



# Shenzhen Sinsche Technology Co.,Ltd

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ammonia nitrogen Reagent A1

**Supplier:** Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

**Emergency telephone**+86 (755) 82127315 (Mon-Fri 08:30- 18:00)

**Chemical Name:** Not applicable

**CAS No.:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**PIN:** NA

**Intended Use:** Laboratory Reagent Determination of ammonium nitrogen

**Date of MSDS Preparation:**

**Day:** 18

**Month:** June

**Year:** 2020

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### Classification

#### **Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### **Hazards not otherwise classified (HNOC)**

Not applicable

#### **Label elements**

#### **Hazard statements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

#### **Other Information**

May be harmful if swallowed

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### **Substance**

Not applicable.

#### **Mixture**

Chemical Family Mixture.

Name	EC No.	CAS-No.	Content
Potassium sodium tartrate, Tetrahydrat	206-156-8	6381-59-5	< 50%
Demineralized Water	231-791-2	7732-18-5	> 60%



## 4. FIRST AID MEASURE

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with soap and plenty of water.

**Ingestion (First Aid):** Give large quantities of water. Call physician immediately.

**Inhalation:** None required.

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## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Autoignition Temperature:** Not applicable

**Hazardous Combustion Products:** Not applicable

**Fire / Explosion Hazards:** None reported

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Stop spilled material from being released to the environment.

**Clean-up Technique:** Absorb spilled liquid with non-reactive sorbent material. Sweep up material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

**D.O.T. Emergency Response Guide Number:** None

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Keep container tightly closed when not in use. Avoid contamination by organic materials.

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## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

**Engineering Controls:** Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields



**Skin Protection:** lab coat

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes Wash thoroughly after handling.

**TLV:** Not established

**PEL:** Not established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colorless liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** None

**pH:** Not determined

**Vapor Pressure:** Not determined

**Vapor Density (air = 1):** Not determined

**Boiling Point:** 98°C (208.4°F)

**Melting Point:** -8°C (17.6°F)

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.290

**Evaporation Rate (water = 1):** 0.65

**Volatile Organic Compounds Content:** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Solubility:**

**Water:** Soluble

**Acid:** Soluble

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** 0.001 in/yr

**Aluminum:** 0.016 in/yr

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Evaporation Extreme temperatures

**Reactivity / Incompatibility:** None reported

**Hazardous Decomposition:** Toxic fumes of: sodium oxides potassium oxide

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** None reported

**Skin and Eye Irritation Data:** None reported

**Mutation Data:** None reported

**Reproductive Effects Data:** None reported

**Ingredient Toxicological Data:** Sodium Citrate: Oral rat LD<sub>50</sub> > 8 g/kg



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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** No information available for this product

**Ingredient Ecological Information:** None reported

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## 13. DISPOSAL CONSIDERATIONS

**Special Instructions (Disposal):** Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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## 14. TRANSPORT INFORMATION

**T.D.G.:**

**Proper Shipping Name:** Not Currently Regulated

**Hazard Class:** NA

**PIN:** NA

**Group:** NA

**Subsidiary Risk:** NA

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

**National Inventories:**

**Canadian Inventory Status:** All ingredients of this product are DSL Listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information.

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### Legend:

NA - Not Applicable w/w - weight/weight

ND - Not Determined w/v - weight/volume

NV - Not Available v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE.**



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HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ammonia nitrogen Reagent A2

**Supplier:** Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

**Emergency telephone**+86 (755) 82127315 (Mon-Fri 08:30- 18:00)

**Chemical Name:** Not applicable

**CAS No.:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**PIN:** NA

**Intended Use:** Laboratory Reagent Determination of ammonium nitrogen

**Date of MSDS Preparation:**

**Day:** 18

**Month:** June

**Year:** 2020

### 2. HAZARDS IDENTIFICATION

**CHS Classification**

**Most Important Hazards**

**According to ABNT NBR 14725-2**

Corrosive to metals	Category 1 - (H290)
Acute toxicity - Oral	Category 3 - (H301)
Acute toxicity - Dermal	Category 2 - (H310)
Acute toxicity - Inhalation (Dusts/Mists)	Category 3 - (H331)
Skin corrosion/irritation	Category 1 - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

