
MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
:
EC index no : 007-011-00-X
EC no : 231-832-4
CAS No : 7758-09-0
Product code : 05402

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SPAN LAB
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)
401208 Mumbai - INDIA
PH: +91 9820509929
info@spanlab.in www.spanlab.in

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Solids, H271
Category 1
Acute toxicity (oral), H301
Category 3
Hazardous to the aquatic H400
environment — Acute
Hazard, Category 1

Full text of classification categories and H statements : see section 16

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

Classification according to Directive 67/548/EEC or 1999/45/EC

O; R8

T; R25

N; R50

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS03

GHS09

Signal word (CLP) : -

Hazard statements (CLP) : H271 - May cause fire or explosion; strong oxidiser
H301 - Toxic if swallowed
H400 - Very toxic to aquatic life

Precautionary statements (CLP) : P220 - Keep/Store away from clothing/.../combustible materials
P273 - Avoid release to the environment
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : POTASSIUM NITRITE CRYSTALS AR/ACS
CAS No : 7758-09-0
EC no : 231-832-4
EC index no : 007-011-00-X

Full text of R- and H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

| | |
|---------------------------------------|--|
| First-aid measures after skin contact | : IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. |
| First-aid measures after eye contact | : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see ... on this label). |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------------------------|--|
| Symptoms/injuries after ingestion | : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. |
|-----------------------------------|--|

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|---|
| Suitable extinguishing media | : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| | |
|------------------|---|
| Fire hazard | : May cause fire or explosion; strong oxidiser. |
| Explosion hazard | : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Firefighting instructions | : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|--------------------------------|
| General measures | : No naked lights. No smoking. |
|------------------|--------------------------------|

6.1.1. For non-emergency personnel

| | |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

6.1.2. For emergency responders

| | |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Stop release. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| Methods for cleaning up | : Clear up rapidly by scoop or vacuum. |
|-------------------------|--|

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|---|
| Additional hazards when processed | : Hazardous waste due to potential risk of explosion. |
| Precautions for safe handling | : Take any precaution to avoid mixing with combustibles/... |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--------------------|---|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. |
|--------------------|---|

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

| | |
|------------------------|--|
| Storage conditions | : Keep in fireproof place. Store in original container. Store in a dry place. Protect from moisture. |
| Incompatible materials | : Heat sources. combustible materials. |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

| | |
|-------------------------------|---|
| Personal protective equipment | : Wear fire/flare resistant/retardant clothing. |
| Hand protection | : protective gloves |
| Eye protection | : Chemical goggles or safety glasses |
| Skin and body protection | : Wear suitable protective clothing |
| Respiratory protection | : Wear respiratory protection |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------------|
| Physical state | : Solid |
| Colour | : Pale yellow crystals. |
| Odour | : odourless. |
| Odour threshold | : No data available |
| pH | : 7 - 10 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : 350 °C |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : 2.9 |
| Relative density | : No data available |
| Density | : 1.915 g/cm ³ |

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

| | |
|----------------------|---|
| Solubility | : Water: 300 g/100ml |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : The substance or mixture is classified as oxidizing with the subcategory 2. May cause fire or explosion; strong oxidiser. |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

May cause fire or explosion; strong oxidiser.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Heat. Sparks. Overheating. Open flame.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed.

Skin corrosion/irritation : Not classified
pH: 7 - 10

Serious eye damage/irritation : Not classified
pH: 7 - 10

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Additional information : Hazardous waste due to potential risk of explosion.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1488

UN-No. (IMDG) : 1488

UN-No.(IATA) : 1488

UN-No.(ADN) : 1488

UN-No. (RID) : 1488

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

14.2. UN proper shipping name

| | |
|---------------------------------------|--|
| Proper Shipping Name (ADR) | : POTASSIUM NITRITE |
| Proper Shipping Name (IMDG) | : POTASSIUM NITRITE |
| Proper Shipping Name (IATA) | : POTASSIUM NITRITE |
| Proper Shipping Name (ADN) | : POTASSIUM NITRITE |
| Proper Shipping Name (RID) | : POTASSIUM NITRITE |
| Transport document description (ADR) | : UN 1488 POTASSIUM NITRITE, 5.1, II, (E), ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IMDG) | : UN 1488 POTASSIUM NITRITE, 5.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 1488 POTASSIUM NITRITE, 5.1, II, ENVIRONMENTALLY HAZARDOUS |
| Transport document description (ADN) | : UN 1488 POTASSIUM NITRITE, 5.1, II, ENVIRONMENTALLY HAZARDOUS |
| Transport document description (RID) | : UN 1488 POTASSIUM NITRITE, 5.1, II, ENVIRONMENTALLY HAZARDOUS |

