

Dry Acid POPS Group (The POPS Group Pty Ltd as Trustee for The Pool Shops Trust)

Version No: 3.1.17.10

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Issue Date: 07/09/2021 Print Date: 10/09/2021 S.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

| i roddot idominioi | |
|-------------------------------|---|
| Product name | Dry Acid |
| Chemical Name | Not Applicable |
| Synonyms | Sodium bisulfate, sodium hydrogen sulphate, sodium hydrogen sulfate |
| Chemical formula | Not Applicable |
| Other means of identification | Not Available |

Relevant identified uses of the substance or mixture and uses advised against

| Relevant identified uses | Lowers PH in swimming pools. |
|--------------------------|--|
| Neievani identined uses | Use according to manufacturer's directions |

Details of the supplier of the safety data sheet

| Registered company name | POPS Group (The POPS Group Pty Ltd as Trustee for The Pool Shops Trust) |
|-------------------------|---|
| Address | 10-12 Cairns Street Loganholme QLD 4129 Australia |
| Telephone | +61 7 3209 7884 |
| Fax | +61 7 3209 8635 |
| Website | http://www.poolware.com.au/ |
| Email | office@poolpro.com.au |

Emergency telephone number

| Association / Organisation | IXOM |
|-----------------------------------|--|
| Emergency telephone numbers | +61 3 9663 2130 (International) (24 hours) |
| Other emergency telephone numbers | +61 1800 033 111 |

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

| Poisons Schedule | S5 |
|--------------------|--|
| Classification [1] | Serious Eye Damage/Eye Irritation Category 1 |
| Legend: | 1. Classification by vendor; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

Label elements

Hazard pictogram(s)



Signal word

Danger

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H318 Causes serious eye damage

Precautionary statement(s) Prevention

P280 Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary statement(s) Response

| 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 CENTER/doctor/physician/first aider. |

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|-----------|--|-------------------------|
| 7681-38-1 | >90 | sodium hydrogen sulfate |
| 7664-93-9 | <10 | sulfuric acid |
| 7732-18-5 | <1 | water |
| Legend: | 1. Classification by vendor; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available | |

SECTION 4 First aid measures

Description of first aid measures

| Eye Contact | 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
|--------------|--|
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. |
| Inhalation | If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. |
| Ingestion | Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

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
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues. INGESTION:
- ▶ Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- ► Charcoal has no place in acid management.
- Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN:

- ▶ Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
- ▶ Deep second-degree burns may benefit from topical silver sulfadiazine.

FVE.

- Feye injuries require retraction of the eyelids to ensure thorough irrigation of the conjuctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
- ▶ Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

[Ellenhorn and Barceloux: Medical Toxicology]

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SECTION 5 Firefighting measures

Extinguishing media

- Dry chemical powder.
- ► BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

| Fire Incompatibility | None known. |
|-------------------------|--|
| Advice for firefighters | |
| Fire Fighting | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. |
| Fire/Explosion Hazard | Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: sulfur oxides (SOx) May emit poisonous fumes. May emit corrosive fumes. |

SECTION 6 Accidental release measures

HAZCHEM

Personal precautions, protective equipment and emergency procedures

Not Applicable

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| Minor Spills | Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust. Sweep up, shovel up or Vacuum up (consider explosion-proof machines designed to be grounded during storage and use). Place spilled material in clean, dry, sealable, labelled container. |
|--------------|---|
| Major Spills | Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. If DRY: Use dry clean up procedures and avoid generating dust. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

| Precautions for safe handling | |
|-------------------------------|--|
| Safe handling | Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. |
| Other information | 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. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. For major quantities: Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams). Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities. |

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Conditions for safe storage, including any incompatibilities

| Suitable container | Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. |
|-------------------------|--|
| 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 generate dangerously large amounts of heat in small spaces. The dissolution of inorganic acids in water or the dilution of their concentrated solutions with additional water may generate significant heat. The addition of water to inorganic acids often generates sufficient heat in the small region of mixing to cause some of the water to boil explosively. The resulting "bumping" can spatter the acid. Inorganic acids react with active metals, including such structural metals as aluminum and iron, to release hydrogen, a flammable gas. |

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|------------------------------|---------------|----------------|---------|---------|---------------|---------------|
| Australia Exposure Standards | sulfuric acid | Sulphuric acid | 1 mg/m3 | 3 mg/m3 | Not Available | Not Available |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|-------------------------|---------------|---------------|---------------|
| sodium hydrogen sulfate | 0.63 mg/m3 | 7 mg/m3 | 42 mg/m3 |
| sodium hydrogen sulfate | 0.82 mg/m3 | 9 mg/m3 | 54 mg/m3 |
| sulfuric acid | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|-------------------------|---------------|---------------|
| sodium hydrogen sulfate | Not Available | Not Available |
| sulfuric acid | 15 mg/m3 | Not Available |
| water | Not Available | Not Available |

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

Personal protection













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Eve and face protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.

