

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SODIUM NITRATE

CAS Number: 7631-99-4

**1. IDENTIFICATION:**

**Product Code** : 90246, 90555, 91623

**Company Name** : ADVENT CHEMBIO PRIVATE LIMITED

**Address** : W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE,  
NAVI MUMBAI - 400 701.

**E-mail** : [sales@adventchembio.com](mailto:sales@adventchembio.com)

**WEBSITE** : [www.adventchembio.com](http://www.adventchembio.com)

**Company Phone Number** : 022-27690837

**2. HAZARDS IDENTIFICATION:****Hazard classification****Physical hazards**

**Oxidizing solids** : Category 3

**Health hazards**

**Acute toxicity, Oral** : Category 4

**Serious eye damage/eye irritation** : Category 2

**Labels elements** :

**Hazard symbol** : 

**Signal word** : Warning

**Hazard statement** : May intensify fire; oxidizer.  
: Toxic if swallowed.  
: Causes serious eye irritation.

**Precautionary statement**

**Prevention** : Obtain special instructions before use.  
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
Keep container tightly closed. Ground/ bond container and receiving equipment.

**Response** : IF exposed or concerned: Get medical advice/ attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

**Storage** : Store in a dry & well-ventilated place. Keep container tightly closed.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: SODIUM NITRATE

CAS Number: 7631-99-4

- Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification** : No data available.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS:**

Ingredient	CAS Number	Percent	Hazardous
Sodium Nitrate	7631-99-4	99- 100%	Yes

**4. FIRST AID MEASURES:**

- General information** : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- Inhalation** : Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.
- Skin contact** : Get medical attention if symptoms persist. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
- Most important symptoms/effects, acute and delayed** : Irritating to eyes, respiratory system and skin. Harmful if swallowed. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.
- Indication of immediate medical attention and special treatment needed** : Treat symptomatically.

**5. FIRE FIGHTING MEASURES:**

- General information** : No data available.
- Suitable (and unsuitable) extinguishing media**
- Suitable extinguishing media** : Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : No data available.
- Specific hazards arising from the chemical** : May intensify fire; oxidizer. Contact with combustible material may cause fire. During fire, gases hazardous to health may be formed.
- Special protective equipment and precautions for firefighters**
- Special firefighting procedures** : Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: SODIUM NITRATE

CAS Number: 7631-99-4

**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. ACCIDENTAL RELEASE MEASURES:**

**Personal precautions, protective equipment and emergency procedures** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up** : Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling** : Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities** : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Store away from incompatible materials. Eliminate sources of ignition.

**8. EXPOSURE CONTROLS PERSONAL PROTECTION:****Control parameters**

**Occupational exposure limits** : None of the components have assigned exposure limits.

**Appropriate engineering controls** : No data available.

**Individual protection measures, such as personal protective equipment**

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: SODIUM NITRATE

CAS Number: 7631-99-4

<b>Eye/face protection</b>	:	Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	:	Chemical resistant gloves.
<b>Other</b>	:	Wear suitable protective clothing.
<b>Respiratory protection</b>	:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.
<b>Hygiene measures</b>	:	Avoid contact with eyes, skin, and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>Appearance</b>	:	Colourless, deliquescent crystals or crystalline powder.
<b>Odor</b>	:	Odorless
<b>Solubility in water</b>	:	874 g/l at 20 °C - soluble
<b>Solubility</b>	:	No data available.
<b>Formula</b>	:	NaNO <sub>3</sub>
<b>Molecular Weight</b>	:	84.99 g/mol
<b>Specific Gravity</b>	:	2.26 (20 °C)
<b>pH</b>	:	No data available.
<b>% Volatiles by volume @ 21C (70F)</b>	:	No data available.
<b>Boiling Point</b>	:	380°C
<b>Melting Point</b>	:	308°C
<b>Flash Point</b>	:	No data available.
<b>Vapor Density (Air=1)</b>	:	No data available.
<b>Vapor Pressure (mm Hg)</b>	:	No data available.
<b>Evaporation Rate (BuAc=1)</b>	:	No data available.

**10. STABILITY AND REACTIVITY:**

<b>Reactivity</b>	:	Contact with combustible material may cause fire.
<b>Chemical stability</b>	:	The product is chemically stable under standard ambient conditions (room temperature).
<b>Possibility of hazardous reactions</b>	:	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	:	Heat, sparks, flames. Sunlight.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: SODIUM NITRATE

CAS Number: 7631-99-4

**Incompatible materials** : Strong acids, Strong reducing agents, Powdered metals, Organic materials, Alkali metals, Alkaline earth metals, Cyanides, thiocyanates.

