

Aquachlor Stain Free Plus

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: Aquachlor Stain Free Plus
Manufacturers' Code & A67419
Pack Size: 1 Litre
Recommended Use: Solution of acid phosphates for discolouring pool waters
Supplier's Details: Waterco Limited
36 South Street
Rydalmere, NSW 2116
Ph: (02) 9898 8600
Emergency Phone Number: Business hours only (02) 9898 8682
General Information
24 Hour Emergency Number:
Australia: Poisons Information Centre Australia Wide
Ph 13 1126
New Zealand: Poisons INFORMATION CENTRE
0800 POISON (0800 764 766)

SECTION 2 - HAZARD IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

Classified as a hazardous substance according to the criteria of the National Occupational Health and Safety Commission.

UN Number: 3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S.
Dangerous Goods Class: 8
Subsidiary Risk: Not applicable
Packing Group: III
Hazchem Code: 2X
Risk Phrases:
R22 Harmful if swallowed.
R36 Irritating to eyes.
Safety Phrases:
S25 Avoid contact with eyes.

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SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity†	Synonyms	CAS Number	Concentration
1-Hydroxyethylidene-1, 1-diphosphonic acid	HEDP	2809-21-4	Below 20%
Phosphorous acid		10294-56-1	Below 1%
Water		7732-18-5	To 100%

† Where they are present in this product and other ingredients of this material are not hazardous, as defined by either inclusion in the *List of Designated Hazardous Substance* or classified in accordance with the *Approved Criteria for Defining a Hazardous Substance*, and published by the National Occupational Health and Safety Commission/AGPS, 1999

SECTION 4 - FIRST AID MEASURES

First Aid: Take a copy of this MSDS to medical advisers if signs or symptoms of overexposure occur and medical attention is required.

Swallowed: Immediately rinse mouth out with water. Give two glasses of water and do not induce vomiting. If vomiting occurs, give further water. Never give anything by mouth to an unconscious person. Seek advice immediately from a medical practitioner or Poisons Information Centre.

Skin: Thoroughly wash exposed skin with plenty of soap and water. Seek medical advice if skin irritation occurs or for all acid burns.

Eye: If contact occurs, or if eye irritation arises, hold the eyelid(s) open and flush the eye(s) with fresh lukewarm water (or, if available, other eye cleansing solutions) for at least 15 minutes. Take care not to rinse contaminated water into the non-affected eye. Seek medical advice immediately for all eye contact. If necessary, transport patient to hospital.

Inhaled: Remove affected individual from exposure to fresh air. Keep individual warm and comfortable. Seek medical advice if respiratory symptoms occur.

First Aid Facilities: If practicable, an eyewash station should be available.

Advice to Doctor: No specific treatment recommended. Treat symptomatically for exposure to an acid solution.

Medical Conditions that may be aggravated by Exposure: Pre-existing respiratory conditions may be affected by inhalation of this product.

SECTION 5 - FIRE FIGHTING MEASURES

Hazchem Code: 2X

Extinguishers: Use an extinguisher commensurate with the fire risks of other materials in the fire.

Fire Fighting Precautions: Fire fighters must wear full protection. Phosphines may be produced if all the water in the product is removed.

Degradation Products:

Combustion Products: Carbon dioxide (carbon monoxide in cases of incomplete combustion), oxides of nitrogen and smoke.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills promptly. Keep spilt product out of drains, sewers and waterways. Spills should be contained, and the possibility of collection for re-use evaluated. If this is not possible, work upwind and ventilate the area of the spill. Wear personal protective equipment as specified below, and absorb any solution using absorbents, sand or earth, and place in a leak-proof container for disposal. If required, spills can be neutralised with an alkaline material, such as soda ash or slaked lime. Wash down the area of spill with plenty of water to remove any remaining residues.

SECTION 7 - HANDLING AND STORAGE

Handling: Keep out of the reach of children. Do not eat, drink or smoke while handling the product. Do not swallow. Avoid contact with the eyes. Avoid skin contact. See below for specific advice on controls and precautions.

Storage: The product is a scheduled poison (S6) and should be stored and used in accordance with the Standard of the Uniform Scheduling of Drugs and Poisons, and Poisons legislation. Minimal conditions include storage in a cool, dry, ventilated store away from sunlight and incompatible substances. Store away from alkalis and oxidizers. Containers should be kept upright, closed and airtight when not in use.

Incompatibilities: Alkalis, pool chemicals containing chlorine, chlorine containing chemicals.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards: No ingredients in this product have exposure standards, as outlined in the standard *Exposure Standards for Atmospheric Contaminants in the Occupational Environment* third edition, published by the National Occupational Health and Safety Commission/AGPS, 1995.

Personal Protective Equipment: All personal protective equipment should be selected, used, maintained and decontaminated in accordance with manufacturers' instructions and applicable standards.

Clothing: Overalls and boots should be worn as a general requirement.

Skin Protection: Where skin exposure is likely, skin protection is required, including gloves and apron. Chemically resistant gloves made of rubber, nitrile, PVC or neoprene should be satisfactory. Any such gloves should comply with Australian Standards AS 2161.

Eye Protection: Eye protection should be used where splashing of solutions or large amounts of mists may be generated. Face-shield, chemical goggles or safety glasses with side shields are suitable. Such eye protection should comply with Australian Standards AS 1336/1337.

Respiratory Protection: Respiratory protection is required, where the production of mists is significant. In such cases, a suitable respirator, such as an approved respirator with an acid filter should be used. The selection, use and maintenance of such respiratory protection should comply with Australian Standard AS 1517/1716.

