



SAFETY DATA SHEET DAP 30% W/V SOLUTION REVISION 3, DATE 01 SEP 21

1. IDENTIFICATION

Product Name	DAP 30% w/v solution
Other Names	No Data Available
Uses	Food manufacture.
Chemical Family	No Data Available
Chemical Formula	H ₃ N.1/2H ₃ O ₄ P
Chemical Name	Diammonium phosphate, aqueous solution
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Redox Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Not Scheduled



Globally Harmonised System

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Signal Word	None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Water	H2O	7732-18-5	70 %
Diammonium phosphate	H3N.1/2H3O4P	7783-28-0	30 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Non-combustible; Material itself does not burn.
Extinguishing Media	If material is involved in a fire, use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction. Use extinguishing media suitable for surrounding area.
Fire and Explosion Hazard	Containers may explode when heated. Decomposes on heating, producing toxic and corrosive fumes, including ammonia, nitrogen oxides and phosphorus

Hazardous Products of Combustion	oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may pollute waterways.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation - Ventilate enclosed spaces before entering. Do not touch or walk through spilled material. Clean up all spills immediately! Avoid breathing vapours and contact with eyes, skin and clothing.
Clean Up Procedures	Absorb with earth, sand or other non-combustible material and transfer to a suitable, properly labelled container for disposal (see SECTION 13). *Collect recoverable product into labelled containers for recycling.
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas.
Decontamination	Wash area and prevent runoff into drains or waterways.
Environmental Precautionary Measures	Prevent spillage from entering drains or water ways. If contamination of drains or waterways occurs, advise emergency services.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Control personal contact with the substance, by using protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours/aerosols and contact with eyes, skin and clothing. Do not ingest. Control personal contact with the substance, by using protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Protect containers against physical damage and check regularly for leaks. Keep away from heat and sources of ignition - No smoking. Keep away from food/feedstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original or suitable container, i.e. Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. HAZARDOUS DECOMPOSITION PRODUCT: Ammonia (CAS No. 7664-41-7): - Safe Work Australia Exposure Standard: TWA = 25 ppm (17 mg/m3); STEL = 35 ppm (24 mg/m3). - New Zealand Workplace Exposure Standard: TWA = 25 ppm (17 mg/m3); STEL = 35 ppm (24 mg/m3).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing

dispersion of it into the general work area.

Personal Protection Equipment

- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Particulate/mist filter respirator (refer to AS/NZS 1715 & 1716).
- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses with side shields or Chemical goggles.
- Hand protection: Handle with gloves. Recommended: Chemical-protective gloves, e.g. PVC.
- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls; PVC apron; safety footwear or gumboots, e.g. Rubber.

Special Hazards Precautions

No information available.

Work Hygienic Practices

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear liquid
Odour	Characteristic of ammonia
Colour	Colourless
pH	7 - 9 (neat)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	Soluble in water
Specific Gravity	1.1 - 1.2
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Not applicable.

Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible; Material itself does not burn.
Reactions That Release Gases or Vapours	Decomposes on heating, producing toxic and corrosive fumes, including ammonia, nitrogen oxides and phosphorus oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	The solution in water is a weak base. Reacts vigorously with strong acids and strong oxidants. Gradually gives off ammonia on exposure to air.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid extremely high or low temperatures. Keep out of direct sunlight.
Materials to Avoid	Incompatible/reactive with strong acids, strong bases and strong oxidisers.
Hazardous Decomposition Products	Decomposes on heating, producing toxic and corrosive fumes, including ammonia, nitrogen oxides and phosphorus oxides.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	<p>Information on possible routes of exposure:</p> <ul style="list-style-type: none"> - Ingestion: Ingestion of large quantities may cause tiredness, fever, diarrhoea, low blood pressure, slow pulse, cyanosis, spasms of the wrist, coma and severe body spasms. - Eye contact: May irritate the eyes resulting in inflammation, stinging and blurred vision. This material can cause eye irritation in some persons. - Skin contact: May cause mild skin irritation resulting in redness, itching and possible dermatitis. This material can cause inflammation of the skin on contact in some persons. - Inhalation: Not normally a hazard due to non-volatile nature of product. Breathing mist or aerosols may cause respiratory irritation. <p>Chronic effects: This material has been classified as non-hazardous.</p> <p>*Not expected to present a significant hazard under anticipated conditions of normal use.</p>
Acute	
Ingestion	<p>Acute toxicity (Oral):</p> <p>COMPONENT: Diammonium phosphate (CAS No. 7783-28-0):</p> <ul style="list-style-type: none"> - LD50, Rat (male/female): >2,000 mg/kg bw. [ECHA].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information available.
Persistence/Degradability	In aqueous solution, DAP is completely dissociated into the ammonium ion and the phosphate anion.

