

**1. Identification of the substance/preparation and of the company/undertaking****1.1 Identification of the product****Product number:** S5248**Name of material:** Sodium Nitrate**CAS No.:** 7631-99-4**1.2 Recommended use and restriction on use**

General use : For experimental, research and industrial use.

Restriction on use : Never drink, Not used except for experimental, research and industrial applications.

**1.3 Manufacturer / Supplier / Distributor information****Importer/distributors identification**

Company : ASIA CHEMIE (THAILAND) CO., LTD.

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**2. Hazards identification****2.1 GHS Classification**

Oxidizing solids : Category3

Serious eye damage/irritation : Category2A

**2.2 GHS label elements****Hazard symbols****Signal word:** Warning**Hazard Statements**

H272 May intensify fire; oxidizer.

H319 Causes serious eye irritation.

**Precautionary Statements**

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, incompatibles material

P264 Wash hands thoroughly after handling.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use Suitable extinguishing media for extinction.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

**2.3 Other hazards which do not result in classification : (NFPA Classification)**

- Not available

**3. Composition/information on ingredients**

Chemical Name	Synonyms	CAS Number	Concentration %
Sodium nitrate	Chile saltpeter; Cubic niter; Soda niter; Niter; Sodium nitrate (Dot); Nitric acid, Sodium salt; Sodium(I) nitrate (1:1);	7631-99-4	100

**4. First aid measures****4.1 Eye contact**

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Go to the hospital immediately if symptoms (flare, irritate) occur.
- Remove contact lenses if worn.

**4.2 Skin contact**

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.

**4.3 Inhalation contact**

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

**4.4 Ingestion contact**

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.

**4.5 Delayed and immediate effects and also chronic effects from short and long term exposure**

- Not available

**4.6 Notes to physician**

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

**5. Fire-fighting measures****5.1 Suitable (Unsuitable) extinguishing media**

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray.
- Avoid use of water jet for extinguishing.

**5.2 Specific hazards arising from the chemical**

- Not available

**5.3 Special protective actions for firefighters**

- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Avoid inhalation of materials or combustion by-products.
- Do not approach the tank surrounded by fire until it is extinguished.
- Use appropriate extinguishing measure suitable for surrounding fire.
- Wear appropriate protective equipment.
- Keep containers cool with water spray.
- Move people from the area.

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation.
- Must work against the wind, let the upwind people to evacuate.
- Move container to safe area from the leak area.
- Avoid skin contact and inhalation.

**6.2 Environmental precautions**

- Prevent runoff and contact with waterways, drains or sewers
- If large amounts have been spilled, inform the relevant authorities.

**6.3 Methods and materials for containment and cleaning up**

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notify the central and local government if the emission reach the standard threshold.
- Disposal of waste shall be in compliance with the Wastes Control Act.
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- Put the spilled material in an appropriate containers and clean the contaminated area.

**7. Handling and storage****7.1 Precautions for safe handling**

- Since emptied containers retain product residue (vapor, liquid, solid) follow all MSDS and label warnings even after container is emptied.
- Avoid contact with incompatible materials.
- Get the manual before use.
- Do not handle until all safety precautions have been read and understood.

**7.2 Conditions for safe storage, including any incompatibilities**

- Do not apply any physical shock to container.
- Avoid direct sunlight.
- Keep in the original container.
- Please pay attention to incompatibilities materials and conditions to avoid.
- Keep sealed when not in use.

**8. Exposure controls/personal protection****8.1 Exposure limits****ACGIH TLV**

- Not available

**OSHA PEL**

- Not available

**8.2 Engineering controls**

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

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

- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Dust, mist, fume-purifying respiratory protection.
- Air-purifying respirator with high-efficiency particulate filtering.
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying).
- Self-contained breathing apparatus with a corpuscle filter of high efficiency.
- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

**Eye protection**

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

**Hand protection**

- Wear appropriate chemical resistant glove.

**Skin protection**

- Wear appropriate chemical resistant protective clothing.

**Others**

- Not available

**9. Physical and chemical properties**

A. Appearance	
- Appearance	Solid (Other)
- Color	colorless
B. Odor	odorless
C. Odor threshold	Not available
D. pH	5.5 (50 g/l, 20°C)
E. Melting point/Freezing point	308 °C
F. Initial Boiling Point/Boiling Ranges	380 °C
G. Flash point	Not available
H. Evaporation rate	Not available
I. Flammability (solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	1.05E-17 mmHg (25°C)
L. Solubility	92.1 g/100 ml (25°C)
M. Vapour density	Not available
N. Specific gravity (Relative density)	2.3
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	Not available
Q. Decomposition temperature	380 °C
R. Viscosity	Not available

S. Molecular weight	84.99
T. Molecular formula	NaNO <sub>3</sub>

**10. Stability and reactivity****10.1 Chemical Stability**

- This material is stable under recommended storage and handling conditions.