#### **Label elements**

Signal word - Danger



**Corrosion**

**Skull and crossbones**

**Health hazard**

Environment **Hazard statements**

H290 - May be corrosive to metals

H301 - Toxic if swallowed

H310 - Fatal in contact with skin

H314 - Causes severe skin burns and eye damage

H331 - Toxic if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure

H410 - Very toxic to aquatic life with long lasting effects

**Precautionary statements**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P234 - Keep only in original container

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse



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P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P310 - Immediately call a POISON CENTER or doctor/physician

P390 - Absorb spillage to prevent material damage

P405 - Store locked up

P406 - Store in corrosive resistant stainless steel container with a resistant liner

P501 - Dispose of contents/ container to an approved waste disposal plant

## **Other Hazards Known**

Not applicable

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## **3. COMPOSITION / INFORMATION ON INGREDIENTS**

### **Substance**

Not applicable.

### **Mixture**

Chemical Family

Mixture.

Name	EC No.	CAS-No.	Content
Potassium Iodide	231-659-4	7681-11-0	< 10%
MERCURIC IODIDE	231-873-8	7774-29-0	< 10%
Sodium hydroxide	215-185-5	1310-73-2	< 20%
Demineralized Water	231-791-2	7732-18-5	> 60%

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## **4. FIRST AID MEASURES**

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with plenty of water for 15 minutes. Call physician immediately.

**Ingestion (First Aid):** Do not induce vomiting. Give 1-2 glasses of water. Call physician immediately. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air.

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## **5. FIRE FIGHTING MEASURES**

**Flammable Properties:** During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Autoignition Temperature:** Not available

**Hazardous Combustion Products:** Toxic fumes of: mercury sodium oxides iodine compounds

**Fire / Explosion Hazards:** None reported

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire.





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## 6. ACCIDENTAL RELEASE MEASURES

### **Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Releases of this material may contaminate the environment. Stop spilled material from being released to the environment. Cover spilled solid material with sand or other inert material.

**Clean-up Technique:** Mercury and its compounds are extremely toxic! Avoid breathing spilled material. Avoid contact with spilled material. Absorb spilled liquid with non-reactive sorbent material. Sweep up material.

Dispose of all mercury contaminated material at a government approved hazardous waste facility. Dispose of material in government approved hazardous waste facility. Decontaminate area with commercially available mercury absorbing compounds.

**Evacuation Procedure:** Evacuate general area (50 foot radius or as directed by your facility's emergency response plan) when: any quantity is spilled. If conditions warrant, increase the size of the evacuation.

**D.O.T. Emergency Response Guide Number:** 154

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin clothing Do not breathe mist or vapors. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Keep away from: acids organic material ammonia Protect from: light heat freezing

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Maintain adequate ventilation to keep vapor level below TWA for chemicals in this product. Maintain general industrial hygiene practices when using this product. Use a fume hood to avoid exposure to dust, mist or vapor.

### **Personal Protective Equipment:**

**Eye Protection:** chemical splash goggles

**Skin Protection:** neoprene latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat

**Inhalation Protection:** laboratory fume hood

**Precautionary Measures:** Avoid contact with: eyes skin clothing Do not breathe: mist/vapor Wash thoroughly after handling. Protect from: light heat freezing Keep away from: acids/acid fumes ammonia organic materials

**TLV:** Not established

**PEL:** Not established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, yellow liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** Not determined

**pH:** >11

**Vapor Pressure:** Not available

**Vapor Density (air = 1):** Not available

**Boiling Point:** 110 C decomposes



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**Melting Point:** Not available

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.265

**Evaporation Rate (water = 1):** Not determined

**Volatile Organic Compounds Content:** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Solubility:**

**Water:** Miscible

**Acid:** Not determined

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** Not determined

**Aluminum:** Not determined

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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Exposure to light or contamination by organic materials will affect this product's stability.