14.3. Transport hazard class(es)

ADR

| | |
|----------------------------------|-------|
| Transport hazard class(es) (ADR) | : 5.1 |
| Danger labels (ADR) | : 5.1 |



IMDG

| | |
|-----------------------------------|-------|
| Transport hazard class(es) (IMDG) | : 5.1 |
| Danger labels (IMDG) | : 5.1 |



IATA

| | |
|-----------------------------------|-------|
| Transport hazard class(es) (IATA) | : 5.1 |
| Hazard labels (IATA) | : 5.1 |



ADN

| | |
|----------------------------------|-------|
| Transport hazard class(es) (ADN) | : 5.1 |
| Danger labels (ADN) | : 5.1 |



RID

| | |
|----------------------------------|-------|
| Transport hazard class(es) (RID) | : 5.1 |
|----------------------------------|-------|

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

Danger labels (RID) : 5.1



14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : O2

Limited quantities (ADR) : 1kg

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T3

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAV

Tank special provisions (ADR) : TU3

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages (ADR) : V11

Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP6, AP7

Special provisions for carriage - Loading, unloading and handling (ADR) : CV24

Hazard identification number (Kemler No.) : 50

Orange plates :



Tunnel restriction code (ADR) : E

EAC code : 1Y

- Transport by sea

Limited quantities (IMDG) : 1 kg

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P002

IBC packing instructions (IMDG) : IBC08

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

| | |
|--------------------------------|--------------|
| IBC special provisions (IMDG) | : B2, B4 |
| Tank instructions (IMDG) | : T3 |
| Tank special provisions (IMDG) | : TP33 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-Q |
| Stowage category (IMDG) | : A |
| Segregation (IMDG) | : SG38, SG49 |
| MFAG-No | : 140 |

- Air transport

| | |
|--|---------|
| PCA Excepted quantities (IATA) | : E2 |
| PCA Limited quantities (IATA) | : Y544 |
| PCA limited quantity max net quantity (IATA) | : 2.5kg |
| PCA packing instructions (IATA) | : 558 |
| PCA max net quantity (IATA) | : 5kg |
| CAO packing instructions (IATA) | : 562 |
| CAO max net quantity (IATA) | : 25kg |
| ERG code (IATA) | : 5L |

- Inland waterway transport

| | |
|-----------------------------------|--------|
| Classification code (ADN) | : O2 |
| Limited quantities (ADN) | : 1 kg |
| Excepted quantities (ADN) | : E2 |
| Equipment required (ADN) | : PP |
| Number of blue cones/lights (ADN) | : 0 |

- Rail transport

| | |
|---|----------------------|
| Classification code (RID) | : O2 |
| Limited quantities (RID) | : 1kg |
| Excepted quantities (RID) | : E2 |
| Packing instructions (RID) | : P002, IBC08 |
| Special packing provisions (RID) | : B4 |
| Mixed packing provisions (RID) | : MP10 |
| Portable tank and bulk container instructions (RID) | : T3 |
| Portable tank and bulk container special provisions (RID) | : TP33 |
| Tank codes for RID tanks (RID) | : SGAV |
| Special provisions for RID tanks (RID) | : TU3 |
| Transport category (RID) | : 2 |
| Special provisions for carriage – Packages (RID) | : W11 |
| Special provisions for carriage – Bulk (RID) | : VC1, VC2, AP6, AP7 |
| Special provisions for carriage – Loading and unloading (RID) | : CW24 |
| Colis express (express parcels) (RID) | : CE10 |
| Hazard identification number (RID) | : 50 |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

POTASSIUM NITRITE CRYSTALS AR/ACS is not on the REACH Candidate List

POTASSIUM NITRITE CRYSTALS AR/ACS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazardous to water (Classification according to VwVwS, Annex 2; WGK No 347)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

| | |
|---------------------|---|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Ox. Sol. 1 | Oxidising Solids, Category 1 |
| H271 | May cause fire or explosion; strong oxidiser |
| H301 | Toxic if swallowed |
| H400 | Very toxic to aquatic life |
| R25 | Toxic if swallowed |
| R50 | Very toxic to aquatic organisms |
| R8 | Contact with combustible material may cause fire |
| N | Dangerous for the environment |
| O | Oxidising |
| T | Toxic |

POTASSIUM NITRITE CRYSTALS AR/ACS

Safety Data Sheet

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product