Skin protection

See Hand protection below

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Hands/feet protection

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene.
- nitrile rubber.
- butyl rubber.
- fluorocaoutchouc.polyvinyl chloride.

Gloves should be examined for wear and/ or degradation constantly.

Body protection

See Other protection below

Other protection

- Overalls.
- P.V.C apron.Barrier cream.
- Skin cleansing cream.

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► Eye wash unit.

Respiratory protection

Type E-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|------------------------|
| up to 10 x ES | E P1 Air-line* | - | E PAPR-P1 |
| up to 50 x ES | Air-line** | E P2 | E PAPR-P2 |
| up to 100 x ES | - | E P3 | - |
| | | Air-line* | - |
| 100+ x ES | - | Air-line** | E PAPR-P3 |

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- · Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- · Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- · Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

Where significant concentrations of the material are likely to enter the breathing zone, a Class P3 respirator may be required.

Class P3 particulate filters are used for protection against highly toxic or highly irritant particulates.

Filtration rate: Filters at least 99.95% of airborne particles

Suitable for:

- · Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.
- · Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
- · Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS
- · Highly toxic particles e.g. Organophosphate Insecticides, Radionuclides, Asbestos

Note: P3 Rating can only be achieved when used with a Full Face Respirator or Powered Air-Purifying Respirator (PAPR). If used with any other respirator, it will only provide filtration protection up to a P2 rating.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

| Appearance | White odourless powder; miscible with water. | | |
|--|--|---|----------------|
| Appearance | write odouness powder, misciple with water. | | |
| Physical state | Divided Solid | Relative density (Water = 1) | 2.435 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | 180 | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | Not Applicable | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Applicable | Surface Tension (dyn/cm or mN/m) | Not Applicable |
| Lower Explosive Limit (%) | Not Applicable | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water | Miscible | pH as a solution (%) | 1.3 |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available |

SECTION 10 Stability and reactivity

| Reactivity | See section 7 |
|------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |

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| Incompatible materials | See section 7 |
|----------------------------------|---------------|
| Hazardous decomposition products | See section 5 |

SECTION 11 Toxicological information

| Inf | ormat | ion on | toxico | logical | effects | |
|-----|-------|--------|--------|---------|---------|--|
|-----|-------|--------|--------|---------|---------|--|

| Inhaled | The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of dusts, or fumes, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Levels above 10 micrograms per cubic metre of suspended inorganic sulfates in the air may cause an excess risk of asthmatic attacks in susceptible people. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. |
|-----------|---|
| Ingestion | The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum. |

Skin Contact

There is some evidence to suggest that the material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Eye

If applied to the eyes, this material causes severe eye damage

Chronic

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis, caused by particles less than 0.5 micron penetrating and remaining in the lung.

| D 4 . 1 . | TOXICITY | IRRITATION |
|-------------------------|--|---------------------------------|
| Dry Acid | Not Available | Not Available |
| | TOXICITY | IRRITATION |
| sodium hydrogen sulfate | Inhalation(Rat) LC50; >2.4 mg/l4h ^[1] | Not Available |
| | Oral(Rat) LD50; >2000 mg/kg ^[1] | |
| | TOXICITY | IRRITATION |
| sulfuric acid | Inhalation(Mouse) LC50; 0.85 mg/l4h ^[1] | Eye (rabbit): 1.38 mg SEVERE |
| | Oral(Rat) LD50; >300 mg/kg ^[1] | Eye (rabbit): 5 mg/30sec SEVERE |
| | | IDDITATION |
| | TOXICITY | IRRITATION |
| water | Oral(Rat) LD50; >90000 mg/kg ^[2] | Not Available |

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

SODIUM HYDROGEN **SULFATE**

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, and result in damage to the lung including reduced lung function. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

SULFURIC ACID

Occupational exposures to strong inorganic acid mists of sulfuric acid: WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS

WATER

No significant acute toxicological data identified in literature search.

