

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 SDS Reference Number: 05956 Issue date: 4/9/2014 Revision date: 9/26/2024 Supersedes version of: 4/9/2015 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Trade name EC-No. CAS-No. Product code Type of product Formula Chemical structure Substance
 SODIUM NITROPRUSSIDE EXTRA PURE
 238-373-9
 13755-38-9
 05956
 Inorganic compound
 C5FeN6Na2O · 2H2O
 2Na*
 Nec, Nece
 Ferce
 2Na*

Synonyms

: Sodium nitroferricyanide (III) Dihydrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Use of the substance/mixture

: Laboratory chemicals, Manufacture of substances

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663, F +91 22 6663 6699 info@lobachemie.com, www.lobachemie.com

1.4. Emergency telephone number

Emergency number

: + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 3 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Toxic if swallowed.

2.2. Label elements

Labelling according to Regulation (EC) No. 127	′ <mark>2/200</mark> 8	[CLP]
Hazard pictograms (CLP)	:	

Signal word (CLP) Hazard statements (CLP) Precautionary statements (CLP)

: Danger : H301 - Toxic if swallowed.

GHS06

H301

: P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on	ingredients	
3.1. Substances		
Substance type :	Mono-constituent	
Name	Product identifier	%
SODIUM NITROPRUSSIDE	CAS-No.: 13755-38-9 EC-No.: 238-373-9	100

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER/doctor. Specific treatment (see supplemental first aid instruction on this label). Call a physician immediately.
First-aid measures for first aider	: First aid workers will be equipped with suitable personal protective equipment.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact Symptoms/effects after ingestion	 None under normal conditions. Dust from this product may cause eye irritation. Toxic if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	 dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray. Dry powder. Foam. Do not use a heavy water stream.
5.2. Special hazards arising from the subst	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

 Protection during firefighting
 : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release	emeasures	
6.1. Personal precautions, protective equipment and emergency procedures		
General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.	
For non-emergency personnel		
Protective equipment	: Wear recommended personal protective equipment.	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.	
For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Stop release. Evacuate unnecessary personnel.	
6.2 Environmental precautions		

Avoid release to the environment.

6.3. Methods and material for contain	ment and cleaning up
For containment	: Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up	: Mechanically recover the product. Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Always wash hands after handling the product.
7.2. Conditions for safe storage, including	any incompatibilities
Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture. Store locked up.
Packaging materials	: Store always product in container of same material as original container.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment symbol(s):



Eye and face protection

Eye protection: Chemical goggles or safety glasses

Skin protection

Skin and body protection: Wear a mask

Hand protection: Protective gloves

Respiratory protection

Respiratory protection: Wear appropriate mask

Environmental exposure controls

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Ruby red.
Appearance	:	Crystals.
Molecular mass	:	297.95 g/mol
Odour	:	Odourless.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not applicable
Boiling point	:	Not available
Flammability	:	Not available
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	> 160 °C
рН	:	5 at 20 °C
pH solution concentration	:	5 %
Viscosity, kinematic	:	Not applicable
Solubility	:	Water: 400 g/l (20°C) - Soluble in water
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1.72 g/cm³ at 20 °C
Relative density	:	Not available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	ation
11.1. Information on hazard classes as	defined in Regulation (EC) No 1272/2008
Acute toxicity (oral)	: Toxic if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
	pH: 5 at 20 °C
Serious eye damage/irritation	: Not classified
	pH: 5 at 20 °C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
SODIUM NITROPRUSSIDE EXTRA PUI	RE (13755-38-9)
Viscosity, kinematic	Not applicable
11.2. Information on other hazards	
Other information	
Potential adverse human health effects and symptoms	: Toxic if swallowed.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Hazardous to the aquatic environment, short–term	 The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified
(acute) Hazardous to the aquatic environment, long–term (chronic)	: Not classified
12.2. Persistence and degradability	
SODIUM NITROPRUSSIDE EXTRA PURE (13755-38-9)
Persistence and degradability	Rapidly degradable
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	E Construction of the second
No additional information available	
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations 13.1. Waste treatment methods Regional waste regulation : Disposal must be done according to official regulations. Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Sewage disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance

	with local, regional, national and/or international regulation. Disposal must be done
	according to official regulations.
Additional information	: Do not re-use empty containers.
Ecological information	: Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA)	: UN 3288 : UN 3288 : UN 3288
UN-No. (ADN) UN-No. (RID)	: UN 3288 : UN 3288
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: TOXIC SOLID, INORGANIC, N.O.S.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

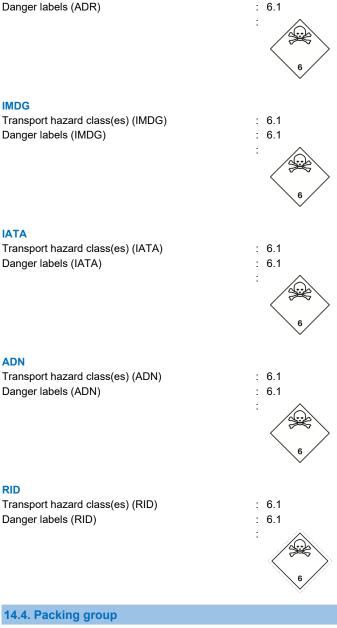
Proper Shipping Name (IMDG)	: TOXIC SOLID, INORGANIC, N.O.S.
Proper Shipping Name (IATA)	: Toxic solid, inorganic, n.o.s.
Proper Shipping Name (ADN)	: TOXIC SOLID, INORGANIC, N.O.S.
Proper Shipping Name (RID)	: TOXIC SOLID, INORGANIC, N.O.S.
Transport document description (ADR)	: UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (SODIUM NITROPRUSSIDE DIHYDRATE),
	6.1, III, (E)
Transport document description (IMDG)	: UN 3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, III
Transport document description (IATA)	: UN 3288 Toxic solid, inorganic, n.o.s. (SODIUM NITROPRUSSIDE DIHYDRATE), 6.1, III
Transport document description (ADN)	: UN 3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, III
Transport document description (RID)	: UN 3288 TOXIC SOLID, INORGANIC, N.O.S., 6.1, III

: 6.1

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) Danger labels (ADR)



Packing group (ADR)	: 111
Packing group (IMDG)	: 111
Packing group (IATA)	: 111
Packing group (ADN)	: 111
Packing group (RID)	: 111

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.5. Environmental hazards	
Dangerous for the environment Marine pollutant	: No : No
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	: T5
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR) Special packing provisions (ADR)	: P002, IBC08, LP02, R001 : B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	
	: TP33
(ADR)	
Tank code (ADR)	: SGAH, L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Bulk (ADR)	: VC1, VC2, AP7
Special provisions for carriage - Loading, unloading	: CV13, CV28
and handling (ADR) Special provisions for carriage - Operation (ADR)	: S9
Hazard identification number (Kemler No.)	: 60
Orange plates	
orango platoo	60
	3288
Tunnel restriction code (ADR)	: E
EAC code	: 2X
Transferration and because	
Transport by sea	: 223, 274
Special provisions (IMDG) Limited quantities (IMDG)	223, 274 : 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation. : 151
MFAG-No	. 101
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA) CAO max net quantity (IATA)	: 677 : 200kg
Special provisions (IATA)	: A3, A5
ERG code (IATA)	: 6L
Inland waterway transport	. TE
Classification code (ADN)	: T5

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Special provisions (ADN)	:	274, 802
Limited quantities (ADN)	:	5 kg
Excepted quantities (ADN)	:	E1
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0
Rail transport		
Classification code (RID)	:	Т5
Special provisions (RID)	:	274
Limited quantities (RID)	:	5kg
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P002, IBC08, LP02, R001
Special packing provisions (RID)	:	B3
Mixed packing provisions (RID)	:	MP10
Portable tank and bulk container instructions (RID)	:	T1
Portable tank and bulk container special provisions	:	TP33
(RID)		
Tank codes for RID tanks (RID)	:	SGAH, L4BH
Special provisions for RID tanks (RID)	:	TU15
Transport category (RID)	:	2
Special provisions for carriage – Bulk (RID)	:	VC1, VC2, AP7
Special provisions for carriage - Loading, unloading	:	CW13, CW28, CW31
and handling (RID)		
Colis express (express parcels) (RID)	:	CE11
Hazard identification number (RID)	:	60

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

National regulations

Germany

Water hazard class (WGK) Chemicals Prohibition Ordinance (ChemVerbotsV)	 WGK 3, Highly hazardous to water (Classification according to AwSV). This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: The substance is not listed
SZW-lijst van reprotoxische stoffen –	: The substance is not listed
Vruchtbaarheid	The substance is not listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: The substance is not listed
Denmark	
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
H301	Toxic if swallowed.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.