**Hazardous decomposition products** : By heating and fire, toxic vapors/gases may be formed.

**11. TOXICOLOGICAL INFORMATION:****Information on likely routes of exposure**

**Ingestion** : May cause irritation of the gastrointestinal tract.

**Inhalation** : May cause irritation to the respiratory system.

**Skin contact** : Causes mild skin irritation

**Eye contact** : Causes serious eye irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

**Oral Product** : LD 50 (Rat): 1,267 mg/kg  
LD 50 (Mouse): 2,480 mg/kg  
: LD 50 (Rabbit): 1,600 mg/kg  
LD 50 (Rabbit): 1,955 mg/kg  
LD 50 (Rabbit): 2,680 mg/kg

**Dermal Product** : LD 50 Rat - male and female - > 5.000 mg/kg

**Inhalation Product** : No data available.

**Repeated dose toxicity Product** : No data available.

**Skin corrosion/irritation Product** : Prolonged or repeated skin contact may cause drying, cracking, or irritation

**Serious eye damage/eye irritation Product** : Irritating to eyes.

**Respiratory or skin sensitization Product** : Not a skin sensitizer.

**Carcinogenicity Product** : This substance has no evidence of carcinogenic properties

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans** : No carcinogenic components identified.

**US. National Toxicology Program (NTP) Report on Carcinogens** : No carcinogenic components identified.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** : No carcinogenic components identified.

**Germ cell mutagenicity**

## MATERIAL SAFETY DATA SHEET

**PRODUCT NAME: SODIUM NITRATE**

CAS Number: 7631-99-4

<b>In vitro Product</b>	: No data available.
<b>Reproductive toxicity Product</b>	: No components toxic to reproduction .
<b>Specific target organ toxicity - single exposure Product</b>	: Not known.
<b>Specific target organ toxicity - repeated exposure Product</b>	: None known.
<b>Aspiration hazard Product</b>	: No data available.
<b>Other effects</b>	: None known.

**12. ECOLOGICAL INFORMATION:****Ecotoxicity****Acute hazards to the aquatic environment**

<b>Fish Product</b>	: No data available.
<b>Specified substance(s): SODIUM NITRATE</b>	LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 7 d): 1,001 - 1,125 mg/l Mortality LC 50 (Chinook salmon (Oncorhynchus tshawytscha), 7 d): 1,023 - 1,149 mg/l Mortality : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 7 d): 778.9 - 1,048 mg/l Mortality LC 50 (Chinook salmon (Oncorhynchus tshawytscha), 7 d): 860.7 - 939.7 mg/l Mortality LC 50 (Western mosquitofish (Gambusia affinis), 24 h): 11,800 mg/l Mortality
<b>Aquatic invertebrates Product</b>	: No data available.
<b>Specified substance(s): SODIUM NITRATE</b>	: EC 50 (American or virginia oyster (Crassostrea virginica), 96 h): 2,600 mg/l Intoxication EC 50 (American or virginia oyster (Crassostrea virginica), 96 h): 3,800 mg/l Intoxication EC 50 (American or virginia oyster (Crassostrea virginica), 96 h): 4,280 mg/l Intoxication EC 50 (American or virginia oyster (Crassostrea virginica), 96 h): 6,230 mg/l Intoxication EC 50 (Northern quahog or hard clam (Mercenaria mercenaria), 96 h): > 4,500 mg/l

**Chronic hazards to the aquatic environment**

<b>Fish Product</b>	: No data available.
<b>Aquatic invertebrates Product</b>	: No data available.
<b>Toxicity to Aquatic Plants Product:</b>	: No data available.
<b>Persistence and degradability</b>	
<b>Biodegradation Product</b>	: There are no data on the degradability of this product.
<b>BOD/COD ratio Product</b>	: No data available.



## MATERIAL SAFETY DATA SHEET

**PRODUCT NAME: SODIUM NITRATE**

CAS Number: 7631-99-4

**Bioaccumulative potential****Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.**Partition coefficient n-octanol / water (log Kow) Product** : No data available.**Mobility in soil** : The product is partly soluble in water. May spread in the aquatic environment.**Other adverse effects** : The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.**13. DISPOSAL CONSIDERATION:****Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.**Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.**14. TRANSPORT INFORMATION:**

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
<b>DOT</b>	UN 1498	Sodium Nitrate	5.1	III	No
<b>IMDG</b>	UN 1498	Sodium Nitrate	5.1	III	No
<b>IATA</b>	UN 1498	Sodium Nitrate	5.1	III	No

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: SODIUM NITRATE

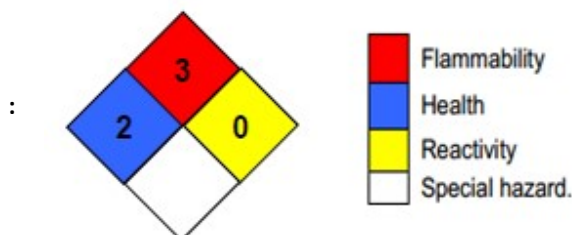
CAS Number: 7631-99-4

**15. REGULATORY INFORMATION:**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.  
Safety, health and environmental regulations/legislation specific for the substance or mixture  
No Data Available.

**16. OTHER INFORMATION:**

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 30/10/2023

Version : 01

**Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).**