

Revision: 1.1

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## Section 1. Identification

### 1.1 Product Identifier 0614

Product Name SODIUM NITRITE tech.  
CAS Number 7632-00-0  
REACH Registration No 01-2119471836-27-XXXX  
Molecular Formula  $\text{NaNO}_2$  =69.00

### 1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

### 1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOM

Phone 44 0113 2362811  
Fax +44(0)113 2362703  
Email safety@viclabs.co.uk  
Website www.viclabs.co.uk

### 1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

#### Classification according to regulation 1272/2008/EC

Oxidising solid, category 3 H272: May intensify fire; oxidizer.  
Acute toxicity, category 3 (oral) H301: Toxic if swallowed.  
Serious eye damage/irritation, category 2 H319: Causes serious eye irritation.  
Hazard to aquatic environment, category 1 H400: Very toxic to aquatic life.

### 2.2 Label elements

#### Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements May intensify fire; oxidizer. Toxic if swallowed. Causes serious eye irritation. Very toxic to aquatic life.

Precautionary Statements Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium nitrite	7632-00-0	231-555-9	01-2119471836-27-XXXX	>97%	Ox. Sol. 3, Acute Tox. 3 (O), Eye Irrit. 2, Aquatic Acute 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water.

Inhalation Remove from exposure. If material has reacted with an acid to form, nitrous fumes, Obtain immediate medical attention even if patient is not complaining of discomfort.

Ingestion If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY.

Personal protection for first aiders Wear protective gloves / eye protection.

### 4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

### 4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media Water spray.

Unsuitable Media Nothing specified.

### 5.2 Special hazards arising from the substance or mixture

Hazards May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. Mixtures with finely divided combustible materials can react explosively.

### 5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

## Section 6. Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. If contact with acid is possible, use full protective clothing and breathing apparatus.

### 6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

### 6.3 Methods and material for containment and cleaning up

Major Spillage                      Shovel/sweep up into container for removal Wash area down with copious amounts of water.  
Minor Spillage                      Wash area down with copious amounts of water.

#### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

### 7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Sodium nitrite	7632-00-0	>97%	-	-

Exposure data source(s)      No occupational exposure data currently available.

### 8.2 Exposure controls

Respiratory Protection      If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.  
Hand Protection              Wear gloves.  
Eye Protection                Use tightly fitting chemical splash proof glasses or goggles.  
Skin Protection                Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.  
Special Hazards                No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance                      White or pale yellow tinted crystals or crystalline powder.  
Odour                                No specific odour.  
pH                                      9 @ 20°C solution.  
Boiling Point                      320°C  
Melting Point                      271°C  
Flash Point                        Not applicable  
Upper Flammable Limit        Not applicable  
Lower Flammable Limit        Not applicable  
Auto Ignition                      Not applicable  
Explosive Properties            No.  
Oxidising Properties            A strong oxidising agent.  
Vapour Pressure                   Not applicable  
Relative Density                   2.1700  
Water Solubility                   67%

### 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Avoid contact with acids or combustible materials.
10.5	Incompatible Materials	Acids : reacts to form poisonous nitrous fumes. Combustible materials. Ammonium salts, phthalic anhydride, thiosulphates, or urea. Cyanides.
10.6	Hazardous Decomposition Products	Not flammable but will assist a fire, producing irritant and toxic fumes of oxides of nitrogen.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye irritation.
Skin	The solid and solutions may be irritating to the skin.
LD50 Skin	Not available
Ingestion	Toxic if swallowed. Repeated small doses cause a fall in blood pressure, rapid pulse, headache and visual disturbances. Larger doses cause nausea, vomiting, cyanosis, collapse and coma.
LD50 Oral	180mg/kg Rat
Inhalation	Presents no significant health hazard by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	A mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1	Toxicity	Low levels are readily bio-degraded in the environment. Higher levels are toxic to marine and plant life. LC50, 24hr, Rainbow trout 0.56-17.4 mg/l; EC50 24hr, Daphnia magna 87-144 mg/l. Repeated exposure of up to 0.05 mg/l produces no adverse effect on fish growth.
	LC50 Algal	Not available
	LC50 Crustacea	87mg/kg Daphnia (24 hours)
	LC50 Fish	0.56mg/kg Rainbow trout (24 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dilute with water and add sodium bicarbonate or soda ash. Add an equal volume of calcium hypochlorite solution and stir. Stand for 1 hour then neutralise with either hydrochloric acid or sodium hydroxide solution. Wash to drain with excess of water. Larger quantities should be sent for disposal by an authorised waste disposer.
Contaminated Packaging	Wash out containers with water.

## Section 14. Transport Information

14.1 UN Number	1500
14.2 Proper Shipping Name	Sodium nitrite
14.3 Transport classes	
UN classification	5.1
Subsidiary hazard(s)	6.1
Transport category	3
ADR Hazard ID	56
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Oxidising solid, category 3; Acute toxicity, category 3 (oral); Serious eye damage/irritation, category 2; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



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

Precautionary Statements P210, P220, P221, P280, P301+P310, P305+P351+P338  
Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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