AQUABOND Chemistry for Tomorrow SAFETY DATA SHEET

Tetrasodium Pyrophosphate

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Tetrasodium Pyrophosphate**
Product code:	1180
Recommended use of the chemical and restrictions on use:	Industrial applications.
Chemical family:	Pure substance.
Name, address and phone # of supplier:	Aqua Bond Inc. PO Box 63635, Toronto, ON, M1V 5K2 (416) 754-7211
24 Hr. Emergency phone #	**CANUTEC (613) 996-6666**

SECTION 2: HAZARDS IDENTIFICATION

Classification of the chemical:	This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).
Hazard classification:	SERIOUS EYE DAMAGE/IRRITATION: CATEGORY 1 ACUTE TOXICITY, ORAL (Category 4)
Label elements:	No pictogram according to the established criteria.
Signal word:	Warning
Hazard statements:	H302 Harmful if swallowed. H318 Causes serious eye damage.
Precautionary statements:	P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P280 Wear eye protection/ face protection. P305+P351+P338+p310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P501 Dispose of contents/ container to an approved waste disposal plant.
Other hazards:	Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Pure substance

Ingredient name	**CAS Number**	**Concentration (wt. %)**
Tetrasodium Pyrophosphate	7722-88-5	≥96.5

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion	DO NOT induce vomiting, rinse mouth. Administer water if patient is conscious. Get medical attention if a large amount is swallowed. Get medical attention if you feel unwell.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

	give oxygen. Get medical attention if irritation develops or persists.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention.
Eye contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if pain and irritation develops or persists.

Most important symptoms and effects, both acute and delayed: Not available.
Indication of any immediate medical attention and special treatment needed: Not available.
Protection of first-aiders: First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	
Suitable	Not flammable/combustible. Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	None known.
Special hazards arising from the substance:	Ambient fire may liberate hazardous vapours.
Hazardous thermal decomposition products:	Oxides of phosphorus, sodium oxides.
Specific hazards:	Not available.
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Wear chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material. Avoid dust formation. Remove all sources of ignition. Do not get water inside containers. Do not expose spill to water.
Environmental precautions:	Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and materials for containment and cleaning up:	Wear protective eyeware, gloves, and clothing. Refer to Section 8. Always obey local regulations. Containerize for disposal. Refer to Section 13. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal.
Special spill response procedures:	In case of transportation accident, contact CANUTEC at (613) 996-6666.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment. Avoid exposure – obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.
Conditions for safe storage:	Store in accordance with local regulations. Store in a segregated and approved area. Store protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be resealed and kept upright. Do not store in unlabeled containers.
Incompatible materials:	Violent reactions possible with: Strong oxidizing agent, Strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:	
Exposure limits:	Not available.
Engineering controls:	Ensure adequate ventilation, especially in confined areas.
Individual protection measures:	Eyes/face: Chemical splash goggles and face shield. Skin: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Respiratory: Wear appropriate respirator where spray mist occurs. Be sure to use a NIOSH approved dust and mist respirator or equivalent. Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystal or crystalline powder.
Odor:	Odourless.

Odor threshold:	Not applicable.
pH:	Not available.
Melting point:	988°C
Initial boiling point and boiling range:	Not available.
Flash point:	Not available.
Evaporation rate:	Not applicable.
Flammability:	Not available.
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not applicable.
Vapour density:	Not applicable.
Relative density:	2.53 g/cm^3
Solubility:	Water: 67 g/l (at 25 °C)
Partition coefficient n-octanol/water:	Not applicable.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Stable at ambient temperature and under normal conditions of use
Chemical stability:	Stable at standard temperature and pressure.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Exposure to moisture and heat.
Incompatible materials:	Violent reactions possible with: Strong oxidizing agent, Strong acids.
Hazardous decomposition products:	Oxides of phosphorus, sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:	LD50 Rat Oral female: > 300 - < 2,000 mg/kg (OECD Test Guideline 420)) LD50 Rabbit Dermal male and female: > 2,000 mg/kg LC50 Rat Inhalation male and female: 4 h - > 0.58 mg/l - dust/mist (OECD Test Guideline 403) Remarks: (highest concentration to be prepared) The value is given in analogy to the following substances: Disodium pyrophosphate
Potential health effects (acute):	May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation
Delayed and immediate effects, chronic effects from short and long term exposure:	None known.
Potential chronic health effects:	None known.
Carcinogenicity:	Not listed as a carcinogen.
Mutagenicity:	No data available.

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Teratogenicity:	No data available.
Developmental effects:	No data available.
Fertility effects:	No data available.
Sensitization:	No data available.
Toxicological effects:	No data available.
Irritation/corrosion:	Serious eye damage/eye irritation. (irreversible effects on the eye - 4 h Rabbit)

Specific target organ toxicity single exposure: No data available.
Specific target organ toxicity repeated exposure: No data available.
Aspiration hazard: No data available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Fish: semi-static test LC50 - Oncorhynchus mykiss (rainbow trout): > 100 mg/l - 96 h (OECD Test Guideline 203)

Aquatic Invertebrates: static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (US-EPA)
LC50 Physaheterostropha: 940 mg/L/96 hr

Aquatic Plants: static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
static test NOEC - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)

Bacteria: static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: dipotassium hydrogen phosphate.

Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	Not regulated.
UN proper shipping name:	-
Transport hazard class:	-
Packing group:	-
Environmental hazard:	No data available.
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.

SECTION 15: REGULATORY INFORMATION

United States

Toxic Substances Control Act (TSCA) — All components are listed.

Canada

Canadian Domestic Substances List (DSL): — All components are listed.

SECTION 16: OTHER INFORMATION

Revision date: May 23, 2024

UN = United Nations

Disclaimer

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