POOLPRIDE PH DECREASE

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
POOLPRIDE PH DECREASE

STATEMENT OF HAZARDOUS NATURE
Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.

OTHER NAMES
NaHSO4, HNaO4S, HO4SNa, "sodium acid sulfate", "sodium acid sulphate", "sodium acid bisulfate", "sodium acid bisulphate", "niter cake", sulphuric, "sulfuric acid, monosodium salt", "Souls dry acid", "Swimfree dry acid", "R70 Spakem Dry Acid", "pH minus dry acid", "Sun pH Down (dry acid)", "sodium hydrogen sulphate", "AR pool tech grade", "J.T. Baker 3534", "Mallinckrodt 7432"

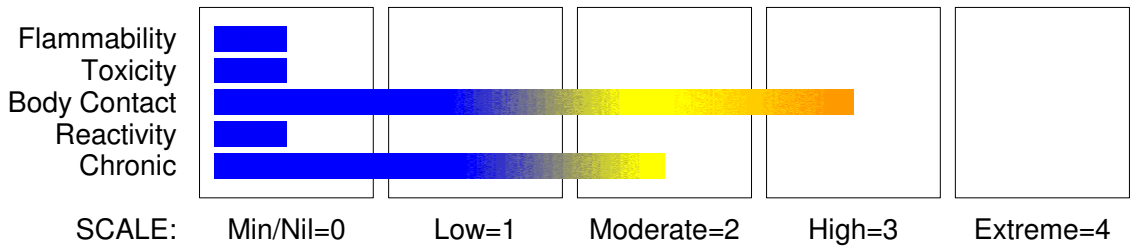
PROPER SHIPPING NAME
CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(contains sodium hydrogen sulfate)

PRODUCT USE
Flux for decomposing minerals; substitute for sulfuric acid in dyeing; disinfectant; manufacture of sodium hydrosulfide, sodium
sulfate, and soda alum; liberating carbon dioxide in carbonic acid baths. Technical grades are used for pickling metals,
carbonizing wool, bleaching and swelling leather, manufacture of magnesia cement.

SUPPLIER
Company: Damar Industries Limited
Address:
Eastgate Business Park
800 Te Ngae Road
Rotorua
Telephone: +64 7 345 6007
Emergency Tel: 0800 2436 2255
Emergency Tel: 0800 CHEMCALL
Fax: +64 7 345 6019

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS



GHS Classification
Serious Eye Damage Category 1
Skin Corrosion/Irritation Category 1C

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EMERGENCY OVERVIEW

HAZARD
DANGER
Gazetted by ERMANZ:
8.2C 8.3A
Causes severe skin burns and eye damage
Causes serious eye damage

PRECAUTIONARY STATEMENTS

Prevention
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
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 or doctor/physician.
Wash contaminated clothing before reuse.

Storage
Store locked up.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
sodium hydrogen sulfate	7681-38-1	>98
hydrolyses to		
sulfuric acid	7664-93-9	

Section 4 - FIRST AID MEASURES

NEW ZEALAND POISONS INFORMATION CENTRE 0800 POISON (0800 764 766)
NZ EMERGENCY SERVICES: 111

SWALLOWED
• For advice, contact a Poisons Information Centre or a doctor at once.
• Urgent hospital treatment is likely to be needed.

EYE
» If this product comes in contact with the eyes:
• Immediately hold eyelids apart and flush the eye continuously with running water.
• Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting
the upper and lower lids.

SKIN
» If skin or hair contact occurs:
• Immediately flush body and clothes with large amounts of water, using safety shower if available.
• Quickly remove all contaminated clothing, including footwear.

INHALED
• If fumes or combustion products are inhaled remove from contaminated area.
• Lay patient down. Keep warm and rested.
• Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
• Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).

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NOTES TO PHYSICIAN
» Treat symptomatically.
For acute or short term repeated exposures to strong acids:
• Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
• Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
• Dry chemical powder.
• BCF (where regulations permit).

FIRE FIGHTING
• Alert Fire Brigade and tell them location and nature of hazard.
• Wear full body protective clothing with breathing apparatus.
When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

FIRE/EXPLOSION HAZARD
• Non combustible.
• Not considered to be a significant fire risk.
Decomposition may produce toxic fumes of: sulfur oxides (SOx), metal oxides.

FIRE INCOMPATIBILITY
» None known.

Personal Protective Equipment
Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS
• Clean up all spills immediately.
• Avoid contact with skin and eyes.

MAJOR SPILLS
• Clear area of personnel and move upwind.
• Alert Fire Brigade and tell them location and nature of hazard.
Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING
• Avoid all personal contact, including inhalation.
• Wear protective clothing when risk of exposure occurs.

SUITABLE CONTAINER
• DO NOT use aluminium or galvanised containers.
• Check regularly for spills and leaks.
• Glass container is suitable for laboratory quantities.
• Lined metal can, lined metal pail/ can.
• Plastic pail.
For low viscosity materials
• Drums and jerricans must be of the non-removable head type.
• Where a can is to be used as an inner package, the can must have a screwed enclosure.

STORAGE INCOMPATIBILITY
• Inorganic acids are generally soluble in water with the release of hydrogen ions. The resulting solutions have pH's of less
than 7.0.
• Inorganic acids neutralise chemical bases (for example: amines and inorganic hydroxides) to form salts - neutralisation can

continued...

generate dangerously large amounts of heat in small spaces.
• Avoid strong bases.
• Metals and their oxides or salts may react violently with chlorine trifluoride and bromine trifluoride.
• These trifluorides are hypergolic oxidisers. They ignites on contact (without external source of heat or ignition) with
recognised fuels - contact with these materials, following an ambient or slightly elevated temperature, is often violent and may
produce ignition.
Avoid storage with calcium hypochlorite, aluminium, alcohols.

