

Safety Data Sheet acc. to OSHA HCS (HazCom 2012)

Printing date 07/28/2020

Reviewed on 07/28/2020

1 Identification

- **Product identifier**
- **Trade name:** DPD Nitrite
- **Catalogue number:** 00512691, 56T002350, 502691, 00502691
- **Application of the substance / the mixture:** Reagent for water analysis
- **Manufacturer/Supplier:**
Tintometer Inc.
6456 Parkland Drive
Sarasota, FL 34243
USA
phone: (941) 756-6410
fax: (941) 727-9654
www.lovibond.us
Made in Germany
- **Emergency telephone number:** + 1 866 928 0789 (English, French, Spanish)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Hazard Communication Standard (HCS).
- **Hazard pictograms**



GHS07



GHS09

- **Signal word** Warning
- **Hazard-determining components of labeling:**
sodium nitrite
- **Hazard statements**
H302 Harmful if swallowed.
H400 Very toxic to aquatic life.
- **Precautionary statements**
P273 Avoid release to the environment.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards** No further relevant information available.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of inorganic compounds.
- **Composition and Information on Ingredients:**
Percent ranges are used due to the confidential product information.

CAS: 7632-00-0	sodium nitrite	2.5–5%
EINECS: 231-555-9	☠ Ox. Sol. 3, H272; ☠ Acute Tox. 3, H301; ☠ Aquatic Acute 1, H400 (M=10); ☠ Eye	
Index number: 007-010-00-4	Irrit. 2A, H319	
RTECS: RA1225000		

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes (at least 15 min) under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink 1-2 glasses of water.
Induce vomiting, if person is conscious. Seek medical help.
If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed**
irritations
after inhalation:
mucosal irritations, cough, breathing difficulty
after swallowing:
sickness
vomiting
cyanosis
after swallowing of large amounts:
headache
methaemoglobinaemia
unconsciousness
- **Danger:**
Danger of circulatory collapse.
Danger of disturbed cardiac rhythm.
- **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**
The product is not combustible.
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Hydrogen chloride (HCl)
Nitrogen oxides (NOx)
Potassium oxide
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Ambient fire may liberate hazardous vapours.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- **Advice for non-emergency personnel:**
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation
 - Avoid formation of dust.
- **Advice for emergency responders:** Protective equipment: see section 8
- **Environmental precautions:**
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
 - Ensure adequate ventilation.
 - Pick up mechanically.
 - Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
- **Advice on safe handling:** No special precautions are necessary if used correctly.
- **Hygiene measures:**
 - Take off immediately all contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Do not eat, drink or smoke when using this product.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
 - Do not store together with acids.
 - Store away from flammable substances.
 - Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
 - Protect from exposure to the light.
 - Store in dry conditions.
 - Protect from humidity and water.
- **Recommended storage temperature:** 20°C +/- 5°C (approx. 68°F)
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Engineering measures:**
 - Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
 - See item 7.
- **Personal protective equipment:**
 - Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
- **Breathing equipment:** Use respiratory protective device against the effects of fume/dust/aerosol.
- **Recommended filter device for short term use:** Combination filter B-P2
- **Protection of hands:**
 - Preventive skin protection by use of skin-protecting agents is recommended.

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After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

Value for the permeation: Level ≤ 1 (10 min)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**

Safety glasses

use against the effects of fumes / dust

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment:**

Do not allow product to reach sewage system or any water course.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**

Form / Physical state:	Tablets
Color:	White

- **Odor:** Odorless

- **Odor threshold:** Not applicable.

- **pH-value (12 g/l) at 20°C (68°F):** 6.1

- **Melting point/freezing point:** Not determined.

- **Initial boiling point and boiling range:** Not determined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** The product is not combustible.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Flammability or explosive limits:**

Lower:	Not applicable.
Upper:	Not applicable.

- **Oxidizing properties:** CAS 7632-00-0: is classified as oxidizing.

Oxidizing potential

- **Vapor Pressure:** Not applicable.

- **Density at 20°C (68°F):** 1.99 g/cm³ (16.61 lbs/gal)

- **Relative density:** Not determined.

- **Vapor density:** Not applicable.

- **Evaporation rate:** Not applicable.

- **Solubility(ies)**

Water:	Soluble.
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- **Partition coefficient (n-octanol/water):** Not applicable.

- **Viscosity:** Not applicable.

- **Solvent content:**

Solids content:	100.0 %
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- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** see section "Possibility of hazardous reactions"

- **Chemical stability** Stable at ambient temperature (room temperature).

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- **Possibility of hazardous reactions**
Reacts with strong acids and oxidizing agents.
--> Forms heat.
Reacts with reducing agents.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
combustible materials
aluminum
- **Hazardous decomposition products:** see section 5

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Classification according to calculation procedure.