Mobility	DAP will completely dissociate into ions in water and thus has a low potential for adsorption.
Environmental Fate	The principal problems of phosphate contamination of the environment relate to eutrophication processes in lakes and ponds. Prevent entry into drains and waterways.
Bioaccumulation Potential	Low potential for bioaccumulation.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Recycle, wherever possible, or dispose of contents/container in accordance with local/regional/national regulations.
Special Precautions for Land Fill	No information available.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available

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UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	DAP 30% w/v solution
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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15. REGULATORY INFORMATION

General Information No Data Available

Poisons Schedule (Aust) Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code Not Hazardous

National/Regional Inventories

Australia (AIC) Listed

Canada (DSL) Not Determined

Canada (NDSL) Not Determined

China (IECSC) Not Determined

Europe (EINECS) Not Determined

Europe (REACH) Not Determined

Japan (ENCS/METI) Not Determined

Korea (KECI) Not Determined

Malaysia (EHS Register) Not Determined

New Zealand (NZIoC) Listed

Philippines (PICCS) Not Determined

Switzerland (Giftliste 1) Not Determined

Switzerland (Inventory of Notified Substances) Not Determined

Taiwan (NCSR) Not Determined

USA (TSCA) Not Determined

16. OTHER INFORMATION

Related Product Codes DIAMMF2550, DIAMMF2551, DIAMMF3550, DIAMMF7550

Revision 3

Revision Date 01 Sep 2021

Key/Legend < Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres**CO₂** Carbon Dioxide**COD** Chemical Oxygen Demand**deg C (°C)** Degrees Celcius**EPA (New Zealand)** Environmental Protection Authority of New Zealand**deg F (°F)** Degrees Farenheit**g** Grams**g/cm³** Grams per Cubic Centimetre**g/l** Grams per Litre**HSNO** Hazardous Substance and New Organism**IDLH** Immediately Dangerous to Life and Health**immiscible** Liquids are insoluable in each other.**inHg** Inch of Mercury**inH₂O** Inch of Water**K** Kelvin**kg** Kilogram**kg/m³** Kilograms per Cubic Metre**lb** Pound**LC₅₀** LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.**LD₅₀** LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.**ltr or L** Litre**m³** Cubic Metre**mbar** Millibar**mg** Milligram**mg/24H** Milligrams per 24 Hours**mg/kg** Milligrams per Kilogram**mg/m³** Milligrams per Cubic Metre**Misc or Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.**mm** Millimetre**mmH₂O** Millimetres of Water**mPa.s** Millipascals per Second**N/A** Not Applicable**NIOSH** National Institute for Occupational Safety and Health**NOHSC** National Occupational Heath and Safety Commission**OECD** Organisation for Economic Co-operation and Development**Oz** Ounce**PEL** Permissible Exposure Limit**Pa** Pascal**ppb** Parts per Billion**ppm** Parts per Million**ppm/2h** Parts per Million per 2 Hours**ppm/6h** Parts per Million per 6 Hours**psi** Pounds per Square Inch**R** Rankine**RCP** Reciprocal Calculation Procedure**STEL** Short Term Exposure Limit**TLV** Threshold Limit Value**tne** Tonne**TWA** Time Weighted Average**ug/24H** Micrograms per 24 Hours**UN** United Nations**wt** Weight