AGAR™
The Chemistry of Cleaning™
ABN 80 004 726 890 | MADE IN AUSTRALIA

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NSW 02 9743 6020
SA 08 8293 2020
QLD 07 3274 3438
WA 08 9249 4566

Safety Data Sheet

Issued: October 2024

Section 1 - Identification of the Material and Supplier

Chemical nature: Water solution of acids, surfactants and other ingredients.

Trade Name: **ACID WASH**

Product Code: ACW5

Product Use: Dissolves scale and rust from hard surfaces.

Creation Date: **October, 2024**

Expiry date: This SDS shall remain valid for 5 years unless a new SDS is issued in the meantime. Please contact Agar Cleaning Systems P/L to ensure you have the latest version of this product's SDS.

Poisons Information Centre: Phone 13 1126 from anywhere in Australia

SUPPLIER DETAILS

Company: Agar Cleaning Systems Pty. Ltd.
Address: 12-14 Cope Street, Preston, Vic. 3072 AUSTRALIA
Telephone: 03 9480 3000 Facsimile: 03 9480 5100
Web: www.agar.com.au Agar SDS are available from this website.
Email: sales@agar.com.au

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

SUSMP Classification: S5.
ADG Classification: Class 8: Corrosive Substances.
UN Number: 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

GHS Signal word: DANGER

Corrosive to Metals – Category 1
Acute Toxicity Oral – Category 4
Skin Corrosion/ Irritation – Category 1
Eye Damage/ Irritation – Category 1

HAZARD STATEMENT:

H290: May be corrosive to metals.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.

PREVENTION

P102: Keep out of reach of children.
P234: Keep only in original packaging.
P260: Do not breathe mists.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P363: Wash contaminated clothing before reuse.
P304+P340:IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTRE phone Australia 131 126 or a doctor.

P390: Absorb spillage to prevent material damage.

STORAGE

P405: Store locked up.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Diluted Product

This product becomes non-hazardous when diluted to 1 in 38 (2.6%) or more with water.

Emergency Overview

Physical Description & Colour: Colourless liquid.
Odour: None.
Major Health Hazards: Severe skin burns and eye damage. Harmful if swallowed.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m^3)	STEL (mg/m^3)
Phosphoric acid	7664-38-2	20 - 30	1	3
Nonionic surfactant	secret	< 10	not set	not set
Sulfamic acid	5329-14-6	< 5	not set	not set
Phosphonic acid	13598-36-2	< 5	not set	not set
Other non-hazardous ingredients	various	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call the Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Undiluted Product:

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Flush contaminated area with lukewarm, gently flowing water for at least 30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). If irritation persists, repeat flushing. Seek medical attention.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Diluted Product (1 in 6):

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists for more than 30 minutes, seek medical advice.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.
Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness.
Fire decomposition products from this product are likely to be irritating if inhaled.
Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials. Try to contain spills, minimise spillage entering drains or water courses.
Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

Flash point:	Does not burn.
Upper Flammability Limit:	Does not burn.
Lower Flammability Limit:	Does not burn.
Autoignition temperature:	Not applicable - does not burn.
Flammability Class:	Does not burn.

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self-contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC, Viton. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the clean-up area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8).
Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the corrosiveness of this product, special personal care should be taken in any clean-up operation. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal.
Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.
Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well-ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 10000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	**TWA (mg/m^3)**	**STEL (mg/m^3)**
Phosphoric acid	1	3

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Undiluted Product:

Ventilation: This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.
Eye Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.
Skin Protection: Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.
Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC, Viton.
Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.
Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Diluted Product (1 in 6):

Ventilation: No special ventilation requirements are necessary.
Eye Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield.
Skin Protection: Prevent skin contact by wearing impervious gloves and overalls. Make sure all skin areas are covered.
Respirator: Not required under normal conditions.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Colourless liquid.
Odour:	None.
Boiling Point:	Approximately 100°C at 100kPa.
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	< 3% VOC
Vapour Pressure:	No data.
Vapour Density:	As for water.
Specific Gravity:	1.4
Water Solubility:	Completely soluble in water.
pH:	0 – 0.5 (as supplied).
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	As for water.
Coeff Oil/water Distribution:	No data.
Autoignition temp:	Not applicable - does not burn.

