64044 Potassium Nitrite

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. Product Identifier

Product Name:	*Potassium Nitrite*
Article No.:	*64044*
UFI:	*--*

1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Laboratory chemical

Uses advised against:

1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company:	*Kremer Pigmente GmbH & Co. KG*
Address:	*Hauptstr. 41-47, 88317 Aichstetten, Germany*
Tel./Fax.:	*Tel +49 7565 914480, Fax +49 7565 1606*
Internet:	*www.kremer-pigmente.com*
EMail:	*info@kremer-pigmente.com*
Importer:	*--*

1. 4. Emergency No.

Emergency No.: *+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

1. 4. 2 Poison Center:

2. Hazards Identification

2. 1. Classification of the Substance or Mixture

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

Oxidizing solids, hazard category 2
Acute toxicity (oral), hazard category 3
Acute aquatic toxicity, hazard category 1

H272	May intensify fire; oxidizer.
Cat.: 3	
H301	Toxic if swallowed.
Cat.: 3	
H400	Very toxic to aquatic life.
Cat.: 1	

Possible Environmental Effects:

2. 2. Label Elements

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

Hazard designation:

GHS03

GHS06-2

GHS09

Signal word:

Danger

Hazard designation:

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

Safety designation:

P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P273	Avoid release to the environment.
P301+P310	If swallowed: Immediately call a poison center or physician.

Hazardous components for labelling:

2. 3. Other Hazards

Can cause combustible dust concentrations in the air.

3. Composition/Information on Ingredients

3. 1. Substance

3. 2. Mixture

Chemical Characterization: *KNO2*

Information on Components / Hazardous Ingredients:

Potassium nitrite (H272-301-400)	> 95 %	CAS-Nr: 7758-09-0 EINECS-Nr: 231-832-4 EC-Nr: 007-011-00-X

Additional information:

4. First Aid Measures

4. 1. Description of the First Aid Measures

General information:

Show this safety data sheet to the doctor in attendance.
Remove contaminated clothes.

After inhalation:

Take affected person to fresh air.
Do not give mouth-to-mouth resuscitation when victim has swallowed or inhaled the product. Apply artificial respiration using a foldable pocket mask, which is fitted with a one-way valve or with another appropriate medical resuscitator.
Immediate medical treatment is necessary. If breathing ceases,

apply artificial respiration with additional oxygen.

After skin contact:

Wash off with plenty of water for at least 15 minutes. In case of irritation seek medical attention.

After eye contact:

Rinse open eyes immediately with plenty of water for at least 15 minutes. Call a physician.

After ingestion:

Do not induce vomiting.
Get medical attention immediately. Call a poison center or physician.

4. 2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

Foam, carbon dioxide (CO2), extinguishing powder, water.

Unsuitable extinguishing media:

None known.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

Oxidant: Contact with combustible/organic material may cause fire. Fine dust can ignite spontaneously on contact with air. Containers can explode when heated. Thermal decomposition can cause the release of irritant gases and vapours.
Keep product and empty containers away from heat and sources of ignition. Can ignite combustible material (wood, paper, oil, clothes, etc.).
Do not let extinguishing water enter the sewerage system or water courses.
In case of fire: formation of nitrogen oxides.

5. 3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device (according to MSHA/NIOSH) and full protective gear.

Further information:

Cool closed containers exposed to fire with water mist.
Avoid contamination of sewage system, open water ways and ground water.

6. Accidential Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
Avoid formation of dust.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.
In case of Contact local authorities if product pollutes soil or vegetation.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Keep combustible materials (wood, oil, etc.) away from spilled material.
Contain with inert absorbent material and dispose as hazardous waste.
Avoid dust formation.

6. 4. Reference to other Sections

See Section 13 for information on disposal.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Wear adequate protective clothing (see para. 8).
Avoid contact with eyes, skin and clothing.
It is recommended to provide a portable eye rinsing bottle.

Hygienic measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.
Take off contaminated clothing immediately and reuse only after thoroughly cleaning these.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.
Keep product shut away or kept in a manner so as to ensure that only qualified persons may have access.

Requirements for storage areas and containers:

Store product in closed containers.

Information on fire and explosion protection:

Do not store together with flammable products.
Do not store together with ignitable and heat sources.

Storage class:

5.1 B; Oxidizing substances (TRGS 510)

Further Information:

7. 3. Specific End Use(s)

Further information:

See Section 1.2.; no other uses provided

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

Does not contain any components with workplace limit values.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8. 2. Exposure Controls

Technical protective measures:

Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.

Technical protective measures have priority to personal protective measures.

Personal Protection

General protective measures:

Remove contaminated clothing immediately.

Preventive skin protection. Wash hands and face at the end of work.

