

SAFETY DATA SHEET

The information contained in this material safety data sheet is believed to be accurate on the date of issue and in accordance with the information available to us. Persons dealing with products referred to in this material safety data sheet do so at their own risk. We accept no liability whatsoever for damage or injury however caused arising from use of this information or of suggestions contained herein.

SECTION 1 - IDENTIFICATION

Product Name: 925 Efflorescence Remover
Other Names: None Listed
Product Code: 925
Product Type: Phosphoric Acid Solution
Major Ingredients: Phosphoric Acid
Product Use: Solution for removal of white powdery calcium deposits (efflorescence).
Company Details: Base Coatings Pty Ltd (ABN 47 168 205 829)
Address: 3B 62 O'Riordan St Alexandria NSW 2015
Telephone: 1300 850 540
Emergency Telephone: 1300 850 540
Other Information: Users should verify currency of this data sheet if more than 3 years old.

SECTION 2 - HAZARD(S) IDENTIFICATION

Hazardous Nature: Corrosive to Metals: Category 1
Hazardous Classification: Skin corrosion / irritation
Hazardous Statement: Skin Corrosion/Irritation: Category 1A
Signal Word: DANGER
GHS Pictograms



Corrosive

Hazard Statements:

H290: May be corrosive to metals
H314: Causes severe skin burns and eye damage

Precautionary Statements:

P234: Keep only in original container.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+312+101: IF SWALLOWED: Call a POISON CENTRE / doctor, if you feel unwell, and have a product container or label at hand.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P406 Store in corrosive resistant/container with a resistant inner liner.

Dangerous Goods Classification: 8

Poisons Schedule: 6

SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

CAS No:	None allocated		
Chemical Ingredients:	Name	CAS	Proportion
	Phosphoric Acid	7664-38-2	20-40%
	Non hazardous ingredients		Balance

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SECTION 4 - FIRST AID MEASURES

For advice, contact Poisons Information Centre (Australia Ph.: 13 11 26) or a doctor.

Inhalation:	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.
Skin Contact:	Remove contaminated clothing and wash before re-use. Wash affected areas with copious quantities of water immediately. Seek immediate medical advice.
Eye Contact:	Seek immediate medical assistance. Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.
Ingestion:	DO NOT INDUCE VOMITING. Wash out mouth with water, afterwards drink plenty of water. Seek immediate medical attention.
First Aid Facilities:	Provide eye baths and safety showers.
Medical Attention:	Treat symptomatically as for strong acids. Consult Poisons Information Centre.

SECTION 5 - FIRE FIGHTING MEASURES

Shut off product that may “fuel” a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with the Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Hazchem Code:	2R
Extinguishing Agents:	Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media. Small fire: Use dry chemical, CO2 or water spray. Large fire: Use water spray, fog or foam - Do NOT use water jets. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.
Hazards from Combustion:	Phosphoric acid forms toxic phosphorous oxide fumes on combustion.
Precautions:	Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural fire-fighter's uniform is NOT effective for these materials.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.
Major Land Spill:	Eliminate sources of ignition. Warn occupants of downwind areas of possible fire and explosion hazard. Prevent liquid from entering sewers, watercourses or low lying areas. Keep the public away from the area. Shut off the source of the spill if possible to do so. Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation. Take measures to minimise the effect on ground water. Contain the spill with sand or earth. Recover by pumping using an explosion proof pump or hand pump, or with a suitable material. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. See “First Aid Measures” and “Stability and Reactivity”
Major Water Spill:	Eliminate any sources of ignition. Warn occupants and shipping in downwind areas of possible fire and explosion hazard. Notify the port or relevant authority and keep public away from the area. Shut off the source of the spill if safe to do so. Confine the spill if possible. Remove the product from the surface by skimming or with a suitable absorbent material. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. See “First Aid Measures” and “Stability and Reactivity”

SECTION 7 - HANDLING AND STORAGE

Refer Australian Standard AS 3780 - 1994 ‘The storage and handling of corrosive substances’

Precautions for Safe handling:	Avoid prolonged or repeated contact with skin, eyes and clothing . Wash hands and face thoroughly after working with material. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles.
Conditions for Safe Storage:	Store in well ventilated area. Store away from foodstuffs. Keep containers securely sealed and protected against physical damage. Store away from sources of heat or ignition. Keep dry and protect from direct sunlight. Protect from freezing.
Incompatible Materials:	Extremely corrosive in presence of copper, brass and stainless steel. Highly corrosive in presence of aluminium. Mild corrosive effect on bronze. Corrosive to ferrous metals and alloys. Non-corrosive in presence of glass.

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SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards:

Name	mg/m ³	STEL ppm	mg/m ³	TWA ppm
Phosphoric acid	3	-	1	-

Biological Limit: No biological limit allocated

Other Exposure Info: As published by the National Occupational Health and Safety Commission (NOHSC):
TWA – the Time-Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
STEL (short term exposure limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during an eight hour work day.