Personal Hygiene: Always wash hands after using this product. Always wash hands before eating, drinking, smoking or using the toilet.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odour:	Clear colourless liquid with irritating vapours.
pH:	Below 2
Vapour Pressure:	Not applicable
Vapour Density:	Not applicable
Boiling Point/Range:	Not known
Freezing/Melting Point:	0°C
Solubility in Water:	Complete
Specific Gravity/Density:	1.45 at 15°C
Flash Point:	Non flammable
Lower Flammability Limit:	Non flammable
Upper Flammability Limit:	Non flammable
Evaporation Rate:	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions to Avoid:	Extremes of heat. Incompatible chemicals.
Incompatible Material:	Alkalis, pool chemicals containing chlorine, chlorine containing chemicals.
Hazardous Reactions:	Highly corrosive to most common metals with evolution of hydrogen, an explosive gas. Reacts with bleaches and pool chlorine chemicals producing chlorine. See section on Incompatibilities.

SECTION 11 - TOXICOLOGICAL INFORMATION

Oral LD ₅₀ (rat) = 2400 mg/kg (not hazardous)
Dermal LD ₅₀ (rabbit) = above 8,000 (not hazardous)
Eye irritation (rabbit) = Corrosive
Skin irritation (rabbit) = Not irritating

The results of tests in animals suggest that HEDP may cause effects on bone and reversible changes in blood forming tissues at very high doses.

HEDP does not cause birth defects in pregnant animals.

HEDP does not cause damage to genetic material.

Routes of Exposure: The primary hazard of this product is eye and skin contact to the liquid and inhalation of irritating mists.

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Acute Effects:

Swallowed: Harmful if swallowed. If large amounts are swallowed, this product may be corrosive to the mouth and digestive system. Other symptoms include gastric pain, nausea, vomiting and diarrhoea.

Skin: Mildly irritating to skin.

Eye: Moderately irritating to the eye on contact, with symptoms of discomfort, tears and blurred vision. Conjunctivitis may also occur. Corrosion to the cornea and other eye surfaces is also possible where excessive exposure occurs.

Inhaled: Airborne mists may be irritating to the upper airways and lungs producing discomfort, coughing and sneezing.

Chronic Effects: Adverse health effects have not been reported following occupational exposures to more concentrated formulations of this product. HEDP is also used as a drug in the medical treatment of some bone conditions.

SECTION 12 - ECOLOGICAL INFORMATION

Algae ED₅₀ (96 hr) = 3mg/L (14 day) = 39 mg/L
Daphnia magna EC₅₀ (48 hr) = 527 mg/kg
Fish LC₅₀ = from 368 mg/L
Bird LD₅₀ = above 2,500 mg/kg
Oyster shell deposition = 89 mg/kg

Phosphorus containing materials are considered an environmental hazard and are associated with algal blooms where water contamination by spills or if run off occurs. Avoid contaminating waterways.

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not discharge this product to natural waterways, storm water channels or sewers. This product is a hazardous waste and it can, along with its containers, be disposed in consultation with waste management authorities and in accordance with local regulations.

SECTION 14 - TRANSPORT INFORMATION

UN Number: 3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S.
Dangerous Goods Class: 8
Subsidiary Risk: Not applicable
Packing Group: III
Hazchem Code: 2X

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Special Precaution to User: The product is classified as dangerous good (Class 8 Corrosive substances). Transport in accordance with the Australian Dangerous Good Code and Dangerous Goods legislation.

SECTION 15 - REGULATORY INFORMATION

Poisons Schedule: S6

Product: 1-Hydroxyethylidene-1, 1-diphosphonic acid (CAS: 2809-21-4) is found in the following regulatory lists:

AICS Listing

International Council of chemical Associations (ICCA) – High Production Volume List

New Zealand Inventory of Chemicals (NZIoC) HSNO Approval Code: HSR006527

Product: Phosphorous acid (CAS: 10294-56-1) is found in the following regulatory lists:

AICS Listing

Hazardous Substances Information System (HSIS)

New Zealand Inventory of Chemicals (NZIoC) HSNO Approval Code: HSR003414

SECTION 16 - OTHER INFORMATION

Worker Training: As a minimum all workers using this product should be shown a copy of this MSDS before first use.

Date of Preparation of this MSDS: January, 2007

Revised: October, 2008 – Address Changed

Revised: December, 2010 – Hazard Identification, Regulatory Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

AICS Australian Inventory of Chemical Substances

CAS number Chemical Abstracts Service Registry Number

Hazchem Number Emergency action code of numbers and letters that provide information to emergency services especially fire fighters

IARC International Agency for Research on Cancer

ASCC Office of the Australian Safety and Compensation Council

NOS Not otherwise specified

NTP National Toxicology Program (USA)

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R-Phrase	Risk Phrase
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

This material safety data sheet (MSDS):

1. Is produced by Waterco Ltd for use in Australia, and is based on information supplied to Waterco Ltd by our suppliers.
2. Summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace,
3. Has been formatted to MSDS format accepted by the National Occupational Health and Safety Commission for use in Australia.
4. Has been produced following the principles and recommendation outline in the *National Code of Practice for the Preparation of Material Safety Data Sheet* published by the National Occupational Health and Safety Commission/AGPS, Canberra, 2003.

Each user must review this MSDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriated risk assessment can be made, the user should contact Waterco Ltd.

If this MSDS is a copy, or more than five years old, contact Waterco Ltd for a new one.