


SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1. Product identifier

Name: Potassium Nitrite.
Synonyms : Nitrous acid, potassium salt.
CLP Annex VI, part 3, index nr. 007-011-00-X, Potassium nitrite
EC/EINECS No. : 231-832-4
CAS No. 7758-09-0
Registration nr : n.a.

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

1.2.1 Intended use : enamel, Benfield process, oxidiser in various applications

1.2.2 Uses advised against no additional information

1.3 Details of the supplier of the safety datasheet

Supplier : GENTROCHEMA BV
Esdoornlaan 19a, NL-4254 AT Sleeuwijk, Nederland
Tel. : +31.183.304422 Fax : +31.183.304069
E-mail : gentrochema@pms.nl Website : www.gentrochema.nl

Emergency telephone nr : during office hours (08:30 - 17:00) : +31.183.304422
After office hours (*only for health professionals*) : +44.870.600.6266

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance

2.1.1. Classification according to Regulation 1272/2008 EC

Ox. solid, 2 H272
Acute tox., 3 H301
Aqua, acute,1 H400

2.2 Label elements


2.2.1. Labelling according to Regulation 1272/2008 EC

Product identifier : Potassium Nitrite

Index Nr : 007-011-00-X, potassium nitrite

Hazard Pictogram(s):



SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

Signal word : Danger

Hazard Statement(s):

H272 May intensify fire; oxidiser
H301 Toxic if swallowed
H400 Very toxic to aquatic life

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P273 Avoid release to the environment.

2.3. Other hazards

No additional information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical characterization: Potassium nitrite, min. 97 % KNO₂, with non hazardous additions

Composition/information on ingredients :


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4. FIRST AID MEASURES

4.1 Description of first aid measures

- **General information** : In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.
- **After inhalation** : Remove to fresh air.
If not breathing give artificial respiration.
If breathing is difficult, give oxygen.
Call a physician.
- **After skin contact** : Immediately flush skin with copious amounts of water for at least 15 minutes.

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

- **After eye contact :** Immediately flush eyes with copious amounts of water for at least 15 minutes, keeping eyelids open.
- **After swallowing :** Drink plenty of water, provided person is conscious and rinse mouth with water. Call a physician.

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

Toxic if swallowed. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No additional information

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
 Non-suitable extinguishing media : Not known

5.2 Special hazards arising from the substance

Nitrogen oxides (NOx), Potassium oxides

5.3 Advice for fire-fighters

Contact with combustible material may cause fire. Oxidiser
 Wear self contained breathing apparatus if necessary.
 Avoid release of the extinguishing media to the environment.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid causing dust.

6.2 Environmental precautions


This material and its container must be disposed of as hazardous waste.
 Avoid release to the environment. Refer to special instructions/safety data sheets.

6.3 Methods and materials for containment and cleaning up

Pick up spilled product, keep in a closed container and hold for waste.

6.4 Reference to other sections

For safe use : refer to section 7
 For personal protection : refer to section 8.
 For disposal : refer to section 13

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid causing dust. Do not breathe dust.
 Handle and open container with care.
 Wash thoroughly after handling.
 When using, do not eat, drink or smoke.
 Avoid exposure - obtain special instructions before use.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.
 Keep away from combustible materials, heat, sparks and open flame.
 Other information: For quality reasons; Store in a cool dry place.

7.3 Specific end uses

No additional information

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits for this substance are not known
 (Chemical Safety Report NOT available)

8.2 Exposure controls

Do not breathe dust.
 Avoid contact with skin, eyes or clothes.
 Wash thoroughly after handling.
 Only use in a well-ventilated place.
 Safety shower and eye bath should be present.

Personal protection :

- Hand protection : Use chemical resistant gloves. See standard : EN-374-3:2003.
- Eye/face protection : Use tight fitting goggles. See standard: EN 166:2001.
- Skin/body protection : Wear appropriate protective clothing.
- Respiratory protection : Wear appropriate respirator, Filter P3 (white).

Other information :

After handling, take a shower. Working clothes should not be taken home.