Extreme temperatures

**Reactivity / Incompatibility:** Incompatible with: acids oxidizers organic materials ammonia

**Hazardous Decomposition:** Toxic fumes of: mercury iodine compounds

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** Mercuric Iodide Skin rat LD50 = 75 mg/kg

**Skin and Eye Irritation Data:** None reported

**Mutation Data:** None reported

**Reproductive Effects Data:** Mercuric Iodide Inhalation rat TCLo = 4870 ng/m<sup>3</sup>/24H - female 1-22 days after conception- post-implantation mortality Mercuric Iodide Inhalation rat TCLo = 450 ng/m<sup>3</sup>/24H - female 1-22 days after conception - embryo or fetus - extra embryonic structures, fetotoxicity

**Ingredient Toxicological Data:** Mercuric Iodide Oral rat LD50 = 18 mg/kg; Sodium Hydroxide Oral rat LDLo = 500mg/kg; Sodium Iodide Oral rat LD50 = 4340 mg/kg

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** --

No ecological data available for this product. Mobility in soil: No data available

**Ingredient Ecological Information:** --

No ecological data available for the ingredients of this product.

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## 13. DISPOSAL CONSIDERATIONS

**Special Instructions (Disposal):** Decontaminate any equipment or surfaces that have come in contact with mercury with commercially available mercury absorbing compounds. Dispose of all mercury contaminated material at an E.P.A.hazardous waste facility. Dispose of material in an E.P.A. approved hazardous waste facility.



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**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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## 14. TRANSPORT INFORMATION

**T.D.G.:**

**Proper Shipping Name:** Corrosive Liquid, Toxic, N.O.S.

(Mercuric Iodide/Sodium Hydroxide Solution)

**Hazard Class:** 8

**UN Number/PIN:** 2922

**Packing Group:** II

**Subsidiary Risk:** 6.1

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

**National Inventories:**

**Canadian Inventory Status:** All ingredients of this product are DSL Listed. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. List of Dangerous Substances Classified in Annex I of the EEC Directive (67/548) - Classification, Packaging and Labeling of Dangerous Substances, Amended July 1992. Gosselin, R. E. et al. Clinical Toxicology of Commercial Products, 5th Ed. Baltimore: The Williams and Wilkins Co., 1984. Vendor Information. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. In-house information. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Technical Judgment.

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**Legend:**

NA - Not Applicable w/w - weight/weight

ND - Not Determined w/v - weight/volume

NV - Not Available v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE.**

**HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ammonia nitrogen Reagent Y1

**Supplier:** Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen City, P.R.C 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

**Emergency telephone**+86 (755) 82127315 (Mon-Fri 08:30- 18:00)

**Chemical Name:** Not applicable

**CAS No.:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**PIN:** NA

**Intended Use:** Laboratory Reagent Determination of ammonium nitrogen

**Date of MSDS Preparation:**

**Day:** 18

**Month:** June

**Year:** 2020

### 2. HAZARDS IDENTIFICATION

**CHS Classification**

**Most Important Hazards**

**According to ABNT NBR 14725-2**

Skin corrosion/irritation	Category 2- (315)
Serious eye damage/eye irritation	Category 2A- (H319)



**Label elements**

**Signal word - Danger**

**Hazard statements**

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

**Precautionary statements**

P260 - Do not breathe dusts or mists

P280 - Wear protective gloves/protective clothing/eye protection/face protection



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P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P234 - Keep only in original container

P390 - Absorb spillage to prevent material damage

## Other Information

Not applicable

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Substance

Not applicable

#### Mixture

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Sodium hydroxide	1310-73-2	40 - 50%	-

#### Description of first aid measures

**General advice** See section 8 for PPE that may be required during handling. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If no local exhaust use approved fume hood and/or respirator. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Remove from exposure, lie down. Immediate medical attention is required. IF IN EYES: Flush eyes for at least 15 minutes. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

**Skin contact** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

**Inhalation** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.

**Ingestion** IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting. Call a physician immediately.

**Self-protection of the first aider** First aider: Pay attention to self-protection!. Use personal protective equipment as required.

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not use mouth-to-mouth method if victim ingested or inhaled the



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substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Flammable properties**

During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

**Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products** This material will not burn.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice** Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Remove all sources of ignition. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Take necessary precautions in observance of pertinent physical hazards. Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

**Emergency Response Guide Number** 154



## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Absorb spillage to prevent material damage.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep/store only in original container.

