



# Shenzhen Sinsche Technology Co.,Ltd

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Available chlorine Reagent R1

**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:** 21

**Month:** June

**Year:** 2020

### 2 -COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Potassium Iodide	231-659-4	7681-11-0	<20%
Demineralized Water	231-791-2	7732-18-5	>80%

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

### Section 3 - HAZARDS IDENTIFICATION

**CHS Classification**

**Most Important Hazards**

**According to ABNT NBR 14725-2**

Acute toxicity - Oral	Category 5
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A



## Hazard statements

H303-May be harmful if swallowed

H315-Causes skin irritation

H319-Causes serious eye irritation

## Precautionary statements

P312 - Call a POISON CENTER or doctor if you feel unwell

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

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

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

P362 + P364 - Take off contaminated clothing and wash it before reuse

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

## Other Hazards Known

Not applicable

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## 👉 Section 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.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. 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.

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:

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## ➤ Section 5 - FIRE FIGHTING MEASURES

### General Information:

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

### Extinguishing Media:

Use agent most appropriate to extinguish fire. Do NOT get water inside containers. In case of fire, use carbon dioxide, dry chemical powder or appropriate foam.

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## ➤ Section 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. Do not get water inside containers.

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## ➤ Section 7 - HANDLING and STORAGE

### Handling:

Wash thoroughly after handling. Use with adequate ventilation.

Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store protected from light. Do not allow contact with water. Keep from contact with moist air and steam.

### Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Store protected from light.

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## ➤ Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 7681-11-0: 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 to prevent skin exposure.

### Clothing:

Wear appropriate protective clothing to prevent skin exposure.



# Shenzhen Sinsche Technology Co.,Ltd

## 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.

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## ➤ Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: colorless

Odor: odorless

pH: 12

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 1330 deg C

Freezing/Melting Point: 680 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Not available.

Solubility in water: Soluble in water

Specific Gravity/Density: Not available

Molecular Formula: Solution

Molecular Weight: Not available

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## ➤ Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, light, dust generation, moisture, metals, excess heat.

Incompatibilities with Other Materials:

Strong acids, strong reducing agents, strong bases, strong oxidizing agents.

Hazardous Decomposition Products:

Oxides of potassium, iodine.

Hazardous Polymerization: Has not been reported.

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## ➤ Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 7681-11-0: TT2975000 LD50/LC50:

Not available.

Carcinogenicity:



# Shenzhen Sinsche Technology Co.,Ltd

Potassium Iodide - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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## 🔗 Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Material Safety Data Sheet ; ;

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## 🔗 Section 13 - DISPOSAL CONSIDERATIONS

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

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## 🔗 Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

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## 🔗 Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7681-11-0: 1

Canada

CAS# 7681-11-0 is listed on Canada's DSL List.

CAS# 7681-11-0 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 7681-11-0 is listed on the TSCA inventory.



# Shenzhen Sinsche Technology Co.,Ltd

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Available chlorine Reagent R2

**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

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**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:** 21

**Month:** June

**Year:** 2020

### 2 -COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content
Acetic acid glacial	200-580-7	64-19-7	< 30%
Demineralized Water	231-791-2	7732-18-5	> 70%

Hazard Symbols: C

Risk Phrases: 34

### Section 3 - HAZARDS IDENTIFICATION

**CHS Classification**

**Most Important Hazards**

**According to ABNT NBR 14725-2**

Acute toxicity - Oral	Category 5
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Acute aquatic toxicity	Category 3

**Label elements**

**Signal word** - Danger

**Hazard statements**



# Shenzhen Sinsche Technology Co.,Ltd

H303 - May be harmful if swallowed

H314 - Causes severe skin burns and eye damage

H402 - Harmful to aquatic life



Corrosion

## Precautionary statements

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

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

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

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

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

P273 - Avoid release to the environment

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P403 + P235 - Store in a well-ventilated place. Keep cool

## Other Hazards Known

Not applicable

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## Section 4 - FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

Ingestion:



# Shenzhen Sinsche Technology Co.,Ltd

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

Antidote: None reported.

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## Section 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.

Extinguishing Media:

Do NOT get water inside containers. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use dry chemical, carbon dioxide, water spray or regular foam. Cool containers with flooding quantities of water until well after fire is out.

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## Section 6 - ACCIDENTAL RELEASE MEASURES

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

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation. Do not get water inside containers.

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## Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale.

Storage:

Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store near alkaline substances. Keep away from oxidizing agents.