**10.2 Possibility of hazardous reactions**

- Hazardous Polymerization will not occur.

**10.3 Conditions to avoid**

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces.
- Avoid contact with heat, sparks, flame or other ignition sources.
- Keep away from heat source.

**10.4 Incompatible materials**

- Not available

**10.5 Hazardous decomposition products**

- May emit flammable vapour if involved in fire.

**11. Toxicological information****11.1 Information on the likely routes of exposure****Respiratory tracts**

- Not available

**Oral**

- Not available

**Eye • Skin**

- Causes serious eye irritation

**11.2 Delayed and immediate effects and also chronic effects from short and long term exposure****Acute toxicity****\* Oral**

- [Sodium nitrate] : LD50 = 1267 mg/kg Rat (HSDB)

**\* Dermal**

- [Sodium nitrate] : LD50 >5000 mg/kg Rat (Read-across: CAS NO.7757-79-1, OECD Guideline 402, GLP, ECHA)

**\* Inhalation**

- Not available

**Skin corrosion/irritation**

- Not available

**Serious eye damage/irritation**

- Causes serious eye irritation

**Respiratory sensitization**

- Not available

**Skin sensitization**

- Not available

**Carcinogenicity****\* IARC**

- Not available

**\* OSHA**

- Not available

**\* ACGIH**

- Not available

**\* NTP**

- Not available

**\* EU CLP**

- Not available

**Germ cell mutagenicity**

- Not available

**Reproductive toxicity**

- Not available

**STOT-single exposure**

- Not available

**STOT-repeated exposure**

- Not available

**Aspiration hazard**

- Not available

**12. Ecological information****12.1 Ecotoxicity****Fish**

- [Sodium nitrate] : LC50 1354 mg/l 96 hr (Topeka shiner (Notropis topeka), ASTM E729-26 (1997)

**Crustaceans**

- [Sodium nitrate] : EC50 8609 mg/l 24 hr Daphnia magna (OECD Guideline 202)

**Algae**

- [Sodium nitrate] : ErC50 > 700 mg/l 72 hr (several benthic diatoms, Read-across CAS No.7757-79-1)

**12.2 Persistence and degradability****Persistence**

- Not available

**Degradability**

- Not available

**12.3 Bioaccumulative potential****Bioaccumulative potential**

- Not available

**Biodegradation**

- Not available

**12.4 Mobility in soil**

- Not available

**12.5 Other adverse effects**

- Not available

**13. Disposal considerations****13.1 Disposal methods**

- Stabilization and minimization treatment by incineration or similar method can be applied, if more than two kinds of designated wastes are in mixture state and it is impractical to separate them
- Oil water separation technology shall be applied as pre-waste treatment if it is applicable
- It shall be treated by incineration

**13.2 Special precautions for disposal**

- Anyone with business license number who generates industrial wastes shall treat the waste by him/herself or by entrusting to the legal entities who treat the wastes, recycle the wastes of others or install and operate the waste treatment facilities according to the Wastes Control Act.
- Dispose of waste in accordance with all applicable laws and regulations.

**14. Transport information****14.1 UN No. (IMDG CODE/IATA DGR)**

- 1498

**14.2 Proper shipping name**

- SODIUM NITRATE

**14.3 Hazard Class**

- 5.1

**14.4 IMDG CODE/IATA DGR Packing group**

- III

**14.5 Marine pollutant**

- Not applicable

**14.6 Special precautions for user related to transport or transportation measures**

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : F-A (General fire schedule)
- EmS SPILLAGE SCHEDULE : S-Q (Oxidizing substances)

**15. Regulatory information****15.1 National and/or international regulatory information**

POPs Management Law

- Not applicable

**Information of EU Classification****\* Classification**

- Not applicable

**U.S. Federal regulations****\* OSHA PROCESS SAFETY (29CFR1910.119)**

- Not applicable

**\* CERCLA Section 103 (40CFR302.4)**

- Not applicable

**\* EPCRA Section 302 (40CFR355.30)**

- Not applicable

**\* EPCRA Section 304 (40CFR355.40)**

- Not applicable

**\* EPCRA Section 313 (40CFR372.65)**

- Not applicable

**Rotterdam Convention listed ingredients**

- Not applicable

**Stockholm Convention listed ingredients**

- Not applicable

**Montreal Protocol listed ingredients**

- Not applicable

**16. Other information**

**Reason for the revision:** General update.

Date: 17/08/2014

**Revision 4**

Date: 03/01/2024

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