

Potassium nitrite
MSDS# 19480

Section 1 - Chemical Product and Company Identification

MSDS Name:

Potassium nitrite

Catalog Numbers:

22270-0000, 22270-0010, 42306-0000, 42306-0050, 42306-5000, P/6160/53,
P/6162/50, P/6162/60, P/6162/65

Synonyms:

Nitrous acid, potassium salt.

Company Identification: Fisher Scientific UK

Bishop Meadow Road, Loughborough
Leics. LE11 5RG

For information in Europe, call:(01509) 231166

Emergency Number, Europe:01509 231166

Section 2 - Composition, Information on Ingredients

CAS#: 7758-09-0
Chemical Name: Potassium nitrite
%: >96
EINECS#: 231-832-4

Hazard Symbols:

T O N

Risk Phrases:

25 50 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic if swallowed. Contact with combustible material may cause fire. Very toxic to aquatic organisms. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Ingestion:

Harmful if swallowed. Ingestion of large amounts may cause gastrointestinal irritation. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death.

Inhalation:

Causes respiratory tract irritation. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death. May cause effects similar to those described for ingestion.

Chronic:

Absorption into the body leads to the formation of methemoglobin which in sufficient concentrations causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything

by

mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray

to

keep fire-exposed containers cool.

Extinguishing Media:

Use flooding quantities of water as spray. Cool containers with flooding quantities of water until well after fire is out. For

small

fires, do NOT use dry chemicals, carbon dioxide, halon or foams.

USE

WATER ONLY.

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in

the

Protective Equipment section. Avoid generating dusty conditions.

Flush spill area with water. Do not use combustible materials such

as

paper towels to clean up spill.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep from contact with clothing and other combustible materials. Avoid breathing dust.

Storage:

Store in a tightly closed container. Store in a cool, dry,

well-ventilated area away from incompatible substances. Keep away from reducing agents. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general

or

local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

CAS# 7758-09-0:

Personal Protective Equipment

Eyes:

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:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

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.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: white to pale yellow
Odor: none reported
pH: Alkaline in solution
Vapor Pressure: Not applicable.
Viscosity: Not applicable.
Boiling Point: Not applicable.
Freezing/Melting Point: 387 deg C (728.60°F)
Autoignition Temperature: Not applicable
Flash Point: Not applicable.
Explosion Limits: Lower:Not available
Explosion Limits: Upper:Not available
Decomposition Temperature:
Solubility in water: Soluble
Specific Gravity/Density: 1.9150
Molecular Formula: KNO2
Molecular Weight: 85.10

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Moisture, excess heat.

Incompatibilities with Other Materials

Strong reducing agents, organic materials, combustible materials.

Hazardous Decomposition Products

Nitrogen oxides, irritating and toxic fumes and gases, oxides of potassium.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 7758-09-0: TT3750000

LD50/LC50:

CAS# 7758-09-0: Inhalation, mouse: LC50 = 85 gm/m³/2H;

Oral, rabbit: LD50 = 200 mg/kg;.

Carcinogenicity:

Potassium nitrite -

Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other:

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA

Shipping Name:	POTASSIUM NITRITE
Hazard Class:	5.1
UN Number:	1488
Packing Group:	II

IMO

Shipping Name:	POTASSIUM NITRITE
Hazard Class:	5.1
UN Number:	1488
Packing Group:	II

RID/ADR

Shipping Name:	POTASSIUM NITRITE
Hazard Class:	5.1
UN Number:	1488
Packing Group:	II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T O N

Risk Phrases:

R 25 Toxic if swallowed.
R 50 Very toxic to aquatic organisms.
R 8 Contact with combustible material may cause fire.

Safety Phrases:

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 7758-09-0: 2

Canada

CAS# 7758-09-0 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7758-09-0 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:

4/24/1998

Revision #6 Date

2/03/2005

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