

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Potassium nitrite
CAS number	7758-09-0
Synonyms	Nitrous acid, potassium salt

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

Identified uses	Laboratory chemicals.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing Solids	Category 2
Acute Oral Toxicity	Category 3
Combustible Dust	Yes

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

May form combustible dust concentrations in air.
May intensify fire; oxidizer.
Toxic if swallowed.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep/Store away from clothing/ other combustible materials. Take any precaution to avoid mixing with combustibles.

Response: If exposed or concerned, get medical attention/advice.

IF SWALLOWED: : Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Fire: In case of fire, use CO₂, dry chemical, or foam for extinction.

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

Disposal: Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Potassium nitrite	Nitrous acid, potassium salt	7758-09-0	> 95%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray, Carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool container.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Oxidizer; contact with combustible/organic material may cause fire. Fine dust dispersed in air may ignite. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. May ignite combustibles (wood, paper, oil, clothing, etc.). Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products: Nitrogen oxides (NO_x).

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available.

Autoignition Temperature 510 °C / 950 °F

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	2	OX

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Keep combustibles (wood, paper, oil, etc) away from spilled material. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Soak up with inert absorbent material.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Keep away from clothing and other combustible materials.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials.

Incompatibilities

Organic materials, acids, amines, strong reducing agents, cyanides, metals, finely powdered metals, combustible material.

SECTION 8: Exposure controls/personal protection**8.1 Occupational exposure limits**

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

8.2 Exposure controls**Appropriate engineering controls**

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

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

Wear appropriate protective gloves and clothing to prevent skin exposure.

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.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical State	Solid
Appearance	Off-white
Odor	Odorless
Odor Threshold	No information available
pH	7-10 5% aq.sol
Melting Point/Range	387 °C / 728.6 °F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	Not applicable
Density	No information available
Solubility	Soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	510 °C / 950 °F
Decomposition Temp	> 350°C
Viscosity	Not applicable
Molecular Formula	KNO2
Molecular Weight	85.1 g/mol
VOC Content(%)	No information available
Oxidizing properties	Oxidizer

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Known reactive hazard.

10.2 Chemical stability

Hygroscopic. Oxidizer; contact with combustible/organic material may cause fire.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Dust formation, incompatible products, excess heat, exposure to moist air or water, combustible material.

10.5 Incompatible materials

Organic materials, acids, amines, strong reducing agents, cyanides, metals, finely powdered metals, combustible material.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium nitrite	-	-	85 g/m ³ /2H (Mouse)

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Potassium nitrite	7758-09-0	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic organisms.

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Likely mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal 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

DOT (US)

UN-no	UN1488
Proper Shipping Name	POTASSIUM NITRITE
Hazard Class	5.1
Packing Group	II

IMDG

UN-no	UN1488
Proper Shipping Name	POTASSIUM NITRITE
Hazard Class	5.1
Packing Group	II

IATA

UN-no	UN1488
Proper Shipping Name	POTASSIUM NITRITE
Hazard Class	5.1

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Listed (Potassium nitrite (CAS #7758-09-0)).

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Listed, Potassium nitrite (CAS #7758-09-0).

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 09/20/2024

SECTION 17: Disclaimer

The information provided on 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 a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.