STORAGE REQUIREMENTS
• Plastic bag
• NOTE: Bags should be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or
collapse.
• Store in original containers.
• Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material		TWA mg/m³
New Zealand Workplace Exposure Standards (WES)	sulfuric acid (Sulphuric acid)	1	

The following materials had no OELs on our records
• sodium hydrogen sulfate: CAS:7681- 38- 1 CAS:10034- 88- 5

PERSONAL PROTECTION

RESPIRATOR
Type E-P Filter of sufficient capacity

EYE
• Chemical goggles.
• Full face shield may be required for supplementary but never for primary protection of eyes.

HANDS/FEET
• Elbow length PVC gloves.
Suitability and durability of glove type is dependent on usage. Factors such as:
• frequency and duration of contact,
• chemical resistance of glove material,

OTHER
• Overalls.
• PVC Apron.

ENGINEERING CONTROLS
» Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Colourless crystals or white fused lumps; soluble in water. Slightly soluble in alcohol. Common forms include: anhydrous,
monohydrate. Anhydrous form is hygroscopic. Both forms dissolve in water and ionise forming acid solution.
Monohydrate melts at

continued...

58C losing water; becoming the anhydrous form.
Properties of monohydrate: Molecular Weight: 138
Melting Range (C): 58 Specific Gravity: 2.1 at 13 C

PHYSICAL PROPERTIES
Mixes with water.
Corrosive.
Acid.

Molecular Weight: 120 (138 hydrate)
Melting Range (℃): >315& 58 hydrate
Solubility in water (g/L): Miscible
pH (1% solution): 1.4
Volatile Component (%vol): Negligible
Relative Vapour Density (air=1): Not applicable.
Lower Explosive Limit (%): Not applicable
Autoignition Temp (℃): Not applicable
State: DIVIDED SOLID

Boiling Range (℃): Decomposes.
Specific Gravity (water=1): 2.44 & 2.1hydrat
pH (as supplied): Not applicable
Vapour Pressure (kPa): Negligible
Evaporation Rate: Not applicable
Flash Point (℃): Not Applicable
Upper Explosive Limit (%): Not applicable
Decomposition Temp (℃): Not Available
Viscosity: Not Applicable

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY
• Contact with alkaline material liberates heat.
• Presence of incompatible materials.
• Product is considered stable.
For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS
ACUTE HEALTH EFFECTS
» Causes burns.
» Risk of serious damage to eyes.

CHRONIC HEALTH EFFECTS
» Cumulative effects may result following exposure*.
» * (limited evidence).

TOXICITY AND IRRITATION
» Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as
reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.
The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may produce respiratory tract irritation. Symptoms of pulmonary irritation may include coughing, wheezing, laryngitis, shortness of breath,
headache, nausea, and a burning sensation.
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is
often characterised by skin redness (erythema) and swelling the epidermis.

Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

Section 13 - DISPOSAL CONSIDERATIONS

• Recycle where possible
Otherwise ensure that:
• licenced contractors dispose of the product and its container.

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Section 14 - TRANSPORTATION INFORMATION

Labels Required: CORROSIVE
HAZCHEM: None

UNDG:

Dangerous Goods Class:	8	Subrisk:	None
UN Number:	3260	Packing Group:	II

Shipping Name:CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (contains sodium hydrogen sulfate)

Air Transport IATA:

ICAO/IATA Class:	8	ICAO/IATA Subrisk:	None
UN/ID Number:	3260	Packing Group:	II
Special provisions:	A3		

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
*(CONTAINS SODIUM HYDROGEN SULFATE)

Maritime Transport IMDG:

IMDG Class:	8	IMDG Subrisk:	None
UN Number:	3260	Packing Group:	II
EMS Number:	F- A, S- B	Special provisions:	274 944
Limited Quantities:	1 kg	Marine Pollutant:	Not Determined

Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.(contains sodium hydrogen sulfate)

Section 15 - REGULATORY INFORMATION

REGULATIONS

sodium hydrogen sulfate (CAS: 7681-38-1) is found on the following regulatory lists;
International Council of Chemical Associations (ICCA) - High Production Volume List
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)
New Zealand Inventory of Chemicals (NZIoC)
OECD Representative List of High Production Volume (HPV) Chemicals

sodium hydrogen sulfate (CAS: 10034-88-5) is found on the following regulatory lists;
International Council of Chemical Associations (ICCA) - High Production Volume List
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)
New Zealand Inventory of Chemicals (NZIoC)
OECD Representative List of High Production Volume (HPV) Chemicals
Specific advice on controls required for materials used in New Zealand can be found at http://www.ermanz.govt.nz/search/registers.html

Section 16 - OTHER INFORMATION

NEW ZEALAND POISONS INFORMATION CENTRE
0800 POISON (0800 764 766)
NZ EMERGENCY SERVICES: 111

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
sodium hydrogen sulfate	7681- 38- 1, 10034- 88- 5

» Classification of the preparation and its individual components has drawn on official and authoritative sources as well as
independent review by the Chemwatch Classification committee using available literature references.
A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

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» The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether
the reported Hazards are Risks in the workplace or other settings.

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