) Specific Gravity</b>	No information available
<b>n) Solubility</b>	No information available
<b>o) Partition coefficient: n octanol/water</b>	No data available
<b>p) Auto-ignition temperature</b>	No information available
<b>q) Decomposition temperature</b>	> 380 °C.
<b>r) Viscosity</b>	No information available
<b>s) Molecular formula</b>	N Na O3
<b>t) Molecular Weight</b>	84.99

### SECTION 10: Stability and Reactivity

<b>10.1 Reactive Hazard :</b>	Yes
<b>10.2 Chemical stability :</b>	Stable under normal conditions. Oxidizer: Contact with combustible/organic material may cause fire. Hygroscopic.
<b>10.3 Possibility of hazardous reactions :</b>	None under normal processing.
<b>10.4 Conditions to avoid :</b>	Avoid dust formation. Incompatible products. Combustible material. Excess heat. Exposure to air or moisture over prolonged periods.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents, Strong reducing agents, Combustible material
<b>10.6 Hazardous decomposition products :</b>	Sodium oxides, Nitrogen oxides (NOx)
<b>10.7 Hazardous Polymerization</b>	Hazardous polymerization does not occur



## SECTION 11: Toxicological information

### 11.1

#### Information on toxicological effects

#### Acute toxicity:

#### Product Information:

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium nitrate	>2000 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation :** Irritating to eyes, respiratory system and skin

**Sensitization:** No information available

**Carcinogenicity :**

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium nitrate	7631-99-4	Not listed	Not listed	Not listed	Not listed	Not listed

**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:** Liver, Heart, Blood

**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

### 12.1

#### Ecotoxicity:

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium nitrate	-	LC50: 994.4 - 1107 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 2000 mg/L, 96h static (Lepomis acrochirus)	-	6000 mg/L 24h

**12.2 Persistence and degradability:** Soluble in water Persistence is unlikely based on information Available.

#### Bioaccumulation/ Accumulation

No information available

### 12.3 Mobility:

Will likely be mobile in the environment due to its water solubility. Log pow : -3.8

## SECTION 13: Disposal considerations

**13.1 Waste treatment 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

### 14.1 UN number :

DOT : UN1498      TDG : UN1498  
IATA : UN1498      IMDG : UN1498

### 14.2 UN proper shipping name

DOT : SODIUM NITRATE      TDG : SODIUM NITRATE

IMDG : SODIUM NITRATE      IATA : SODIUM NITRATE

**14.3 Transport hazard class(es)**      DOT: 5.1      TDG: 5.1      IMDG: 5.1      IATA: 5.1

**14.4 Packaging group:**      DOT: III      TDG: III      IMDG: III      IATA: III

## SECTION 15: Regulatory information

### 15.1 United states of America Inventory:

Component	CAS-No	TSCA	TSCA Inventory notification Active/Inactive	TSCA - EPA Regulatory Flags
Sodium nitrate	7631-99-4	X	ACTIVE	-

**Legend:**





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

X - Listed

'-' - Not Listed

**TSCA 12(b) - Notices of Export**                      Not applicable

**International Inventories:**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium nitrate	7631-99-4	X	-	231-554-3	X	X	X	X	X	KE-31545

**U.S. Federal Regulations**

**SARA 313**

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Sodium nitrate	7631-99-4	>95	1.0

**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**  
chemicals.

This product does not contain any Proposition 65

**15.2 U.S. State Right-to-Know Regulations:**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium nitrate	X	X	X	X	X

**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 contains the following DHS Chemicals.

Component	DHS Chemical Facility Anti-Terrorism Standard
Sodium nitrate	Theft STQs - 400lb

**Other International Regulations**

**Mexico – Grade** No information available

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sodium nitrate	7631-99-4	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Sodium nitrate	7631-99-4	Not applicable	Not applicable	Not applicable	Not applicable

**SECTION 16: Other information**

**16.1 Prepared By:** Regulatory affairs  
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**Email:** exports@kscl.co.in  
**Creation Date:** 23-Mar-2012  
**Revision Date:** 24-Aug-2023  
**Print Date:** 24-Aug-2023  
**Revision Summary:** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**16.2 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 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.