Engineering Controls: Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required.

Personal Protection

Respiratory Protection: Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

Eye Protection: The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.

Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection: Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste. Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Hygiene Measures: Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colourless syrupy liquid

Odour: Odourless

Specific Gravity: 1.685

pH Value: 1

Viscosity: Not available

Flash Point: Not applicable

Boiling Point / Range: 158°C

Solubility in Water: Completely miscible

Flammability: Non combustible material.

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under normal use conditions.

Conditions to avoid: Incompatibles.

Incompatible materials: Acetulides, alcohols, aldehydes, amides, amines, ammonia or bleach, azo-compounds, carbides, carbamates, caustics, chlorides, combustible materials, cyanides, esters, epoxides, fluorides, glycols, halogenated organics, ketones, mercaptins, nitromethane, organic peroxides, organophosphates, phenols and cresols, phosphides, silicides, sodium tetrahydroborate, strong caustics, stainless steel, sulfides and unsaturated halides.

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide, organic complexes on incomplete burning or oxidation.

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SECTION 10 - STABILITY AND REACTIVITY (CONT.)

Possibility of Hazardous Reactions:

Phosphoric acid decomposes under formation of toxic fumes on contact with alcohols, cyanides, ketones, phenols, esters, sulfides, mercaptans and halogenated organic compounds. Liberates explosive hydrogen gas when reacting with chlorides and stainless steel. Exothermic reactions with aldehydes, amines, amides, alcohols and glycols, azo-compounds, carbamates, esters, caustics, phenols and cresols, organophosphates, epoxides, explosives, combustible materials, unsaturated halids, sodium tetrahydroborate, organic peroxides.

Hazardous Polymerisation:

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Effects

Inhalation:

Harmful if inhaled. Vapour or mist can cause irritation of the nose, throat, and upper respiratory tract. Severe exposures can lead to a chemical pneumonitis.

Ingestion:

Harmful if swallowed and absorbed through membranes. Burns to the mouth, throat and stomach. Symptoms include sour acrid taste, coughing, difficult breathing and swallowing, conjunctivitis, severe gastrointestinal irritation, nausea, vomiting, bloody diarrhoea, severe abdominal pains, extreme thirst, convulsions.

Skin:

Harmful if absorbed through skin. Corrosive. Concentrated acid solutions can cause redness, pain, itching, scaling, occasional blistering, and severe skin burns.

Eye:

Harmful if contact the eyes. Mists may cause eye irritation. Symptoms include of redness, pain, tearing, eyelid spasms, blurred vision, chemical conjunctivitis, burns and permanent eye damage. Risk of blindness!

Chronic Effects:

Dermatitis may occur from prolonged or repeated skin contact. Prolonged or over exposure to phosphoric acid can increase fluid levels in the lungs (pulmonary oedema). May cause clammy skin and dermatitis, weak and rapid pulse, shallow respiration, very little urine, bronchitis, shortness of breath. Severe exposure to phosphoric acid can lead to shock, circulatory collapse and death.

Toxicity Data:

Oral LD₅₀ (Rat): 1530 mg/kg (anhydrous) (IUCLID)

LD₅₀ (Rabbit): 2,740 mg/kg (anhydrous)(IUCLID)

Carcinogenicity:

No evidence of carcinogenic properties.

Mutagenicity:

No evidence of mutagenic effects.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Quantitative data on the ecological effect of this product are not available.

Bioaccumulative:

Phosphate (formed when phosphoric acid is dissolved) is unlikely to bioaccumulate in most aquatic species.

Potential Information on

Ecological Effects:

Excessive amounts of phosphoric acid can affect the pH shift leading to a potential risk to aquatic organisms.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Considerations:

Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

Container Disposal:

Dispose container as hazardous waste.

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SECTION 14 - TRANSPORT INFORMATION

Road and Rail Transport:

UN No.: 1805
Proper Shipping Name: PHOSPHORIC ACID
DG Class: 8
Sub. Risk: None
Packaging Group: III
Hazchem: 2R

Marine Transport:

UN No.: 1805
Proper Shipping Name: PHOSPHORIC ACID
DG Class: 8
Sub. Risk: None
Packaging Group: III
Hazchem: 2R

Air Transport:

UN No.: 1805
Proper Shipping Name: PHOSPHORIC ACID
DG Class: 8
Sub. Risk: None
Packaging Group: III
Hazchem: 2R

Special precautions during transport:

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:
Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8
dangerous goods are acids, Class 7 and are incompatible with food and food packaging in any quantity.

SECTION 15 - REGULATORY INFORMATION

Country / Region: Australia
Inventory: AICS
Status: Listed
Poisons Schedule Number: 6

SECTION 16 - OTHER INFORMATION

Supersedes: August 2015
Reason(s) For Issue: Revised. Format change.

END OF SAFETY DATA SHEET

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Base Coatings cannot anticipate or control the conditions under which the product may be used, therefore each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.