

Safety Data Sheet

Sodium Nitrite 40%

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sodium Nitrite 40%

Synonyms/Generic Names: None

Product Number: 5259

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

Pictograms:



GHS Classification:

Acute toxicity, Oral	Category 3
Eye irritation	Category 2A
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H301	Toxic if swallowed.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/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.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	Toxic if swallowed.

NFPA Ratings

Health	2
Flammability	0
Reactivity	1
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	0
Reactivity	1

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Sodium Nitrite	40-41	7632-00-0	231-555-9	NaNO ₂	69.00 g/mol
Water	Balance	7732-18-5	231-791-2	H ₂ O	18.00 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (sodium oxides, nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
--	--

Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Contain spillage, absorb on noncombustible material, and then collect with broom and non-sparking shovel or with an electrically protected vacuum cleaner, or by wet-brushing, and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White to slightly yellowish liquid.
Odor	None
Odor threshold	Not Available
pH	~9.5 (1% solution)
Melting point/freezing point	-7°C (19°F)
Initial boiling point and boiling range	120°C (248 °F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	2.3 kPa at 20°C
Vapor density	Not Available
Specific gravity	1.300-1.310
Solubility (ies)	Not Available
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	>320 °C (>608 °F)

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Reacts with acids, oxidizing agents, reducing agents, amine-containing materials.
Conditions to Avoid	Avoid excess heat, especially avoid heating to dryness which increases the possibility of hazardous oxidizing reactions.
Incompatible Materials	Acids, powdered metals, ammonia, cyanides, amines, activated carbon.
Hazardous Decomposition Products	Nitrogen oxides, metallic oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Dermal	LD50 – rabbit - >2000 mg/kg
Eyes	Not Available
Inhalation	LC50 – rat – 5.5 mg/m ³ (4-hr)
Oral	LD50- rat - 88 mg/kg (for sodium nitrite dry)

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.
Eyes	Irritation, redness, watering eyes, itchiness.
Respiratory	Respiratory tract irritation, cyanosis, dyspnea, pulmonary edema, asphyxia, chemical pneumonitis, upper airway obstruction caused by edema.
Ingestion	Irritation, nausea, vomiting, diarrhea.

Carcinogenicity	Sodium nitrite is not considered a carcinogen: however, reactions with secondary and tertiary amines produce Nitrosamines which are potentially carcinogenic.
Teratogenicity	Multiple reproductive tests indicate that Sodium nitrite is not teratogenic.
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Fetal toxicity has been observed in pregnant animals which had been fed toxic doses of Sodium nitrite due to the formation of methemoglobin.
Serious Sensitization	Guinea pig – no sensitizing effects known
Skin Corrosion/Irritation (Draize test)	Rabbit (skin): non-irritant
Serious Eye Damage/Irritation (Draize test)	Rabbit (eye): moderate eye irritation

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic Vertebrate	LC50 - Oncorhynchus mykiss – 0.19 mg/l (96hr)
Aquatic Invertebrate	EC50 – Daphnia magna – 12.5 – 100 mg/l (48hr)
Aquatic Plants	Green algae 1230 mg/l (192hr) toxic limit concentration
Bacteria, to soil dwelling organisms and to terrestrial plants	EC – Pseudomonas putida – 123 mg/l (16hr) EC20 – Activated industrial sewage sludge is not to be anticipated during correct introduction of low concentration.

Persistence and Degradability	Not Applicable to inorganic substances
Bioaccumulative Potential	Not expected when the Log P _{ow} is <1 (Sodium nitrite Log P _{ow} : -3.7)
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Applicable
Other Adverse Effects	No other adverse effects are identified

13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN3287, Toxic liquid, inorganic, n.o.s., (sodium nitrite), 6.1, PG III
TDG	UN3287, TOXIC LIQUID, INORGANIC, N.O.S., (SODIUM NITRITE), 6.1, PG III
IMDG	UN3287, TOXIC LIQUID, INORGANIC, N.O.S., (SODIUM NITRITE), 6.1, PG III
Marine Pollutant	No
IATA/ICAO	UN3287, Toxic liquid, inorganic, n.o.s., (sodium nitrite), 6.1, PG III

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL /NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard, Chronic Health Hazard
SARA 312	Acute Health Hazard, Chronic Health Hazard
SARA 313	Listed: Sodium Nitrite
WHMIS Canada	Not Listed

16. OTHER INFORMATION

Revision	Date
Original	04/10/2017
Revision 1	05/24/2017
Revision 2	05/19/2020

Disclaimer: The information provided in this Safety Data Sheet ("SDS") is correct to the best of our knowledge, information and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.