· Acute toxicity estimate (ATE_(MIX)) - Calculation method:		
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Oral	GHS ATE _(MIX)	1316 mg/kg (.)
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· LD/LC50 values that are relevant for classification:		
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CAS: 7632-00-0 sodium nitrite		
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Oral	LD50	85 mg/kg (rat) (IUCLID)
	LDLo	71 mg/kg (human) (RTECS)
Inhalative	LC50	5.5 mg/l/4h (rat) (RTECS)

- **Primary irritant effect:**
- **on the skin:** Based on available data, the classification criteria are not met.
- **on the eye:** Based on available data, the classification criteria are not met.

· Information on components:		
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CAS: 7632-00-0 sodium nitrite		
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Irritation of skin	OECD 404	(rabbit: no irritation)
Irritation of eyes	OECD 405	(rabbit: irritation)

- **Sensitization:** Based on available data, the classification criteria are not met.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
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None of the ingredients is listed.		
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· NTP (National Toxicology Program)		
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None of the ingredients is listed.		
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· OSHA-Ca (Occupational Safety & Health Administration)		
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None of the ingredients is listed.		
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- **Other information:** see section 8 / 15

- **Synergistic Products:** None

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):** The following statements refer to the mixture:
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

· Information on components:		
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CAS 7632-00-0: Did not show carcinogenic effects in animal experiments (IUCLID).		
CAS 7632-00-0: No impairment of reproductive performance in animal experiments (IUCLID).		

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- **Additional toxicological information:**

Nitrites in general: Possibility of formation of nitrosamines with secondary or tertiary amines.
Nitrosamines have shown themselves to be carcinogenic in animal experiments.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

CAS: 7632-00-0 sodium nitrite

EC50 12.5–100 mg/l/48h (Daphnia magna) (OECD 202)

EC50 >100 mg/l/72 h (Desmodesmus subspicatus) (OECD 201)

LC50 0.09–0.13 mg/l/96h (rainbow trout)
(ECOTOX)

- **Bacterial toxicity:**

CAS: 7632-00-0 sodium nitrite

EC50 510 mg/l /3h (activated sludge) (OECD 209)

- **Persistence and degradability .**

- **Other information:**

Mixture of inorganic compounds.

Methods for the determination of biodegradability are not applicable to inorganic substances.

- **Bioaccumulative potential**

CAS: 7632-00-0 sodium nitrite

log Pow -3.7 (.) (OECD 107)
(Merck)

- **Mobility in soil** No further relevant information available.

- **Other adverse effects** Avoid transfer into the environment.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**

- **DOT**

none

- **IMDG, IATA**

UN3077

- **UN proper shipping name**

- **DOT**

none

- **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (SODIUM NITRITE), MARINE POLLUTANT

- **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (SODIUM NITRITE)

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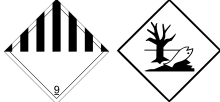
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<ul style="list-style-type: none"> · Transport hazard class(es) 	
<ul style="list-style-type: none"> · DOT · Class 	none
<ul style="list-style-type: none"> · IMDG, IATA 	
	
<ul style="list-style-type: none"> · Class · Label 	9 Miscellaneous dangerous substances and articles 9
<ul style="list-style-type: none"> · Packing group · DOT · IMDG, IATA 	
	none III
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (IATA): 	
	Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category · Stowage Code 	
	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F Nitrites and their mixtures A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	
	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
	Not dangerous according to the above specifications.
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	
	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

15 Regulatory information

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

· Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 7632-00-0 | sodium nitrite

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

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· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· New Jersey Right-to-Know List:	
CAS: 7632-00-0	sodium nitrite
· New Jersey Special Hazardous Substance List:	
None of the ingredients is listed.	
· Pennsylvania Right-to-Know List:	
CAS: 7632-00-0	sodium nitrite
· Pennsylvania Special Hazardous Substance List:	
CAS: 7632-00-0	sodium nitrite
	E
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· Information about limitation of use: Not required.	
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

· **Date of preparation / last revision** 07/28/2020 / 1

· Abbreviations and acronyms:

OECD: Organisation for Economic Co-operation and Development
STOT: specific target organ toxicity
SE: single exposure
RE: repeated exposure
EC50: half maximal effective concentration
IC50: half maximal inhibitory concentration
NOEL or NOEC: No Observed Effect Level or Concentration
ACGIH[®] - American Conference of Governmental Industrial Hygienists
•A1 - Confirmed human carcinogen
•A2 - Suspected human carcinogen
•A3 - Confirmed animal carcinogen with unknown relevance to humans
•A4 - Not classifiable as a human carcinogen
•A5 - Not suspected as a human carcinogen
IARC - International Agency for Research on Cancer
•Group 1 - Carcinogenic to humans
•Group 2A - Probably carcinogenic to humans
•Group 2B - Possibly carcinogenic to humans
•Group 3 - Not classifiable as to carcinogenicity to humans
•Group 4 - Probably not carcinogenic to humans
NTP - National Toxicology Program, U.S. Department of Health and Human Services
•Group K - Known to be Human Carcinogens
•Group R - Reasonably Anticipated to be Human Carcinogens
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Ox. Sol. 3: Oxidizing solids – Category 3
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

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- **Sources** Data arise from safety data sheets, reference works and literature.
 - * **Data compared to the previous version altered.**
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