Section 10 - Stability and Reactivity

Reactivity and Chemical Stability: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Possibility of Hazardous Reactions: Most strong acids react with inorganic and organic bases such as amines to form salts. They also react with many metals liberating hydrogen gas. These reactions are often rapid and sometimes liberate much heat. They can also decompose many organic materials such as esters, in a reaction called hydrolysis.
This product will not undergo polymerisation reactions.
Conditions to Avoid: Keep containers tightly closed. Containers should be kept dry.
Incompatibilities: Bases, amines, zinc, tin, aluminium and their alloys.
Fire Decomposition: Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon

dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form oxides of sulphur (sulphur dioxide is a respiratory hazard) and other sulphur compounds. Most will have a foul odour. May form oxides of phosphorus and other phosphorus compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Section 11 - Toxicological Information

Information on toxicological effects:

Acute toxicity	Harmful if swallowed.
Skin corrosion/irritation	Corrosion.
Serious eye damage/irritation	Serious eye damage.
Respiratory or skin sensitisation	No known significant effects or hazards.
Germ cell mutagenicity	No known significant effects or hazards.
Carcinogenicity	No known significant effects or hazards.
Reproductive toxicity	No known significant effects or hazards.
Specific target organ toxicity (STOT)- single exposure	No known significant effects or hazards.
Specific target organ toxicity (STOT)- repeated exposure	No known significant effects or hazards.
Aspiration hazard	No known significant effects or hazards.

Classification of Hazardous Ingredients

Ingredient:	Health effects:
Phosphoric Acid	Skin corrosion and serious eye damage. Harmful if swallowed and if inhaled.
Nonionic surfactant	Skin irritation and serious eye damage. Harmful if swallowed.
Sulfamic acid	Skin irritation and eye irritation.
Phosphonic acid	Skin corrosion and serious eye damage. Harmful if swallowed.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. However, product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. If liquid enters nasal passages, it will cause pain and burn nasal membranes. Patients with inhalation burns may develop acute pulmonary oedema.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: This product is corrosive to the skin. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.
Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: This product is corrosive to eyes. It will cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is immediately treated, permanent blindness and facial scarring will occur.
Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. However, this product is corrosive to the gastrointestinal tract. Capable of causing severe burns with deep ulceration, and can penetrate to deeper layers of skin resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure
Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

Ecotoxicity: Not classified as harmful to aquatic organisms. However, until diluted or neutralised it will kill all aquatic organisms it contacts due to extreme pH.
Persistence and Degradability: This product will not accumulate in the soil or water or cause long term problems.
Bioaccumulative Potential: No information available.
Mobility in Soil: No information available.
Other Adverse Effects: No information available.

Section 13 - Disposal Considerations

Disposal: Containers should be emptied as completely as practical before disposal. If possible, recycle product and containers either in-house or send to recycle company. If this is not practical, send to a commercial waste disposal site.

Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

UN Number: 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Hazchem Code: 2X
Special Provisions: 223, 274
Limited Quantities: ADG 7 specifies a Limited Quantity value of 5 L for this class of product.
Dangerous Goods Class: Class 8: Corrosive Substances.
Packing Group: III
Packaging Instruction: P001, IBC03, LP01
Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with AICIS regulations.
The following ingredients are mentioned in the SUSMP: Phosphoric acid and sulfamic acid.

Section 16 - Other Information

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

Abbreviations and Definitions of terms used:

<	Less than.
>	Greater than.
ADG CODE	Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).
AICS	Australian Inventory of Chemical Substances.
CAS	Chemical Abstracts Service (Registry Number).
COD	Chemical Oxygen Demand.
°C	Degrees Celsius.
g	Gram.
g/L	Grams per litre.
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters.
HSIS	Hazardous Substance Information System.
IARC	International Agency for Research on Cancer.
kg	Kilogram.
L	Litre.

miscible	A liquid that mixes homogeneously with another liquid.
N/A	Not Applicable.
N/K	Not Known.
NIOSH	National Institute for Occupational Safety and Health.
non-haz	Non-hazardous.
NOS	Not Otherwise Specified.
NTP	National Toxicology Program (USA).
PEL	Permissible Exposure Limit.
ppb	Parts per billion.
ppm	Parts per million.
R-Phrase	Risk Phrase.
STEL	Short Term Exposure Limit.
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons.
SWA	Safe Work Australia, formerly ASCC and NOHSC.

LC50	The concentration of a material (inhaled) that will be lethal to 50% of the test animals.
LD50	The dose (swallowed all at once) which is lethal to 50% of a group of test animals.
m^3	Cubic metre.
mg	Milligram.
mg/m^3	Milligrams per cubic metre.

TLV	Threshold Limit Value.
TWA	Time Weighted Average.
UN Number	United Nations Number.
wt	Weight.

THIS SDS 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. EACH USER MUST REVIEW THIS SDS 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 APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO PROVIDE ADDITIONAL INFORMATION.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

The information in this Data Sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. As far as lawfully possible, Agar Cleaning Systems accepts no liability for any loss, injury or damage (including consequential loss) suffered or incurred by any person as a consequence of reliance on the information and advice contained herein.

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End of SDS.