**Flammability class** Not applicable

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide40 - 50%	Ceiling: 5 mg/m <sub>3</sub>	TWA: 5 mg/m <sub>3</sub> (vacated) Ceiling: 5 mg/m <sub>3</sub>	IDLH: 10 mg/m <sub>3</sub> Ceiling: 5 mg/m <sub>3</sub>

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick OEL	New Foundland & Labrador OEL
Sodium hydroxide40 - 50%	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>

Chemical name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
Sodium hydroxide40 - 50%	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>

Chemical name	Quebec OEL	Saskatchewan OEL	Yukon OEL
Sodium hydroxide40 - 50%	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>	Ceiling: 5 mg/m <sub>3</sub>

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Legend** See section 16 for terms and abbreviations

### Appropriate engineering controls

**Engineering Controls** If no local exhaust use approved fume hood or self-contained breathing apparatus If no local exhaust use approved fume hood and/or respirator Showers Eyewash stations

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear tight sealing safety goggles and/or face protection shield. Avoid contact with eyes.

**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** Do not breathe gas/fumes/vapor/spray. If no local exhaust use approved fume hood and/or respirator. In case of inadequate ventilation wear respiratory protection.



# Shenzhen Sinsche Technology Co.,Ltd

**General Hygiene Considerations** Avoid breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear suitable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Avoid prolonged or repeated contact with skin. Take off all contaminated clothing and wash it before reuse.

## Environmental exposure controls

Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Liquid

**Gas Under Pressure** Not classified according to GHS criteria

**Appearance** aqueous solution **Color** colorless

**Odor** None **Odor threshold** No data available

### Property Values Remarks • Method

**Molecular weight** No data available

**pH** >14

**Melting point/freezing point** ~ -17 °C / 1 °F Estimation based on theoretical calculation

**Boiling point / boiling range** ~ 100 °C / 212 °F Estimation based on theoretical calculation

**Evaporation rate** 0.19 (water = 1)

**Vapor pressure** 21.977 mm Hg / 2.93 kPa at 25 °C / 77 °F Estimation based on theoretical calculation

**Vapor density (air = 1)** 0.62 (air = 1)

**Specific gravity (water = 1 / air = 1)** 1.28

**Partition Coefficient (n-octanol/water)** Not applicable

### Soil Organic Carbon-Water Partition

#### Coefficient

Not applicable

**Autoignition temperature** No data available

**Decomposition temperature** No data available

**Dynamic viscosity** No data available

**Kinematic viscosity** No data available

### Solubility(ies)

#### Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

#### Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F





## Other Information

**Metal Corrosivity** Classified as corrosive to metal according to GHS criteria

**GHS Metal Corrosivity Classification** Category 1, H290

**Steel Corrosion Rate** No data available

**Aluminum Corrosion Rate** > 508 mm/yr / > 20 in/yr

**Bulk density** Not applicable

**Explosive properties** Not classified according to GHS criteria.

**Explosion data** During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Upper explosion limit** No data available

**Lower explosion limit** No data available

**Flammable properties** During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

**Flammability Limit in Air**

**Upper flammability limit:** No data available

**Lower flammability limit:** No data available

**Flash point** No data available

**Method** No information available

**Oxidizing properties** Not classified according to GHS criteria.

**Reactivity properties** Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

---

## 10. STABILITY AND REACTIVITY

### Reactivity properties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

### Chemical stability

Stable under recommended storage conditions.

### Special dangers of the product

None reported

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

### Conditions to avoid

Extremes of temperature and direct sunlight. Incompatible materials.

### Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

### Explosive properties

Not classified according to GHS criteria. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Upper explosion limit** No data available

**Lower explosion limit** No data available



# Shenzhen Sinsche Technology Co.,Ltd

**Autoignition temperature**

No data available

**Sensitivity to Static Discharge**

None reported

**Sensitivity to Mechanical Impact**

None reported

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## 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

<b>Product Information</b>	Corrosive to skin. Corrosive to eyes.
<b>Inhalation</b>	Causes burns. Corrosive by inhalation.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness. Causes burns.
<b>Skin contact</b>	Cause severe skin burns and eye damage.
<b>Ingestion</b>	Ingestion causes burns of the upper digestive and respiratory tracts.
<b>Aggravated Medical Conditions</b>	Eye disorders. Skin disorders. Respiratory disorders.
<b>Toxicologically synergistic products</b>	None known.
<b>Toxicokinetics, metabolism and distribution</b>	No information available.

