Chemical Safety Data Sheet

SECTION 1 IDENTIFICATION

Product Name: Sodium nitrite

Synonyms: /

Recommended Use of the Chemical and Restrictions on Use: /

Supplier's details:Shandong Guowei Chemical Industry Co., Ltd.

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SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Oxidizing Solids Category 3.

Acute Toxicity - Oral Category 3.

Hazardous to the Aquatic Environment - Acute Hazard Category 1.

GHS Label Elements, Including Precautionary Statements:

Signal Word: DANGER

Hazard Statement(s): May intensify fire; Oxidizer; Toxic if swallowed; Very toxic to aquatic life.

Precautionary Statement(s):

Prevention： Keep away from heat; Keep/Store away from clothing / combustible material; Clean all objects contaminated by this material, use water; Take any precaution to avoid mixing with combustibles; Do not eat, drink or smoke when using this product; Avoid release to the environment; Wear protective gloves/protective clothing/eye protection/face protection.

Response： If swallowed, Rinse mouth; IMMEDIATELY contact Doctor or Poisons Information Centre; Collect spillage; In case of fire: Use water to extinguish.

Storage： Store locked up.

Disposal： This material and its container must be disposed of as hazardous waste.

Other hazards which do not result in classification: /

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	**CAS No.**
Sodium nitrite	7632-00-0

Grade	**Purity (Sodium Nitrite)**
First Grade	≥ 98.6%
Superior Grade	≥ 99.0%

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The toxicity of nitrates and nitrites result from their vasodilating properties and their propensity to form methaemoglobin. Most produce a peak effect within 30 minutes.

Indication of immediate medical attention and special treatment needed： Hypotension should respond to Trendelenburg's position and intravenous fluids; otherwise dopamine may be needed. Naloxone, glucose and thiamine should be given if a multiple ingestion is suspected. Decontaminate using Ipecac Syrup for alert patients or lavage for obtunded patients who present within 2-4 hours of ingestion.

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing media: USE FLOODING QUANTITIES OF WATER. DO NOT use dry chemical, CO_2, foam or halogenated-type extinguishers.

Special hazards arising from the chemical: Will not burn but increases intensity of fire. Heating may cause expansion or decomposition leading to violent rupture of containers. Heat affected containers remain hazardous. Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition. May emit irritating, poisonous or corrosive fumes.

Special protective actions for fire-fighters: Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water course. Fight fire from a safe distance, with adequate cover. Extinguishers should be used only by trained personnel. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Clean up all spills immediately. No smoking, naked lights, ignition sources. Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result. Avoid breathing dust or vapours and all contact with skin and eyes.Control personal contact with the substance, by using protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up: MINOR SPILLS: Contain and absorb spill with dry sand, earth, inert material or vermiculite. DO NOT use sawdust as fire may result. Scoop up solid residues and seal in labelled drums for disposal. Neutralise/decontaminate area. MAJOR SPILLS: Contain spill with sand, earth or other clean, inert materials. NEVER use organic absorbents such as sawdust, paper, cloth; as fire may result. Avoid any contamination by organic matter. Use spark-free and explosion-proof equipment. Collect any recoverable product into labelled containers for possible recycling. DO NOT mix fresh with recovered material. Collect residues and seal in labelled drums for disposal. Wash area and

prevent runoff into drains.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid personal contact and inhalation of dust, mist or vapours. Provide adequate ventilation. Always wear protective equipment and wash off any spillage from clothing. Keep material away from light, heat, flammables or combustibles. Keep cool, dry and away from incompatible materials. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: Store in original containers. Keep containers securely sealed as supplied. Store in a cool, well-ventilated area. Keep dry. Store under cover and away from sunlight. Store away from flammable or combustible materials, debris and waste. Contact may cause fire or violent reaction. Store away from incompatible materials and foodstuff containers. DO NOT stack on wooden floors or pallets. Protect containers from physical damage. Check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

Appropriate engineering controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear an approved respirator. Correct fit is essential to obtain adequate protection an approved self-contained breathing apparatus (SCBA) may be required in some situations.

Personal protective equipment

Eye/face protection: Safety glasses with side shields. Chemical goggles.

Skin protection: Wear chemical protective gloves, eg. PVC. Wear safety footwear or safety gumboots, eg. Rubber. Impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Other protection: /

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White powder.
Odour	/
Odour Threshold	/
pH (1% solution)	9.0
Melting point/freezing point	271 ºC
Initial boiling point and boiling range	320 ºC
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	/
Vapour density	/
Relative density	2.17(water=1)
Water solubility	Miscible
Partition coefficient: noctanol/water	/

Autoignition temperature	/
Decomposition temperature	/
Viscosity	/

SECTION 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: Product is considered stable.

Possibility of hazardous reactions: Hazardous polymerisation will not occur.

Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials: Reducing agents.

Hazardous decomposition products: nitrogen oxides (NOx), metal oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute health effects

Inhalation: Inhalation of dusts, generated by the material, during the course of normal handling, may produce severely toxic effects; these may be fatal.

Ingestion: Toxic effects may result from the accidental ingestion of the material.

Skin: Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact.

Eyes: Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals. Repeated or prolonged eye contact may cause inflammation (similar to windburn) characterised by a temporary redness of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.

Chronic health effects: There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Animal testing to see whether nitrites caused cancer proved inconclusive. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis.

Numerical measures of toxicity(such as acute toxicity estimates): Oral (rat) LD50:180 mg/kg, Inhalation (rat) LC50:5.5 mg/m³/4h.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Very toxic to aquatic organisms.

Persistence and degradability: Water/Soil: LOW.

Bioaccumulative potential: LOW.

Mobility in soil: HIGH.

Other adverse effects: /

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

UN number: 1500.

UN proper shipping name: Sodium Nitrite.

Transport hazard class(es): 5.1+6.1.

Packaging group: III.

Environmental hazards: /

Special precautions for user: /

SECTION 15 REGULATORY INFORMATION

Regulations：

Sodium nitrite (CAS:7632-00-0) is found on the following regulatory list："China Classification and Labelling of Dangerous Chemical Substances", "China Dangerous Chemicals Names List", This safety data sheet is in compliance with the following national standards: GB16483-2008，GB13690-2009，GB6944-2005，GB/T15098-2008，GB18218-2009，GB15258-2009，GB6944-2005，GB190-2009，GB191-2009，GB12268-2008，GA57-1993，GB/T 15098-2008，GBZ 2-2007as well as the following national regulations: Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation, United Nations Regulations on the Transport of Dangerous Goods (UN RTDG)

SECTION 16 OTHER INFORMATION

References "Model Regulations on the Transport of Dangerous Goods"

"The Globally Harmonized System of Classification and Labelling of Chemicals"

Form Date 24-Jan.-2021

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.