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

A respiratory protection program meeting NIOSH/MSHA or EN 149 requirements must be followed whenever workplace conditions warrant a respirator´s use.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Nitrile rubber, neoprene

Natural latex.

Polyvinyl chloride (PVC)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Prevent contamination of open water ways and sewage system.
Avoid contamination of ground water.
Contact local authorities if large spillages cannot be contained.

9. Physical and Chemical Properties

9. 1. Information on Basic Physical and Chemical Properties

Form:	*solid*
Color:	*whitish*
Odor:	*odorless*
Odor threshold:	*no information available*
pH-Value:	*7 - 10 (50 g/l; 20°C)*
Melting temperature:	*387°C (728.6°F)*
Boiling temperature:	*not available*
Flash point:	*Class 1 (Flash point < 23°C, Boiling point <= 35°C)*
Evaporation rate:	*No information available.*
Flammability (solid, gas):	*not available*
Upper explosion limit:	*no information available*
Lower explosion limit:	*no information available*
Vapor pressure:	*Class 1*
Vapor density:	*No information available.*
Density:	*1.92 g/cm3 (20°C)*
Solubility in water:	*3000 g/l (20°C)*
Coefficient of variation (n-Octanol/Water):	*no information available*
Auto-ignition temperature:	*510°C (950°F)*
Decomposition temperature:	*> 350°C*
Viscosity, dynamic:	*not applicable*
Explosive properties:	*not available*

Oxidizing properties:

Oxidizing agent

Bulk density: *980 kg/m3*

9. 2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

KNO3; Molecular weight: 85.1 g/mol

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Hygroscopic, oxidant: fire hazard after contact with combustible/organic substances.

10.3. Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.
Strong heating.
Avoid contact with acids, water or humidity.

Thermal decomposition:

10.5. Imcompatible Materials

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

10.6. Hazardous Decomposition Products

Nitrogen oxides (NOx)

10.7. Further Information

11. Toxicological Information

11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral:

No information available.

LD50, dermal:

No information available.

LC50, inhalation: *85 g/m3/2H (mouse)*

Primary effects

Irritant effect on skin:

No information available

Irritant effect on eyes:

No information available.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No relevant data found.

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Aspiration hazard

Not applicable

11. 2. Information on other Hazards

Endocrine Disrupting Properties: no information available.

12. Ecological Information

12. 1. Aquatic Toxicity

Very toxic for aquatic organisms.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12. 2. Persistency and Degradability

Soluble in water, persistency is unlikely.
Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12. 3. Bioaccumulation

Considered unlikely to bioaccumulate.

12. 4. Mobility

Product is water soluble and can spread in watercourses.
Highly mobile in soil.

12. 5. Results of PBT- und vPvP Assessment

PBT/vPvB assessment not available as a chemical safety assessment is not required / not conducted.

12. 6. Endocrine Disrupting Properties

Not listed.

12. 7. Other Adverse Effects

Water hazard class:

2 (German Regulation) (Assessment by list): hazardous.

Behaviour in sewage systems:

Further ecological effects:

Do not let product enter waterways or sewage system.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and local regulations.
Leave chemical in original containers. Do not mix with other waste.

European Waste Code (EWC):

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA	*1488*

14. 2. UN Proper Shipping Name

ADR/RID:	*KALIUMNITRIT*
IMDG/IATA:	*POTASSIUM NITRITE*

14. 3. Transport Hazard Classes

ADR Class:	*5.1*
Hazard no.:	*5.1*
Classification code:	*O2*
Tunnel restriction code:	*E*
IMDG Class (sea):	*5.1*
Hazard no.:	*5.1*
EmS No.:	*F-A, S-Q*
IATA Class:	*5.1*
Hazard no.:	*5.1*

14. 4. Packaging Group

ADR/RID: *II*

IMDG: *II*

IATA: *II*

14. 5. Environmental Hazards

Environmentally hazardous substance, solid; Marine Pollutant

14. 6. Special Precautions for User

none known

14. 7. Maritime Transport in Bulk according to IMO Instruments

not applicable

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

2, hazardous for water (German Regulation)

Local regulations on chemical accidents:

Toxic (2); Amount 1: 50 t; Amount 2: 200 t
Oxidizing (3); Amount 1: 50 t; Amount 2: 200 t
Environmentally hazardous (9a); Amount 1: 100 t; Amount 2: 200 t

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.
The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline are to be observed.

Restriction and prohibition of application:

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15. 3. Further Information

Listed in the following inventories:
EINECS (231-832-4), TSCA (US), AICS (AUS), DSL (CA), ENCS (JP), KECL (KE-29165), PICCS (PH), IECSC (CN)
Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.