**Product Acute Toxicity Data****Oral Exposure Route** No data available**Dermal Exposure Route** No data available**Inhalation (Dust/Mist) Exposure Route** No data available**Inhalation (Vapor) Exposure Route** No data available**Inhalation (Gas) Exposure Route** No data available**Acute Toxicity Estimations (ATE)****Ingredient Acute Toxicity Data****Oral Exposure Route** If available, see data below

<b>Chemical name</b>	<b>Endpoint type</b>	<b>Reported dose</b>	<b>Exposure time</b>	<b>Toxicological effects</b>	<b>Key literature references and sources for data</b>
Sodium hydroxide (40 -50%) CAS#: 1310-73-2	Rabbit LD <sub>50</sub>	500 mg/kg	None reported	None reported	No information available

**Dermal Exposure Route** If available, see data below

<b>Chemical name</b>	<b>Endpoint type</b>	<b>Reported dose</b>	<b>Exposure time</b>	<b>Toxicological effects</b>	<b>Key literature references and sources for data</b>
Sodium hydroxide (40 -50%) CAS#: 1310-73-2	Rabbit LD <sub>50</sub>	1350 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)



# Shenzhen Sinsche Technology Co.,Ltd

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Product Specific Target Organ Toxicity Single Exposure Data**

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Ingredient Specific Target Organ Toxicity Single Exposure Data**

**Oral Exposure Route** If available, see data below

**Dermal Exposure Route** If available, see data below

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Aspiration toxicity**

No data available

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium hydroxide (40 -50%)	Standard Draize Test	Rabbit	0.05 mg	24 hours	Corrosive to eyes	RTECS (Registry of Toxic Effects of Chemical Substances)

**Sensitization Information**

**Product Sensitization Data**

**Skin Sensitization Exposure Route** No data available.

**Respiratory Sensitization Exposure Route** No data available.

**Ingredient Sensitization Data**

**Skin Sensitization Exposure Route** If available, see data below.

**Respiratory Sensitization Exposure Route** If available, see data below.

**Chronic Toxicity Information**

**Product Specific Target Organ Toxicity Repeat Dose Data**

**Oral Exposure Route** No data available.

**Dermal Exposure Route** No data available.

**Inhalation (Dust/Mist) Exposure Route** No data available.

**Inhalation (Vapor) Exposure Route** No data available.

**Inhalation (Gas) Exposure Route** No data available.

**Ingredient Specific Target Organ Toxicity Repeat Exposure Data**

**Oral Exposure Route** If available, see data below

**Dermal Exposure Route** If available, see data below



# Shenzhen Sinsche Technology Co.,Ltd

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Product Carcinogenicity Data**

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Ingredient Carcinogenicity Data**

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium hydroxide	1310-73-2	-	-	-	-

**Legend**

<b>ACGIH (American Conference of Governmental Industrial Hygienists)</b>	Does not apply
<b>IARC (International Agency for Research on Cancer)</b>	Does not apply
<b>NTP (National Toxicology Program)</b>	Does not apply
<b>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</b>	Does not apply

**Oral Exposure Route** If available, see data below

**Dermal Exposure Route** If available, see data below

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Product Germ Cell Mutagenicity invitro Data**

No data available.

**Ingredient Germ Cell Mutagenicity invitro Data**

No data available

**Product Germ Cell Mutagenicity invivo Data**

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

**Ingredient Germ Cell Mutagenicity invivo Data**

**Oral Exposure Route** If available, see data below

**Dermal Exposure Route** If available, see data below

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Product Reproductive Toxicity Data**

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available



# Shenzhen Sinsche Technology Co.,Ltd

## Ingredient Reproductive Toxicity Data

**Oral Exposure Route** If available, see data below

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

---

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product Ecological Data

##### Aquatic toxicity

**Fish** No data available

**Crustacea** No data available

**Algae** No data available

#### Ingredient Ecological Data

##### Aquatic toxicity

**Fish** If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide (40 -50%) CAS#: 1310-73-2	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	45.4 mg/L	IUCLID (The International Uniform Chemical Information Database)

**Crustacea** If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide (40 -50%) CAS#: 1310-73-2	48 hours	<i>Daphnia sp.</i>	EC <sub>50</sub>	40.4 mg/L	IUCLID (The International Uniform Chemical Information Database)

**Algae** No data available

### Other Information

#### Persistence and degradability

##### Product Biodegradability Data

If available, see ingredient data below.