9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 information on basic physical and chemical properties

Appearance: solid, white/yellow crystals
Odour: odourless
Odour threshold: Not available

4 / 8

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is intended to describe the product in respect of safety requirements only. None of the information is to be taken to constitute a guarantee concerning the properties of this product.

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

PH-value :	7.5 (1 % solution)
Alkalinity or acidity :	Not available.
Boiling point :	Not available.
Melting point :	441 °C
Flash point:	Not available
Evaporation rate:	Not relevant
Flammability :	Not available.
Vapour pressure :	Not available
Vapour density :	Not available.
Specific gravity/Density :	1.9 g/cm ³
Solubility in water :	281 g/l (at 0 °C)
Solubility in other solvents :	Not available.
Partition coefficient n-octanol/water:	Not available.
Auto ignition temperature:	Not available.
Decomposition temperature :	> 530 °C
Viscosity :	Not available.
Explosive properties	> 530 °C
Oxidising properties :	strong oxidiser. May intensify fire

9.2. other information

Due to its hygroscopic properties, this product will cake rapidly (in case an anti-caking agent is not used).

10. STABILITY AND REACTIVITY

10.1 Reactivity

Contact with combustible material may cause fire.
Reacts violently with reducing substances.

10.2 Chemical stability

May explode upon heating > 530 °C.
Stable under circumstances as advised in section 7.

10.3 Possibility of hazardous reactions

Do not mix with reducing substances, acids and organic substances.

10.4 Conditions to avoid

Keep away from combustible materials, heat, sparks and open flames. Keep away from sources of ignition - No smoking.

10.5 Incompatible materials


Do not mix with reducing substances, acids and organic substances.

10.6. Hazardous decomposition products

Poisonous NO_x

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

Acute toxicity : Oral LD50, rabbit : 200 mg/kg
 Inhalation LC50, mouse : 85 mg/m³, 2 hrs

Acute effects: no information available

Chronicle effects: no information available

Other information: -

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Very toxic to aquatic organisms.
 Water hazard class 5 (Netherlands)

12.2 Persistence and degradability

No additional information

12.3 Bio accumulative potential

No additional information

12.4 Mobility in soil

No additional information

12.5 Results of PBT and vPvB assessment

Not relevant

13. DISPOSAL CONSIDERATIONS


Product/packing : Observe all federal, state and local environmental regulations. See directives 75/442/EEC and 2006/12/EC. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ Safety data sheets.

14. TRANSPORT INFORMATION

Landtransport (RID/ADR) :



ADR/GGVSEB class: Potassium nitrite, ADR 5.1
 GEVI Nr.: 50
 Label : flame / fish and tree
 Packing group: II
 UN nr. : 1488
 Tunnel restriction code E

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

Sea transport (IMDG) :



IMDG class: 5.1
 UN nr. : 1488
 Label : 5.1
 Packing group : II
 EMS: F-A, S-Q
 Segregation group: 12, NITRITES AND THEIR MIXTURES
 Marine Pollutant : yes
 POTASSIUM NITRITE.

Air transport (ICAO-IATA):



ICAO/IATA class: 5.1
 UN/ID Number: 1488
 Label: 5.1
 Packing group: II POTASSIUM NITRITE
 UN nr. : 1488

15. REGULATORY INFORMATION

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

State regulations

Observe all federal, state and local regulations.

Water hazard class :

5 (Netherlands)

additional regulations and restrictions

REACH regulation


15.2 Chemical Safety report

No additional information

16. OTHER INFORMATION

relevant H& R Phrases

H272 May intensify fire; oxidiser

SAFETY DATA SHEET	In accordance with Regulation 1907/2006 (REACH), amended by Regulation 453/2010	
	POTASSIUM NITRITE	

H301 Toxic if swallowed.
H400 Very toxic to aquatic life.

Consulted literature: -
Version : Nr. 2.01 of 13.02.2018. (Replaces all preceding versions.)
Changes per section compared to last version : Deleted labelling and classification according regulation 67/548/EC
Name of composer and manager in charge : Mr W. van Loon. (wl@gentrochema.nl./tel +31 183 304422)
Printing date : 13-02-2018

Used abbreviations

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA : International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent