Section 1 : Chemical Product and Company Identification		
1.1	**Product identifiers**	
	Product Name:	Sodium Nitrate
1.2	**Other means of identification**	
	Other names	Nitric Acid Sodium Salt, Sodium Nitrate (various grades), Sodium nitrate, crystals Nitratine, Soda niter, Chile saltpetre, Cubic nitre.
	CAS No.	7631-99-4
	REACH No.	01-2119488221-41-0025
	EC number	231-554-3
	Index no.	
1.3	**Recommended use of the chemical and restrictions on use**	
	Identified uses	An auxiliary for many sectors of industry, e.g. build industrial chemicals, glass, metal, petrochemical etc.
	Uses advised against	Food additives
1.4	**Supplier's details**	
	Company	Deepak Nitrite Ltd. Aaditya-I, Chhani Road, Vadodara - 390 024, India Manufacturing facilities at : Vadodara, Dahej, Roha, Taloja & Hyderabad. Web : www.godeepak.com E.mail : customer.dnl@godeepak.com
1.5	**Emergency phone number**	
		In case of Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Within USA & Canada: +1-800-424-9300, Outside USA & Canada: +1 703-527-3887 Contact no. : +91-9904406400

	Section 2 : Hazards Identification	
2.1	**Classification of the substance or mixture**	
	(Classification according to Regulation (EC) No 1272/2008) Oxidizing solid, Category 3, Serious Eye Irritation, Category 2, Health hazard: 1, Flammability: 0, Physical hazards: 1, Harmful solid, Category 3, **EC classification** **(Classification according to Directive 67/548/EEC)** T; R8 Contact with combustible material may cause fire. R22. Harmful if swallow. R36 Irritating to eye. WGK 1 : Slightly water endangering	
2.2	**Label elements including precautionary statements**	
	Pictograms	
	Signal word	Warning.

	Hazard statement(s)	H272: May intensify fire; oxidizer. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H302: Harmful if swallowed
	Precautionary statement(s)	
	Prevention	P220 Keep/Store away from clothing/ combustible materials. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection.
	Response	P301 + P310 . IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician. P305+P351+P338 . . If in eye: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists, get medical advice/ attention.
	Storage	P405 Store locked up. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
2.3	**Other hazards which do not result in classification**	
	There is no additional information.	

	Section 3 : Composition and Information on ingredients			
3.1	**Substances**			
	Molecular formula		$NaNO_3$	
	Molecular weight		84.99 g/mol	
	Component	CAS Number	EC number	Concentration
	Sodium Nitrate	7631-99-4	231-554-3	> 99%

	Section 4 : First Aid measures	
4.1	**Description of necessary first-aid measures**	
	After inhalation	If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.
	After skin contact	Wash off with plenty of water. Remove contaminated clothing.
	After eye contact	Rinse out with plenty of water with eyelid held wide open. In case of eye irritation, consult ophthalmologist.
	If swallowed	Give water to drink (two glasses at the most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 to 40 gram in 10% slurry) and consult a doctor as quickly as possible.
	Note to Physician	Absorption of this product into the body may cause cyanosis. Moderate degrees of cyanosis need to be treated by supportive measures such as bed rest and oxygen inhalation. Through cleansing of the entire contaminated area of the body is of utmost importance. If cyanosis is severe, intravenous injection of methylene blue, 1 mg/kg of body weight may be of value. Antidote: None reported.
4.2	**Most important symptoms / effects, acute and delayed**	
	After eye contact: Irritation. After ingestion: Malaise, Nausea, Gastrointestinal complaints.	
4.3	**Indication of immediate medical attention and special treatment needed**	
	None	

	Section 5 : Firefighting measures
5.1	**Extinguishing Media**
	Suitable extinguishing media
	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool fire-exposed containers.
	Unsuitable extinguishing media
	None
5.2	**Specific hazards arising from the chemical**
	Nitrogen oxides (NOx), Sodium oxides
5.3	**Special protective actions for fire-fighters**
	Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

	Section 6 : Accidental Release Measures
6.1	**Personal precautions, protective equipment and emergency procedures**
	Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas. *For personal protection see section 8*.
6.2	**Environmental precautions**
	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3	**Methods and materials for containment and cleaning up**
	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. *Store and dispose of according to local /national regulations (see section 13).*
6.4	**Reference to other sections**
	Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

	Section 7 : Handling and Storage
7.1	**Precautions for safe handling**
	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from combustible material. *For precautions see section 2.2.*
7.2	**Conditions for safe storage, including any incompatibilities**
	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Do not store near combustible materials. Hygroscopic.

	Section 8 : Exposure Control / Personal Protection		
8.1	**Control parameters / Occupational Exposure limit values**		
	Endpoint	Threshold level	Protection goal, route of exposure
	DNEL	20.8 mg/kg	Human, Dermal
	DNEL	36.7 mg/m^3	Human, inhalator
8.2	**Exposure controls / Appropriate engineering controls**		
	Local exhaust ventilation to keep low dust environment		
8.3	**Individual protection measures, such as Personal Protective Equipment (PPE)**		
	Skin Protection	Choose body protection according to the amount and concentration of the dangerous substance at the workplace.	
	Hand Protection	The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.	

	Eye/Face Protection:	Use safety googles with side protection. For Face and eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU) to be used.
	Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
	Hygiene measures	Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Immediately change contaminated clothing. Apply skin-protective barrier cream. Use adequate ventilation to keep airborne concentrations low.

	Section 9 : Physical and Chemical Properties	
9.1	**Information on basic physical and chemical properties**	
a)	Appearance	Form Solid
b)	Colour	White
c)	Odour	Odourless
d)	pH	5.5 -8 (5 % in H_2O, 25°C)
e)	Boiling Point/range	380^0 C @ 760 mm Hg
f)	Melting point	308° C
g)	Flash Point	No data available
h)	Thermal decomposition	>600° C
i)	Lower explosion limit	No data available
j)	Upper explosion limit	No data available
k)	Vapor pressure	9.9E-17 hPa @ 25°C
l)	Relative vapor density	No data available
m)	Bulk density	1200 kg/m^3
n)	Solubility/qualitative	Easily soluble in cold water, hot water.
o)	Water solubility	817g/L water at 20°C
p)	Partition coefficient (n- Octanol / water)	Log Pow: -3.7 Method: OECD test guideline 107 No bioaccumulation is to be expected (log Pow <1)
9.2	**Other safety information**	
a)	There is no additional information	

	Section 10 : Stability and reactivity
10.1	**Reactivity**
	Oxidising property
10.2	**Chemical Stability:**
	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
10.3	**Possibility of hazardous reactions**
	Violent reaction with combustible material. Strong reducing agents, strong acids, amines, chlorates, finely powdered metals, hydrazine, liquid ammonia, amides (e.g. butyramide, diethyltoluamide, dimethyl formamide), cyanides, permanganates, hypophosphite, sulphites, tannic acid, carbon, antipyrine, sodium thiosulfate, ammonium salts, cellulose, acetanilide, iodides, mercury salts.
10.4	**Conditions to Avoid:**
	High temperatures, incompatible materials, exposure to air, combustible materials, organic material, exposure to moist air or water.
10.5	**Incompatible Materials**
	Strong acids, Strong reducing agents, Powdered metals, Organic materials, Alkali metals, Alkaline earth metals, Cyanides, thiocyanates

10.6	**Hazardous Decomposition Products:**
	Hazardous decomposition products formed under fire conditions. - Sodium oxides, nitrogen oxides (NOx)

	Section 11 : Toxicological Information:	
11.1	**Information on toxicological effects**	
a)	**Acute toxicity**	
	Oral	LD50 Oral rat 1267 mg/kg LD50 Oral Rabbit 2680 mg/kg ORL-MAN LD50 114 mg/kg ORL-CHD LD50 22.5 mg/kg
	Inhalation:	LD50 rat Dose : 5.5 mg/l, 4 h (RTECS)
	Dermal:	N/A
b)	**Skin corrosion/irritation**	
	Causes irritation	
c)	**Serious eye damage/eye irritation**	
	Causes irritation	
d)	**Respiratory or skin sensitization**	
	No data available.	
e)	**Germ cell mutagenicity**	
	No data available.	
f)	**Carcinogenicity**	
	Not listed by ACGIH, IARC, NIOSH, NTP or OSHA	
g)	**Reproductive toxicity**	
	No data available	
h)	**Specific target organ toxicity (STOT) - single exposure**	
	No data available	
i)	**Specific target organ toxicity (STOT) - repeated exposure**	
	Liver, heart, blood.	
j)	**Aspiration hazard**	
	No data available	
11.2	**Additional Information**	
	RTECS: WC5600000 Absorption into the body leads to the formation of methemoglobinemia.	

	Section 12 : Ecological Information
12.1	**Toxicity**
	• LC_{50} 96 h fish(mg,l^{-1}) : 11060 ppm(stickleback) • BOD 0.1 mg/kg • WGK 1 slightly water endangering
12.2	**Persistence and Degradability**
	The methods for determining the biological degradability are not applicable to inorganic substances. Partition coefficient: n-octanol/water: Log Pow: -3.7 Method: OECD Test guideline 107 No bioaccumulation is to be expected (log Pow <1).
12.3	**Bio accumulative potential**
	No data available
12.4	**Mobility in soil**
	No data available
12.5	**Other adverse effects**
	No data available
12.5	**Results of PBT and vPvB assessment**
	No data available
12.6	**Other adverse effects**
	Very toxic to aquatic organisms.

	Section 13 : Disposal considerations
13.1	**Disposal Methods**
a)	**Product**
	Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.
b)	**Contaminated packaging**
	Dispose of as unused product.

	Section 14 : Transport information		
14.1	**UN number**		
	ADR/RID: 1498	IMDG: 1498	IATA: 1498
14.2	**Proper Shipping Name**		
	ADR/RID: Sodium Nitrate	IMDG: Sodium Nitrate	IATA: Sodium Nitrate
14.3	**Transport hazard class(es)**		
	ADR/RID: 5.1	IMDG: 5.1	IATA: 5.1
14.4	**Packaging group**		
	ADR/RID: III	IMDG: III	IATA: III
14.5	**Environmental hazards**		
	ADR/RID: NO	IMDG: NO	IATA: NO
14.6	**Special precautions for user**		
	Provisions for dangerous goods (ADR) should be complied within the premises.		
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code**		
	No data available		

	Section 15 : Regulatory information	
15.1	**Safety, health and environmental regulations specific for the product in question**	
	Listing of substance for applicability of various regulations / National inventories: Safety phrase(s) S22 Do not breath dust. S24 Avoid contact with skin. S41 In case of fire and/or explosion do not breathe fumes.	
	Regulations / National inventories	**Status**
	AICS Australian Inventory of Chemical Substances	Listed
	CICR Chemical Inventory and Control Regulation	Listed
	CSCL-ENCS List of Existing and New Chemical Substances	Listed
	DSL Domestic Substances List	Listed
	ECSI EC Substance Inventory (EINECS, ELINCS, NLP	Listed
	IECSC Inventory of Existing Chemical Substances Produced or Imported in China	Listed
	KECI Korea Existing Chemical Inventory	Listed
	NZIoC New Zeland Inventory of Chemicals	Listed
	PICCS Philippine Inventory of Chemicals and Chemical Substances.	Listed
	TCSI Taiwan Chemical Substance Inventory	Listed
	INSQ National Inventory of Chemical Substances.	Listed
	CICR Chemical Inventory and Control Requlation.	Listed
	TSCA Toxic Substance Control ACt	Listed
	Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)	Not listed
	Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)	Not listed
	Regulation 850/2004/EC on persistent organic pollutants (POP)	Not listed
15.2	**Chemical safety assessment**	
	Product a chemical safety assessment was not carried out for this product.	

	Section 16 : Other information
16.1	**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* • *CAS: Chemical Abstracts Service* • *CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures* • *CMR : Carcinogenic, Mutagenic or toxic for Reproduction* • *DGR : Dangerous Goods Regulations (see IATA/DGR)* • *EC50: Effective Concentration 50%* • *EINECS : European Inventory of Existing Commercial Chemical Substances* • *GHS : Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations* • *IATA : International Air Transport Association* • *IATA/DGR : Dangerous Goods Regulations (DGR) for the air transport (IATA)* • *ICAO International Civil Aviation Organization* • *IMDG : International Maritime Dangerous Goods Code* • *Index number : Identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008* • *LC50: Lethal Concentration 50%* • *LD50: Lethal Dose 50%* • *MARPOL : Marine Pollutant as per International Convention for the Prevention of Pollution from Ships* • *REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals* • *RID: Regulation concerning the International Carriage of Dangerous Goods by Rail* • *STEL: Short term exposure limit* • *VOC : Volatile Organic Compounds* • *vPvB : very Persistent and very Bio accumulative*
16.2	**Key literature references and sources for data**
	a) Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU *b) Regulation (EC) No. 1272/2008 (CLP, EU GHS)* *c) Dangerous Goods Regulations (DGR) for the air transport (IATA)* d) *International Maritime Dangerous Goods Code (IMDG)*
	Prepared by : — *Deepak Nitrite Ltd. E.Mail : sbraval@godeepak.com*
	Revision Date — *01-June-2020*
	Revision Summary — *This safety datasheet has been prepared aaccording to the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS), and complies with the requirements of Regulation (EC) No. 1907/2006.*
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End of SDS