##### Ingredient Biodegradability Data

Test data reported below

Chemical name	Test method	Biodegradation	Exposure time	Results
Sodium hydroxide (40 -50%) CAS#: 1310-73-2	None reported	None reported	None reported	Readily biodegradable

### Bioaccumulation

**Product Bioaccumulation Data** No data available.

**Partition Coefficient (n-octanol/water)** Not applicable

**Ingredient Bioaccumulation Data** No data available

Chemical name	Partition Coefficient (n-octanol/water)	Method
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# Shenzhen Sinsche Technology Co.,Ltd

Sodium hydroxide (40 -50%) CAS#: 1310-73-2	log K <sub>ow</sub> ~ 0	No information available
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## Mobility

### Product Information

**Soil Organic Carbon-Water Partition Coefficient** Not applicable

### Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

## Ingredient Information

Chemical name	Soil Organic Carbon-Water Partition Coefficient	Method
Sodium hydroxide (40 - 50%) CAS#: 1310-73-2	log K <sub>oc</sub> ~ 0	No information available

Chemical name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
Sodium hydroxide (40 - 50%) CAS#: 1310-73-2	Completely soluble	420000 mg/L	0 °C	32 °F

## Other adverse effects

No information available.

---

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D002

**Special instructions for disposal** Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

---

## 14. TRANSPORT INFORMATION

### U.S. DOT

**UN/ID no** UN1824

**Proper shipping name** Sodium Hydroxide Solution

**Hazard Class** 8

**Packing Group** II

### Emergency Response Guide

#### Number

154

### TDG

**UN/ID no** UN1824

**Proper shipping name** Sodium Hydroxide Solution

**Hazard Class** 8



# Shenzhen Sinsche Technology Co.,Ltd

**Packing Group II**

**IATA**

**UN/ID no** UN1824

**Proper shipping name** Sodium Hydroxide Solution

**Hazard Class** 8

**Packing Group II**

**ERG Code** 154

**IMDG**

**UN/ID no** UN1824

**Proper shipping name** Sodium Hydroxide Solution

**Hazard Class** 8

**Packing Group II**

**Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods.

If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

---

## 15. REGULATORY INFORMATION

### National Inventories

**TSCA** Complies

**DSL/NDSL** Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### International Inventories

**EINECS/ELINCS** Complies

**ENCS** Complies

**IECSC** Complies

**KECL** Complies

**PICCS** Complies

**TCSI** Complies

**AICS** Complies

**NZIoC** Complies

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**TCSI** - Taiwan Chemical Substances Inventory

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals



# Shenzhen Sinsche Technology Co.,Ltd

## US Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

### SARA 311/312 Hazard Categories

**Acute health hazard** Yes

**Chronic Health Hazard** Yes

**Fire hazard** No

**Sudden release of pressure hazard** No

**Reactive Hazard** No

### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb	-	-	X

### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

## 16. OTHER INFORMATION

### Special Comments

None

### Additional information

#### Global Automotive Declarable Substance List (GADSL)

Not applicable

### NFPA and HMIS Classifications

NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 3	Flammability - 0	Physical Hazards - 0	Personal protection - X - See section 8 for more information

### Key or legend to abbreviations and acronyms used in the safety data sheet

*NIOSH IDLH Immediately Dangerous to Life or Health*

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)

*NDF no data*

**Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**





# Shenzhen Sinsche Technology Co.,Ltd

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those

listed in the final OSHA PEL. These lists are

for reference purposes only. Please note that

some reference state regulations of these

"liberated" exposure limits in their state

regulations.

SKN\* Skin designation SKN+ Skin sensitization

RSP+ Respiratory sensitization \*\* Hazard Designation

C Carcinogen R Reproductive toxicant M mutagen

## Disclaimer

**USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.**

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Supplier:** Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen City, P.RC 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

**Emergency telephone**+86 (755) 82127315 (Mon-Fri 08:30- 18:00)

**Chemical Name:** Not applicable

**CAS No.:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**PIN:** NA

**Intended Use:** Laboratory Reagent Determination of ammonium nitrogen

**Date of MSDS Preparation:**

**Day:** 18

**Month:** June

**Year:** 2020

### 2 -COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Sodium carbonate anhydrous	207-838-8	497-19-8	100%

Hazard Symbols: C

Risk Phrases: 35

### 3 - HAZARDS IDENTIFICATION

**CHS Classification**

**Most Important Hazards**

**According to ABNT NBR 14725-2**

Skin corrosion/irritation	Category 2- (315)
Serious eye damage/eye irritation	Category 2A- (H319)



**Signal word** - Warning



# Shenzhen Sinsche Technology Co.,Ltd

## Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

## Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: 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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P362 - Take off contaminated clothing and wash before reuse

## Other hazards

No information available

---

## ➤ 4 - FIRST AID MEASURES

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

---

## ➤ 5 - FIRE FIGHTING MEASURES

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Runoff from fire control or dilution water may cause pollution.