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## Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits CAS# 64-19-7: United States OSHA: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA Belgium - TWA:





## Shenzhen Sinsche Technology Co.,Ltd

10 ppm VLE; 25 mg/m<sup>3</sup> VLE Belgium - STEL: 15 ppm VLE; 38 mg/m<sup>3</sup> VLE France - VLE: 10 ppm VLE; 25 mg/m<sup>3</sup> VLE Germany: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA Japan: 10 ppm OEL; 25 mg/m<sup>3</sup> OEL Malaysia: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA Netherlands: 10 ppm MAC; 25 mg/m<sup>3</sup> MAC Russia: 5 mg/m<sup>3</sup> TWA Spain: 10 ppm VLA-ED; 25 mg/m<sup>3</sup> VLA-ED Spain: 15 ppm VLA-EC; 37 mg/m<sup>3</sup> VLA-EC CAS# 7732-18-5: Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

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### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: clear colorless

Odor: pungent odor

pH: Not available.

Vapor Pressure: 11.4 mm Hg @20 deg C

Viscosity: Not available.

Boiling Point: 118.1 deg C

Freezing/Melting Point: 16.7 deg C

Autoignition Temperature: 961 deg F ( 516.11 deg C)

Flash Point: > 141 deg F (> 60.56 deg C)

Explosion Limits, lower: 4.0%

Explosion Limits, upper: 19.9%

Decomposition Temperature:

Solubility in water: Soluble.

Specific Gravity/Density: 1.049

Molecular Formula: Not applicable.

Molecular Weight:

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### Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Ignition sources, excess heat.

Incompatibilities with Other Materials:

Acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), alcohols and glycols (e.g. butyl alcohol, ethanol, methanol, ethylene glycol), aldehydes (e.g. acetaldehyde, acrolein, chloral hydrate, formaldehyde), amines (aliphatic and aromatic, e.g. dimethyl amine, propylamine, pyridine, triethylamine), azo, diazo, and hydrazines (e.g. dimethyl



# Shenzhen Sinsche Technology Co.,Ltd

hydrazine, hydrazine, methyl hydrazine), caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), cyanides (e.g. potassium cyanide, sodium cyanide), dithiocarbamates (e.g. ferbam, maneb, metham, thiram), fluorides (inorganic, e.g. ammonium fluoride, calcium fluoride, cesium fluoride), isocyanates (e.g. methyl isocyanate), metals (alkali and alkaline, e.g. cesium, potassium, sodium), metals as powders (e.g. hafnium, raney nickel), metals and metal compounds (toxic, e.g. beryllium, lead acetate, nickel carbonyl, tetraethyl lead), nitrides (e.g. potassium nitride, sodium n.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

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## Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 64-19-7: AF1225000 CAS# 7732-18-5: ZC0110000 LD50/LC50:

CAS# 64-19-7: Draize test, rabbit, skin: 50 mg/24H Mild; Inhalation, mouse: LC50 = 5620 ppm/1H;

Oral, rat: LD50 = 3310 mg/kg; Skin, rabbit: LD50 = 1060 uL/kg.

CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.

Carcinogenicity:

Acetic acid - Not listed by ACGIH, IARC, or NTP.

Water - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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## Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Fathead Minnow: 122 mg/L; 24 Hr.; Reconstituted WaterFish: Fathead Minnow: LC50 = 88

mg/L; 96 Hr; Static bioassay @ 18-22CFish: Bluegill/Sunfish: LC50 = 75 mg/L; 96 Hr;

UnspecifiedFish: Goldfish: LC50 = 423 mg/L; 24 Hr; UnspecifiedWater flea Daphnia: EC50 = 32-47

mg/L; 24-48 Hr; UnspecifiedBacteria: Phytobacterium phosphoreum: EC50 = 8.86-11 mg/L;

5,15,25 min; Microtox test

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## Section 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location.

Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

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## Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: Acetic Acid Solution

Hazard Class: 8

UN Number: 2790



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Packing Group: III

IMO

Shipping Name: Acetic Acid Solution

Hazard Class: 8

UN Number: 2790

Packing Group: III

RID/ADR

Shipping Name: Acetic Acid Solution

Hazard Class: 8

UN Number: 2790

Packing group: III

USA RQ: CAS# 64-19-7: 5000 lb final RQ; 2270 kg final RQ

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## Section 15 - REGULATORY INFORMATION

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 34 Causes burns.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

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

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 64-19-7: 1

CAS# 7732-18-5: No information available.

Canada

CAS# 64-19-7 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 64-19-7 is listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 64-19-7 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.



## **16 Other information**

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Rev. No./Repl. SDS Generated

version 1

### **DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.