

## Section 1. Identification

### 1.1 Product Identifier 1799

Product Name	SODIUM NITROPRUSSIDE 2H <sub>2</sub> O pure
CAS Number	13755-38-9
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	Na <sub>2</sub> [Fe(CN) <sub>5</sub> NO] · 2H <sub>2</sub> O =297.95

### 1.2 Relevent 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

Acute toxicity, category 3 (oral)

H301: Toxic if swallowed.

### 2.2 Label elements

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

Signal word Danger

Hazard Pictograms



Hazard Statements Toxic if swallowed.

Precautionary Statements    Wear protective gloves / protective clothing / eye protection / face protection. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium Nitroprusside	13755-38-9	238-373-9		>98%	Acute Tox. 3 (O)

## 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. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Ingestion	Wash out the patients mouth thoroughly with water. 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	Consider what other flammable materials are present and act accordingly. Water spray, alcohol resistant foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

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

Hazards	May evolve toxic fumes if involved in a fire. Hydrogen cyanide, nitrogen oxides. Heavy metal oxides, Sodium Oxides
---------	--

### 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. Keep up wind. Avoid exposure to toxic vapours and fumes. Ensure adequate ventilation. Avoid creating dust. Avoid breathing dust. Use approved personal protective equipment.
---------------------	---

### 6.2 Environmental precautions

Environmental	Keep material out of sewers, storm drains, surface waters and soil.
---------------	---

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

Major Spillage	Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.
----------------	--

Minor Spillage

Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. 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 below the recommended limits.

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

Keep container tightly closed. Well ventilated, cool, dry storage .

### 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 Nitroprusside	13755-38-9	>98%	-	1.0 mg/m-3	-	2.0 mg/m-3

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

### 8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain dust concentrations below exposure limits. 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	Ruby red crystals.
Odour	No specific odour.
pH	5 (5% solution)
Boiling Point	Not available
Melting Point	Not applicable
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	1.7200
Water Solubility	400 g/L Completely soluble in water.

### 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	Hygroscopic; protect from moisture. Avoid exposure to heat.
10.5	Incompatible Materials	Strong oxidising agents. Mixtures with nitrites can explode on heating. Strong Acids.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire. Hydrogen cyanide, nitrogen oxides. Heavy metal oxides, Sodium Oxides

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Presents no significant health hazard to the eyes.
Skin	May be absorbed through the skin. Avoid direct skin contact.
LD50 Skin	Not available
Ingestion	Large amounts taken internally form cyanides as metabolites with potentially fatal consequences.
LD50 Oral	99mg/kg Rat
Inhalation	Inhalation of the dust can result in symptoms similar to those due to ingestion.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1	Toxicity	Cyanides are highly toxic to aquatic life.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
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	Do not dispose of as domestic waste. Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Contaminated Packaging	Dispose of in the same way as the unused product.

## Section 14. Transport Information

<b>14.1 UN Number</b>	3288
<b>14.2 Proper Shipping Name</b>	Toxic solid, inorganic, N.O.S. (Sodium Nitroferricyanide (III) Dihydrate)
<b>14.3 Transport classes</b>	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	E
<b>14.4 Packing Group</b>	III
<b>14.5 Environment hazards</b>	See section 12.
<b>14.6 Special precautions for user</b>	No special precautions required.
<b>14.7 Transport in bulk</b>	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 Acute toxicity, category 3 (oral)

Signal word Danger

Hazard Pictograms



Hazard Statements H301  
Toxic if swallowed.

Precautionary Statements P280, P270, P301+P310, P330  
Wear protective gloves / protective clothing / eye protection / face protection. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

### 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.

Revision number: 2.1 (Supercedes revision 2.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 12 August 2023

Copyright: 2023 Vickers Laboratories Ltd