

## 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 :  $\text{NNaO}_2$

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 (NO<sub>x</sub>), 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 fumehood 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/cm<sup>3</sup>

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 (NO<sub>x</sub>), 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**

no data available

**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**



no data available

### **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.