Material Safety Data Sheet

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Sodium nitrite
Product Number: D9016
Brand: Dando
Supplier: Dando Chemicals US LLC
Address: 551 E 11 Mile Rd Suite 3B, Madison Heights, MI 48071 USA.
Telephone: 248-629-9434
Emergency Phone # (For both supplier and manufacturer): +1 (313) 520 1328
Email: info@dandochem.us
Preparation Information: Dando Chemicals US LLC

2. HAZARDS IDENTIFICATION

Emergency Overview

Target Organs
Blood, Cardiovascular system., Smooth muscle.

WHMIS Classification
C Oxidizing Material Oxidizer
D1B Toxic Material Causing Immediate and Serious

Toxic Effects
Toxic by ingestion
D2A Very Toxic Material Causing Other Toxic Effects Carcinogen
D2B Toxic Material Causing Other Toxic Effects Moderate eye irritant

GHS Classification
Oxidizing solids (Category 3)

Acute toxicity, Oral (Category 3)

Eye irritation (Category 2A)

Acute aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Pictogram

Signal word  Danger

Hazard statement(s)

H272  May intensify fire; oxidiser.

H301  Toxic if swallowed.

H319  Causes serious eye irritation.

H400  Very toxic to aquatic life.

Precautionary statement(s)

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.

P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**HMIS Classification**

Health hazard:  2

**Chronic Health Hazard:  *  

Flammability:  0

Physical hazards:  1

Reactivity:  3

**Potential Health Effects**
Inhalation  May be harmful if inhaled. Causes respiratory tract irritation.

Skin  May be harmful if absorbed through skin. Causes skin irritation.

Eyes  Causes eye irritation.

Ingestion  Toxic if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula  :  NNaO$_2$

Molecular Weight  :  69.00 g/mol

CAS-No.  EC-No.  Index-No.  Concentration

**Sodium nitrite**

7632-00-0  231-555-9  007-010-00-4

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Sodium oxides

Explosion data - sensitivity to mechanical impact

no data available

Explosion data - sensitivity to static discharge

no data available

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Eye protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Specific engineering controls

Use mechanical exhaust or laboratory fume hood to avoid exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form  solid
Colour  no data available

Safety data

pH  9

Melting
point/freezing point
Melting point/range: 271 °C (520 °F) - lit.

Boiling point  320 °C (608 °F)

Flash point  no data available

Ignition temperature  490 °C (914 °F)

Auto-ignition
temperature
no data available

Lower explosion limit  no data available

Upper explosion limit  no data available

Vapour pressure  < 0.0000 hPa (< 0.0000 mmHg) at 25 °C (77 °F)

Density  2.168 g/cm3

Water solubility  820 g/l at 20 °C (68 °F)

Partition coefficient:
n-octanol/water
log Pow: -3.7

Relative vapour density
no data available

Odour no data available

Odour Threshold no data available

Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
Exposure to moisture.

Materials to avoid
Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx), Sodium oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat - 157.9 mg/kg
LD50 Oral - mouse - 175 mg/kg

Remarks: Vascular:BP lowering not characterized in autonomic section. Vascular: Regional or general arteriolar or venous dilation.

Inhalation LC50
Dermal LD50
no data available

Other information on acute toxicity
no data available

Skin corrosion/irritation
Skin - rabbit - No skin irritation - 48 h - OECD Test Guideline 404

Serious eye damage/eye irritation
Eyes - rabbit - Moderate eye irritation - 24 h - OECD Test Guideline 405

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)
2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity
no data available

Teratogenicity
no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
Potential health effects

**Inhalation**  May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion**  Toxic if swallowed.

**Skin**  May be harmful if absorbed through skin. Causes skin irritation.

**Eyes**  Causes eye irritation.

**Signs and Symptoms of Exposure**

Headache, Nausea, Incoordination. Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

**Synergistic effects**

no data available

**Additional Information**

RTECS: RA1225000

12. ECOLOGICAL INFORMATION

**Toxicity**

Toxicity to fish  flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h
mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available
Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1500  Class: 5.1 (6.1)  Packing group: III
Proper shipping name: Sodium nitrite
Reportable Quantity (RQ): 100 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG

UN number: 1500  Class: 5.1 (6.1)  Packing group: III  EMS-No: F-A, S-Q
Proper shipping name: SODIUM NITRITE
Marine pollutant: No

IATA

UN number: 1500  Class: 5.1 (6.1)  Packing group: III
Proper shipping name: Sodium nitrite

15. REGULATORY INFORMATION

WHMIS Classification
C Oxidizing Material  Oxidizer

D1B  Toxic Material Causing Immediate and Serious  Toxic by ingestion

**Toxic Effects**

D2A  Very Toxic Material Causing Other Toxic Effects  Carcinogen

D2B  Toxic Material Causing Other Toxic Effects  Moderate eye irritant

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the

MSDS contains all the information required by the Controlled Products Regulations.

**16. OTHER INFORMATION**

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dando Chemicals and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.