MSDS

SHANDONG LONGGANG SILICON TECHNOLOGY CO.,LTD

Section 1 IDENTIFICATION

GHS Product identifier: Sodium metasilicate pentahydrate.

Recommended use of the chemical and restrictions on use: This material can be used to produce detergent, textile treatment compositions, paper deinking agent, etc.

Supplier's details: SHANDONG LONGGANG SILICON TECHNOLOGY CO.,LTD BINHAI ECONOMIC DEVELOPMENT AREA,CHANGYI CITY,SHANDONG PROVINCE,CHINA

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Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 1C, Serious Eye Damage/Eye Irritation Category 1.

GHS Label elements, including precautionary statements:

Signal word: Danger

Hazard statement(s): Harmful if swallowed. Causes severe skin burns and eye damage.

Precautionary statement(s):

Prevention: Do not breathe dust/fume/gas/mist/ vapors / spray. Wash … thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Specific treatment (see below). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Storage: Store locked up.

Disposal: Dispose of contents/container to....

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Sodium metasilicate pentahydrate	10213-79-3	99.925%

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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 Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: For acute or short-term repeated exposures to highly alkaline materials: Respiratory stress is uncommon but present occasionally because of soft tissue edema. Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary. INGESTION: Milk and water are the preferred diluents. Catharsis and emesis are absolutely contra-indicated. Activated charcoal does not absorb alkali. Gastric lavage should not be used. SKIN AND EYE: Injury should be irrigated for 20-30 minutes. Eye injuries require saline.

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.

Special hazards arising from the chemical: Non combustible. Not considered a significant fire risk, however containers may burn.

Special protective actions for fire-fighters: Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use fire fighting procedures suitable for surrounding area. 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: Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and 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: Collect recoverable product into labelled containers for recycling. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.

Conditions for safe storage, including any incompatibilities: Store in original containers.Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium metasilicate, pentahydrate	Sodium metasilicate pentahydrate	45 mg/m^3	45 mg/m^3	170 mg/m^3
sodium metasilicate, pentahydrate	Sodium silicate; (Sodium metasilicate)	18 mg/m^3	230 mg/m^3	230 mg/m^3

Appropriate engineering controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances.

Individual protection measures

Eye/face protection: Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes.

Skin protection: Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber.

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.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	White solid granules
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	/
Initial boiling point and boiling range	/
Flash point	/
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	/
Vapour density(air=1)	1.75
Relative density(water=1)	Miscible
Solubility(ies)	/
Partition coefficient: n-octanol/water	/
Auto-ignition temperature	/
Decomposition temperature	/
Viscosity	

Section 10 STABILITY AND REACTIVITY

Reactivity: /
Chemical stability: Contact with acidic material liberates heat.
Possibility of hazardous reactions: Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates. Avoid contact with copper, aluminium and their alloys.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: Acids.
Hazardous decomposition products: Metal oxides.

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.
Symptoms related to the physical, chemical and toxicological characteristics: /
Acute health effects: Acidic corrosives produce respiratory tract irritation with coughing, choking and mucous membrane damage. Symptoms of exposure may include dizziness, headache, nausea and weakness. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. The material can produce chemical burns following direct contact with the skin. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. Ingestion of alkaline corrosives may produce immediate pain, and circumoral burns. Mucous membrane corrosive damage is characterised by a white appearance and soapy feel; this may then become brown, oedematous and ulcerated. Profuse salivation with an inability to swallow or speak may also result. The material can produce severe chemical burns following direct

contact with the skin. The material produces severe ocular lesions after instillation.
Chronic health effects: Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.
Numerical measures of toxicity(such as acute toxicity estimates): Oral (rat) LD50: 600 mg/kg, dermal (rat) LD50: >5000 mg/kg.

Section 12 ECOLOGICAL INFORMATION

Toxicity: /
Persistence and degradability: /
Bioaccumulative potential: /
Mobility in soil: /
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Treat and neutralise at an approved treatment plant. Treatment should involve: Mixing or slurrying in water; Neutralisation with suitable dilute acid followed by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 TRANSPORT INFORMATION

UN number: 3253.
UN proper shipping name: DISODIUM TRIOXOSILICATE.
Transport hazard class(es) : 8.
Packing group, if applicable: III.
Environmental hazards: /
Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2008, GA 57-1993, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
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