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Section 1: Product & Company Information

Product Identifier: Trisodium Phosphate

Other Means of Identification

Product Number: 132005

Recommended Use and Restrictions on Use

Recommended Use: Used in softening water, tanning leather, manufacturing paper, clarifying sugar, in detergent mixtures, photographic developers,

food additives, buffers, emulsifiers, dietary supplements, boiler water compounds, and industrial cleaners.

Restrictions on Use: None Known

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc. Address: 4320 Greenway Drive Knoxville, TN 37918

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)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)

Not classified.

Health Hazard(s)

Corrosion/Irritation, Skin - 2 (Corrosion)Damage/Irritation, Eye - 2A

Environmental Hazard(s)

Not classified.

Label Elements Signal Word WARNING

Hazard Symbol(s)

No symbol



Hazard Statement(s)

H315: Causes skin Irritation. H319: Causes serious eye Irritation.

Precautionary Statements

General

Not applicable.

Prevention

P264: Wash face, hands and any exposed skin thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

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

P321: Specific treatment (see supplemental first aid instructions on this label).

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

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

Storage

Not applicable.



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Disposal

Not applicable.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity ²	Common Name/Synonym(s)	CAS# ³	Weight %	Impurity or Stabilizing Additive
Trisodium Phosphate Dodecahydrate	None Known	10101-89-0	100	None

- 1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it 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

After First Aid, get appropriate in plant, paramedic, or community medical support.

Inhalation

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Get medical aid.

Skin Contact

Immediately flush skin with plenty of soap and water for at least 15 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately. Do not allow victim to rub or keep eyes closed.

Ingestion

If victim is conscious and alert, give 2-4 cupsful of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

$Most\ important\ symptoms/effects,\ acute\ and\ delayed$

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

Product Itself is noncombustible.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Use media appropriate to surrounding fire since this product is noncombustible.

Unsuitable Extinguishing Media

No data available.

Specific Hazards Arising from the Chemical

In a fire situation at high temperatures, phosphates can emit highly toxic phosphorus oxide fumes.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

 $Do \ not \ release \ runoff \ from \ fire \ control \ methods \ to \ sewers \ or \ waterways.$

Special Protective Equipment for Fire-Fighters

Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or positive pressure mode.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Cleanup personnel should wear the necessary personal protective equipment to prevent skin or eye contact and dust inhalation.



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Methods and Materials for Containment and Clean-Up

Small Spills: Vacuum or sweep up material and place in a suitable disposal container.

Large spills: Containment: Dike with inert absorbent material, as needed, to contain and limit the spill area. Sweep, vacuum, or scoop up the spilled solid, avoiding dust generation, into a suitable disposal container. (with a secure lid) Do not release into sewers or waterways.

Cleanup: Flush residues to drain with plenty of water.

Notification Procedures

Notify authorities if any exposure to the public or environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

Environmental Precautions

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

Section 7: Handling and Storage

Precautions for Safe Handling

Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with the eyes, skin and clothing. Keep container tightly closed. Avoid ingestion and inhalation

Conditions for Safe Storage, including any Incompatibilities

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

Section 8: Exposure Controls/Personal Protection

Control Parameters

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

Biological Limit Values

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

Appropriate Engineering Controls

Avoid dust inhalation, body contact, contact with acidic materials, and heating to decomposition.

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

Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face -protection regulations (29 CFR 1910.133) Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of or in conjunction with contact lenses.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear chemically protective gloves, boots, aprons and gauntlets to prevent prolonged or repeated skin contact.

Respiratory Protection

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given worker conditions, level of airborne contamination, and presence of enough 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 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/ off White
Odor: Odorless
Odor Threshold: No data available.

DAGOT I Treshold:No data available.
No data available.

Melting Point/Freezing Point: 73.3 to 76.7 °C / 163.9 to 170.1 °F

Initial Boiling Point and Boiling Range: 100 °C / 212 °F
Flash Point: Not applicable.

Evaporation Rate (butyl acetate=1): No data available.
Flammability (solid, gas): No data available.

Upper/Lower Limit on Flammability or Explosive Limits



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Flammability Limit – Upper: Not applicable.
Flammability Limit – Lower: Not applicable.
Explosive Limit – Upper: Not applicable.
Explosive Limit – Lower: Not applicable.
Vapor Pressure: No data available.
Vapor Density (air = 1): No data available.
Relative Density (water=1): No data available.

Solubility(ies):

Solubility in water:
Solubility (other):
No data available.
Partition coefficient (n-octanol/water):
Not applicable.
Auto-Ignition Temperature:
Not applicable.
Viscosity:
No data available.

Other Information:

Molecular Weight: No Data Available Formula: No data available.

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical Stability

Stable at room temperature in closed containers under normal storage and handling conditions.

Possibility of Hazardous Reactions

Thermal oxidative decomposition if trisodium phosphate can produce highly toxic fumes of phosphorus oxides, and sodium oxides.

Conditions to Avoid

Never heat to decomposition.

Incompatible Materials

This strong caustic material reacts violently with water and strong acids to generate heat.

Hazardous Decomposition Products

Phosphourous oxides, and sodium oxides.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: No Data available Inhalation: No data Available Skin Contact: No data Available Eye Contact: No data Available

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Trisodium Phosphate: LD50 (Rat) 7400 mg/kg

Dermal

No data Available

Inhalation

No data Available

Repeated Dose Toxicity

No data Available

Intravenous

Trisodium Phosphate: LDLo (Rabbit) 1580 mg/kg

Skin Corrosion/Irritation

No information available

Serious Eye Damage/Eye Irritation

No information available

Respiratory/Skin Sensitization

No information 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.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

Trisodium Phosphate: TLm (mosquito fish) 151 ppm/96 hr.

Aquatic Invertebrates

Trisodium Phosphate: TLm (Daphnia Magna) 126 ppm/96 hr.

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

Expected to be readily biodegradable.

BOD/COD Ratio

No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

No data available.

Mobility in Soil

The product is water soluble and may spread in water systems.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Scrap materials can be used for neutralizing acid wastes or buried in an approved landfill. If regulations permit, you may flush small amounts to drain with large excess of water. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, State and local regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.



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Section 14: Transportation Information

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.

UN Number: UN 3077

UN Proper Shipping Name: Sodium Phosphate Dodecahydrate

Technical Name: Environmentally hazardous substance, Solid, n.o.s.

Hazard Class: 8 Subsidiary Hazard Risk: -Packing Group: III

DOT Label/Placard Exemptions: Not determined

Special Provisions:

Packaging Exceptions: 49CFR 173. Packaging Non-Bulk: 49CFR 173. Packaging Bulk: 49CFR 173. Reportable Quantity (RQ): 1,000lb (454kg)

Marine Pollutant: No Poison Inhalation Hazard: No

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons

transporting the product know what to do in the event of an accident or spillage.

Emergency Response Guidebook (ERG) #:

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance 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: Yes

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.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 3

Chronic Health Hazard: / *

Flammability: 0
Physical Hazard: 0

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

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 3

Fire Hazard: 0

Reactivity Hazard: 0

Special: N/A W OX COR POI



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

Prepared By: Regulatory Manager Version #: 001 Issue Date: September 27, 2018 Revision Date: -

Revisions: -

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 I – 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

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