SODIUM HYDROGEN **SULFATE & SULFURIC ACID**

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

| Acute Toxicity | × | Carcinogenicity | × |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion | × | Reproductivity | X |
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | × |
| Respiratory or Skin sensitisation | × | STOT - Repeated Exposure | × |
| Mutagenicity | × | Aspiration Hazard | × |

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Legena:

▼ – Data either not available or does not fill the criteria for classification
▼ – Data available to make classification

SECTION 12 Ecological information

Toxicity

| Dry Acid | Endpoint | Test Duration (hr) | Species | Value | Source |
|--|------------------|--------------------|-------------------------------|------------------|------------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| Pour la la la company de la co | EC50(ECx) | 48h | Crustacea | 190mg/l | 1 |
| sodium hydrogen sulfate | LC50 | 96h | Fish | 120mg/l | 2 |
| | EC50 | 48h | Crustacea | 190mg/l | 1 |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| | NOEC(ECx) | Not Available | Crustacea | 0.15mg/l | 2 |
| sulfuric acid | EC50 | 72h | Algae or other aquatic plants | 2.56mg/l | 2 |
| | LC50 | 96h | Fish | 0.75mg/l | 2 |
| | EC50 | 48h | Crustacea | 3.05mg/l | 2 |
| water | Endpoint | Test Duration (hr) | Species | Value | Source |
| | Not Available | Not Available | Not Available | Not Available | Not Available |

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

| Ingredient | Persistence: Water/Soil Persistence: Air | |
|-------------------------|--|------|
| sodium hydrogen sulfate | HIGH | HIGH |
| water | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation | |
|-------------------------|------------------------|--|
| sodium hydrogen sulfate | LOW (LogKOW = -2.2002) | |

Mobility in soil

| Ingredient | Mobility | |
|-------------------------|-------------------|--|
| sodium hydrogen sulfate | LOW (KOC = 6.124) | |

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- ► Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible

Otherwise

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- ▶ Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 Transport information

Labels Required

| Marine Pollutant | NO |
|------------------|----------------|
| HAZCHEM | Not Applicable |

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Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|-------------------------|---------------|
| sodium hydrogen sulfate | Not Available |
| sulfuric acid | Not Available |
| water | Not Available |

Transport in bulk in accordance with the ICG Code

| Product name | Ship Type |
|-------------------------|---------------|
| sodium hydrogen sulfate | Not Available |
| sulfuric acid | Not Available |
| water | Not Available |

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

sodium hydrogen sulfate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

sulfuric acid is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Schedule 6

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

| National Inventory | Status | |
|--|--|--|
| Australia - AIIC / Australia Non-Industrial Use | Yes | |
| Canada - DSL | Yes | |
| Canada - NDSL | No (sodium hydrogen sulfate; sulfuric acid; water) | |
| China - IECSC | Yes | |
| Europe - EINEC / ELINCS / NLP | Yes | |
| Japan - ENCS | Yes | |
| Korea - KECI | Yes | |
| New Zealand - NZIoC | Yes | |
| Philippines - PICCS | Yes | |
| USA - TSCA | Yes | |
| Taiwan - TCSI | Yes | |
| Mexico - INSQ | Yes | |
| Vietnam - NCI | Yes | |
| Russia - FBEPH | Yes | |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. | |

SECTION 16 Other information

| Revision Date | 07/09/2021 |
|---------------|------------|
| Initial Date | 26/08/2021 |

SDS Version Summary

| Version | Date of Update | Sections Updated |
|-----------|-------------------|--|
| 3.1.17.10 | 07/09/2021 | Acute Health (eye), Acute Health (inhaled), Acute Health (skin), Acute Health (swallowed), Chronic Health, Classification, Disposal, Environmental, Fire Fighter (fire/explosion hazard), Fire Fighter (fire fighting), First Aid (inhaled), First Aid (skin), First Aid (swallowed), Handling Procedure, Instability Condition, Personal Protection (other), Personal Protection (eye), Personal Protection (hands/feet), Physical Properties, Spills (major), Spills (minor), Storage (storage requirement), Storage (suitable |

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Dry Acid

Date of Version **Sections Updated** Update

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.

container), Transport, Transport Information

The 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. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List

NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory

NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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