

Section 1: Product & Company Information**Product Identifier:** Sodium Thiosulfate Rice Pentahydrate**Other Means of Identification**Product Number: 122258
104020**Recommended Use and Restrictions on Use**Recommended Use: Emulsifier. Water treatment.
Restrictions on Use: Not known.**Manufacturer / Importer / Supplier / Distributor Information****Company Name:** CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918
USA**Information Telephone Number:** 1-865-524-4239
Fax Number: 1-865-524-3375
Website: www.corecheminc.com
Contact Person: Regulatory Manager
E-mail: regulatory@corecheminc.com**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)**Section 2: Hazards Identification****GHS Hazard Classification(s)**

Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Section 3: Composition/Information on Ingredients**Substance**

Chemical Identity ²	Common Name/Synonym(s)	CAS # ³	Weight %	Impurity or Stabilizing Additive
Sodium Thiosulfate Pentahydrate	-	10102-17-7	99-100%	No

1. Information regarding the composition and the percentage ranges of the mixtures ingredients are not presented as its Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.

2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.

3. "—" Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures**General Information**

Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation

Get them to fresh air and keep them warm and resting in a comfortable position to breathe in. loosen tight clothing. Get medical attention for any breathing difficulty.

Skin Contact

Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye Contact

Flush thoroughly with water. Take out contacts and open eyes wide. If irritation occurs, get medical assistance.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed Symptoms

No data available.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Treat symptomatically. Symptoms may be delayed.

Section 5: Fire-Fighting Measures

General Fire Hazards

Not considered a fire hazard.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

Do not use water streams.

Specific Hazards Arising from the Chemical

Harmful gases and/or vapors.

Hazardous Combustion Product:

Oxides of sulfur and sodium.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

Avoid breathing fire gasses or vapors. Evacuate the area. Cool containers exposed to the heat with water spray and remove them from the area if it can be done safely.

Special Protective Equipment for Fire-Fighters

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

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

No data available.

Methods and Materials for Containment and Clean-Up

Collect spillage with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

Notification Procedures

Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental Precautions

Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions for Safe Handling

Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. Do not breathe dust. Keep container closed and tightly sealed when not in use. Use good hygiene practices.

Conditions for Safe Storage, including any Incompatibilities

Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.

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Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Use tight fitting goggles if dust is generated.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respiratory Protection

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions., level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks) wear an SCBA. **WARNING! Air purifying respirators do not protect workers in oxygen-deficient atmospheres.** If respirators are used, OSHA requires a written respiratory protection program that includes at least, medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Hygiene Measures

Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

Section 9: Physical and Chemical Properties

Appearance:

Physical State: Solid
Color: White

Odor:

Odorless

Odor Threshold:

No data available.

pH:

6.0 - 8.0 (Solution)

Specific Gravity /density

1.74 g/cm³

Melting Point/Freezing Point:

48 °C (118 °F) Loses water @ 100 °C

Initial Boiling Point and Boiling

>100 °C (> 212 °F) (Decomposes)

Range:

Flash Point:

No data available.

Evaporation Rate (butyl acetate=1):

No data available.

Flammability (solid, gas):

No data available.

Upper/Lower Limit on Flammability or Explosive Limits

Flammability Limit – Upper: No data available.

Flammability Limit – Lower: No data available.

Explosive Limit – Upper: No data available.

Explosive Limit – Lower: No data available.

Vapor Pressure:

No data available.

Vapor Density (air =1):

No data available.

Relative Density (water=1):

1.7 – 1.75 (20 °C)

Solubility(ies):

Solubility in water: 79g/100 ml water @ 4°C (39°F)

Solubility (other): No data available.

Partition coefficient

Log Pow: -4.53 at 25°C

(n-octanol/water):

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Auto-Ignition Temperature: No data available.
Decomposition Temperature: No data available.
Viscosity: No data available.

Other Information:

Molecular Weight: 248.21 g/mol
Formula: Na₂S₂O₃·5H₂O

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical Stability

Sodium Thiosulfate, Pentahydrate is stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Incompatibilities and excessive heat. Excessive moisture.

Incompatible Materials

Alcohol, Strong reducing agents, Strong bases, Powdered metals, Organic materials.

**Hazardous
Products Decomposition**

Thermal oxidative decomposition of sodium thiosulfate, pentahydrate can produce hydrogen Sulfide and Sodium Oxide.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: Causes severe irritation and possible burns to the mouth and throat. Gastrointestinal disturbances may be expected with nausea, abdominal pain, and vomiting.

Inhalation: Causes irritation to the respiratory tract. Symptoms may include sore throat, shortness of breath, inflammation of nasal passages, coughing, and wheezing. May cause lung edema, a medical emergency.

Skin Contact: Irritation may occur from prolonged skin contact.

Eye Contact: Contact may cause mechanical irritation.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Sodium Thiosulfate Pentahydrate (CAS# 1303-96-4): LD50 (Mouse) 2000 mg/kg

Dermal

No data available.

Inhalation

Sodium Thiosulfate: LD50 rat: > 2.6 mg/l - 4h

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

Causes severe irritation or burns. Symptoms include redness, itching and pain. May cause allergic skin reaction.

Serious Eye Damage/Eye Irritation

Can cause severe irritation or burns with eye damage.

Respiratory/Skin Sensitization

No data available.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

None known.

Specific Target Organ Toxicity - Single Exposure

None known.

Specific Target Organ Toxicity - Repeated Exposure

None known.

Aspiration Hazard

Not classified.

Other Effects

None known.

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability

Biodegradation

This product does not biodegrade.

BOD/COD Ratio

No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

Log Pow: -4.53 at 25 C

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Chemical waste generators must determine at the time of disposal, whether a discarded chemical is classified as a hazardous waste. Chemical additions, processing or otherwise altering this material may make waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. The transportation, storage, treatment and disposal of this waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Contaminated Packaging

Since emptied containers retain product residue, follow label warnings even after container is emptied.

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Section 15: Regulatory Information**US Federal Regulations****Toxic Substances Control Act (TSCA), Chemical Substance Inventory, Section 8(b)**

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)**EPCRA 302 Extremely Hazardous Substance**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No
Sudden Release of Pressure: No
Reactive: No
Acute (Immediate) Health Hazard: No
Chronic (Delayed) Health Hazard: No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 2

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By: Regulatory Manager

Version #: 001

Issue Date: July 9, 2015

Last Revised By: Regulatory Assistant C

Last Revision Date: 5/1/2020

Current Revision: 03

Sections Revised: 2-3, 5, 7-11, 13, 16

Key to Abbreviations and

Acronyms

ATE - Acute Toxicity Estimate

BCF - Bioconcentration Factor

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

l - Liter

lb - Pound

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

mg - milligram

ml - milliliter

N/A - Not Applicable

N/D - Not Determined

PEL - Permissible Exposure Limit

REL - Recommended Exposure Limit

STEL - Short-term Exposure Limit

TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists

AIHA - American Industrial Hygiene Association

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

EPA - US Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - US Occupational Health and Safety Administration

SARA - US EPA Superfund Amendments and Reauthorization Act

TSCA - US EPA Toxic Substances Control Act

UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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