SAFETY DATA SHEET

Ammonium Persulphate Sol. 10%

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Ammonium Persulphate Sol. 10%**
Product code:	5602
Recommended use of the chemical and restrictions on use:	Industrial applications.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. PO Box 63635, Woodside Square 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:
OXIDIZING LIQUID- CATEGORY 3
ACUTE TOXICITY (ORAL)- CAT 4
ACUTE TOXICITY (DERMAL)- CAT 4
SKIN IRRITATION - CAT 2
EYE IRRITATION - CAT 2A
RESPORATORY SENSITIZATION – CAT 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) – CAT 3



Label elements:

Signal word: Danger

Hazard statements:
H272 – May intensify fire; oxidizer
H302- Harmful if swallowed
H312- Harmful in contact with skin
H315- Causes skin irritation
H317- May cause an allergic skin reaction
H319- Causes serious eye irritation
H334- May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335- May cause respiratory irritation

Precautionary statements:
P210- Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P220- Keep/Store away from clothing combustible materials.
P221- Take any precaution to avoid mixing with combustibles
P261-Avoid breathing dust/fume/gas/mist/vapors/spray.

P264- Wash skin thoroughly after handling.
P271-Use only outdoors or in a well-ventilated area.
P273- Avoid release to the environment.
P280- Wear protective gloves/protective clothing/eye protection/face protection.

Other hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	CAS Number	Concentration (%)
Ammonium Persulphate	7727-54-0	10
Water	7732-18-5	90

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give large quantities of water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, administer oxygen if available by trained personnel. Seek medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops, seek medical attention.

Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation develops.

Most important symptoms and effects, both acute and delayed:

Corrosive to skin and eyes. Do not ingest, inhale, and avoid contact with skin, eyes and clothing.

Indication of any immediate medical attention and special treatment needed:

No specific treatment. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable: Use any means suitable for extinguishing surrounding fire. Do not use water.

Special hazards arising from the substance: Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Heating or contact with water releases oxygen which may intensify combustion in an existing fire. An explosion hazard when mixed with finely powdered organic matter, metal powder, or reducing agents.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up:	Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Special spill response procedures:	In case of transportation accident, contact CANUTEC (613) 996-6666.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment (see Section 8). 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 vapour 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. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous.
Conditions for safe storage:	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Separate from incompatibilities. Store below 25C. Protect from direct sunlight. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid);

	observe all warnings and precautions listed for the product.
Incompatible materials:	Reducing agents, caustics, combustible material, metals, oxidizers, organic material.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Ammonium persulphate	**ACGIH TLV** 0.1 mg/m3 TWA **OSHA PEL** 0.1 mg/m3
Engineering controls:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits.
Individual protection measures:	Eyes/face: Chemical splash goggles and face shield. Skin: Chemical-resistant, impervious gloves (PVC, Butyl or nitrile rubber) 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. Respiratory: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid.
Odour:	Odourless.
Odour threshold:	Not available.
pH:	1-3
Melting point:	Not available.
Freezing point:	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	Not available
Evaporation rate:	Not available.
Flammability:	Not applicable.
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not available

Vapour density:	Not available.
Relative density:	0.95 – 1.16
Solubility:	Soluble.
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	This product will decompose slowly, release oxygen, and lose effectiveness.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials:	Reducing agents, caustics, combustible material, metals, oxidizers, organic materials.
Hazardous decomposition products:	Oxides of sulphur and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological effects:
Acute toxicity:

Product	**Result**	**Species**	**Dose**
Ammonium Persulfate	LD50 oral	Rat	689 mg/kg

Oral:	Toxic effect.
Inhalation:	May cause allergy or asthma symptoms.
Skin:	May cause irritation.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from NTP, IARC, ACGIH or OSHA.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: Not available.
Persistence and degradability Not available.
Behaviour in environmental system:
Bioaccumulative potential Not available.
Mobility in soil: Not available.

Additional ecological information: Avoid transfer into the environment.
Other adverse effects: Not 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	3216
UN proper shipping name:	INORGANIC PERSULPHATES, AQUEOUS SOLUTION
Transport hazard class:	5.1
Packing group:	III
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.

SECTION 15: REGULATORY INFORMATION

Canada inventory (DSL): All components are listed on DSL.

SECTION 16: OTHER INFORMATION

Revision date: March 28, 2023
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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