**Extinguishing Media:**

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

---



## ➤ 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

---

## ➤ 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

---

## ➤ 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits CAS# 497-19-8: Russia: 5 mg/m<sup>3</sup> TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

---

## ➤ 9 - PHYSICAL AND CHEMICAL PROPERTIES



## Shenzhen Sinsche Technology Co.,Ltd

Physical State: Powder  
Color: white  
Odor: odorless  
pH: 11.6 (solution)  
Vapor Pressure: Not available.  
Viscosity: Not available.  
Boiling Point: 1600 deg C  
Freezing/Melting Point: 851 deg C  
Autoignition Temperature: Not available.  
Flash Point: Not applicable.  
Explosion Limits, lower: Not available.  
Explosion Limits, upper: Not available.  
Decomposition Temperature: 400 deg C  
Solubility in water: Soluble.  
Specific Gravity/Density: 2.53  
Molecular Formula: Na<sub>2</sub>CO<sub>3</sub>  
Molecular Weight: 105.99

---

### ➤ 10 - STABILITY AND REACTIVITY

#### Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Decomposed by acids with effervescence, evolution of carbon dioxide.

#### Conditions to Avoid:

Dust generation, excess heat, moist air.

#### Incompatibilities with Other Materials:

Reacts explosively with red-hot aluminum metal. Incompatible with ammonia + silver nitrate, 2,4-dinitrotoluene, 2,4,6-trinitrotoluene, sulfuric acid, sodium sulfide + water, lithium, phosphorus pentoxide, fluorine, and hydrogen peroxide. Hot concentrated solutions of sodium carbonate are mildly corrosive to steel.

#### Hazardous Decomposition Products:

Carbon dioxide, toxic fumes of sodium oxide.

Hazardous Polymerization: Has not been reported.

---

### ➤ 11 - TOXICOLOGICAL INFORMATION

#### RTECS#:

CAS# 497-19-8: VZ4050000 LD50/LC50:

CAS# 497-19-8: Draize test, rabbit, eye: 100 mg/24H Moderate; Draize test, rabbit, eye: 50 mg Severe; Draize test, rabbit, skin: 500 mg/24H Mild; Inhalation, mouse: LC50 = 1200 mg/m<sup>3</sup>/2H; Inhalation, rat: LC50 = 2300 mg/m<sup>3</sup>/2H; Oral, mouse: LD50 = 6600 mg/kg; Oral, mouse: LD50 = 6600



## Shenzhen Sinsche Technology Co.,Ltd

mg/kg; Oral, rat: LD50 = 4090 mg/kg.

Carcinogenicity:

Sodium carbonate anhydrous - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

---

### ➤ 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Bluegill/Sunfish: LC50 = 320 mg/L; 96 Hr.; Static Conditions

---

### ➤ 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

---

### ➤ 14 - TRANSPORT INFORMATION

IATA

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

IMO

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

RID/ADR

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing group:

---

### ➤ 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36 Irritating to eyes.

Safety Phrases:

S 22 Do not breathe dust.



## Shenzhen Sinsche Technology Co.,Ltd

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 497-19-8: 1

Canada

CAS# 497-19-8 is listed on Canada's DSL List.

CAS# 497-19-8 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 497-19-8 is listed on the TSCA inventory.



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ammonia nitrogen Reagent Y3

**Supplier:** Shenzhen Sinsche Technology Co.,Ltd.

ADD: 4/F , T3 Building, Silicon Valley Compound, Qingquan Road, Longhua Street, Longhua District, Shenzhen City, P.R.C 518109.

Tel: +86 (755) 82127315 Fax: +86 (755) 82127860

Email:Sinsche@sinsche.com

**Emergency telephone**+86 (755) 82127315 (Mon-Fri 08:30- 18:00)

**Chemical Name:** Not applicable

**CAS No.:** Not applicable

**Chemical Formula:** Not applicable

**Chemical Family:** Not applicable

**PIN:** NA

**Intended Use:** Laboratory Reagent Determination of ammonium nitrogen

**Date of MSDS Preparation:**

**Day:** 18

**Month:** June

**Year:** 2020

### 2. HAZARDS IDENTIFICATION

#### CHS Classification

Acute aquatic toxicity	Category 3 - (H402)
Chronic aquatic toxicity	Category 2 - (H411)

#### Label elements

##### Hazard statements

H402 - Harmful to aquatic life

H411 - Toxic to aquatic life with long lasting effects



Environment

##### Precautionary statements

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

P391 - Collect spillage





## Other Hazards Known

Not applicable

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Substance

Not applicable.

### Mixture

Chemical Family Mixture.

Name	EC No.	CAS-No.	Content
POLY(VINYL ALCOHOL)	unlisted	9002-89-5	< 10%
Demineralized Water	231-791-2	7732-18-5	> 90%

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## 4. FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with plenty of water.

**Ingestion (First Aid):** Give large quantities of water. Call physician immediately.

**Inhalation:** None required.

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## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.

**Flash Point:** Not applicable

**Method:** Not applicable

**Flammability Limits:**

**Lower Explosion Limits:** Not applicable

**Upper Explosion Limits:** Not applicable

**Autoignition Temperature:** Not applicable

**Hazardous Combustion Products:** This material will not burn.

**Fire / Explosion Hazards:** None reported

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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## 6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**

Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

**Containment Technique:** Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment.



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**Clean-up Technique:** Cover spilled material with an alkali, such as soda ash or sodium bicarbonate. Scoop up slurry into a large beaker. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

**D.O.T. Emergency Response Guide Number:** None

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## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Keep container tightly closed when not in use.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

**Eye Protection:** safety glasses with top and side shields

**Skin Protection:** disposable latex gloves

**Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes Wash thoroughly after handling.

**TLV:** Not established

**PEL:** Not established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Purple/brown solution

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** Slight iodine

**pH:** Not determined

**Vapor Pressure:** Not determined

**Vapor Density (air = 1):** Not determined

**Boiling Point:** 98°C (208.4°F)

**Melting Point:** 0°C (32°F)

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.0042

**Evaporation Rate (water = 1):** 0.87

**Volatile Organic Compounds Content:** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Solubility:**

**Water:** Soluble

**Acid:** Soluble

**Other:** Not determined

**Metal Corrosivity:**

**Steel:** 0.019 in/yr

**Aluminum:** 0.001 in/yr



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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Evaporation Extreme temperatures

**Reactivity / Incompatibility:** None reported

**Hazardous Decomposition:** Toxic fumes of: carbon dioxide carbon monoxide

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

**Product Toxicological Data:**

**LD50:** None reported

**LC50:** None reported

**Dermal Toxicity Data:** None reported

**Skin and Eye Irritation Data:** None reported

**Mutation Data:** None reported

**Reproductive Effects Data:** None reported

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**Ingredient Toxicological Data:** Polyvinyl Alcohol: Oral mouse LD<sub>50</sub> = 14.7 g/kg, Oral rat LD<sub>50</sub> > 20 g/kg

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## 12. ECOLOGICAL INFORMATION

**Product Ecological Information:** No information available for this product

**Ingredient Ecological Information:** None reported

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## 13. DISPOSAL CONSIDERATIONS

**Special Instructions (Disposal):** Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain.

**Empty Containers:** Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

**NOTICE (Disposal):** These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information.

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## 14. TRANSPORT INFORMATION

**T.D.G.:**

**Proper Shipping Name:** Not Currently Regulated

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**Hazard Class:** NA

**UN Number/PIN:** NA

**Packing Group:** NA

**Subsidiary Risk:** NA

**Additional Information:** There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

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## 15. REGULATORY INFORMATION

### **National Inventories:**

**Canadian Inventory Status:** All ingredients of this product are DSL Listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Technical Judgment. In-house information. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991.

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### **Legend:**

NA - Not Applicable w/w - weight/weight

ND - Not Determined w/v - weight/volume

NV - Not Available v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE.**

**HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**