

**Section 1 - Identification of the Material and Supplier**

**Product Name:** Swan Propyzamide 500 SC Herbicide  
**APVMA Approval No.:** 95321  
**Chemical nature:** Suspension Concentrate (SC) containing propyzamide  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Company:** **Swan Chemical Holdings Pty Ltd.**  
U2/9 Glossop Street, Wangara WA 6065  
Phone: 1300 289 520  
[info@swanchemicalholdings.com](mailto:info@swanchemicalholdings.com)  
swanchemicalholdings.com

**Creation Date:** February 2025  
**Poisons Information Centre:** Phone 13 11 26 from anywhere in Australia

**Section 2 - Hazards Identification****Classification of the substance or mixture**

Poisons Schedule: S5  
Classification: Carcinogenicity Category 2  
Acute Aquatic Hazard Category 1  
Chronic Aquatic Hazard Category 1

**Label elements**

Hazard pictogram(s):



SIGNAL WORD: WARNING

**Hazard statement(s)**

H351 Suspected of causing cancer.  
H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s) Prevention**

P201 Obtain special instructions before use.  
P281 Use personal protective equipment as required.  
P273 Avoid release to the environment.

**Precautionary statement(s) Response**

P308+P313 IF exposed or concerned: Get medical advice/attention.  
P391 Collect spillage.

**Precautionary statement(s) Storage**

P405 Store locked up.

**Precautionary statement(s) Disposal**

P501 Dispose of contents/container in accordance with local regulations.

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### Section 3 - Composition/Information on Ingredients

**Substances:** See section below for composition of Mixtures

#### Mixtures

CAS No	% [weight]	Name
23950-58-5	40-60	propyzamide
107-21-1	<5	ethylene glycol
68425-94-5	<5	formaldehyde/ alkylnaphthalene sulfonates, sodium salts
9084-06-4	<3	formaldehyde/ naphthalenesulfonic acid, sodium
8052-48-0	<1	fatty acids, tallow, sodium salts
11138-66-2	<1	gum xanthan
7732-18-5	<50	water

### Section 4 - First Aid Measures

#### Description of first aid measures

**Eye Contact** If this product comes in contact with eyes:

- Wash out immediately with water.
- If irritation continues, seek medical attention.
- 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, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

**Ingestion** For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed.  
**If swallowed do NOT induce vomiting.**  
 If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.  
 Observe the patient carefully.  
 Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.  
 Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.  
 Transport to hospital or doctor without delay.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to ethylene glycol:

- Early treatment of ingestion is important. Ensure emesis is satisfactory.
- Test and correct for metabolic acidosis and hypocalcaemia.
- Apply sustained diuresis when possible with hypertonic mannitol.
- Evaluate renal status and begin haemodialysis if indicated. [I.L.O]

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- Rapid absorption is an indication that emesis or lavage is effective only in the first few hours. Cathartics and charcoal are generally not effective.
- Correct acidosis, fluid/electrolyte balance and respiratory depression in the usual manner. Systemic acidosis (below 7.2) can be treated with intravenous sodium bicarbonate solution.
- Ethanol therapy prolongs the half-life of ethylene glycol and reduces the formation of toxic metabolites.
- Pyridoxine and thiamine are cofactors for ethylene glycol metabolism and should be given (50 to 100 mg respectively) intramuscularly, four times per day for 2 days.
- Magnesium is also a cofactor and should be replenished. The status of 4-methylpyrazole, in the treatment regime, is still uncertain. For clearance of the material and its metabolites, haemodialysis is much superior to peritoneal dialysis. [Ellenhorn and Barceloux: Medical Toxicology]

It has been suggested that there is a need for establishing a new biological exposure limit before a workshift that is clearly below 100 mmol ethoxy-acetic acids per mole creatinine in morning urine of people occupationally exposed to ethylene glycol ethers. This arises from the finding that an increase in urinary stones may be associated with such exposures.

Laitinen J., et al: Occupational & Environmental Medicine 1996; 53, 595-600

## Section 5 - Fire Fighting Measures

### Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- foam.
- dry chemical powder.
- 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.
- Equipment should be thoroughly decontaminated after use.

#### Fire/Explosion Hazard

- The material is not readily combustible under normal conditions.
- However, it will break down under fire conditions and the organic component may burn.
- Not considered to be a significant fire risk.
- Heat may cause expansion or decomposition with violent rupture of containers.
- Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.
  - Decomposes on heating and produces toxic fumes of:
    - > carbon dioxide (CO<sub>2</sub>)
    - > hydrogen chloride
    - > phosgene

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- > nitrogen oxides (NOx)
- > other pyrolysis products typical of burning organic material.

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## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

#### Minor Spills

- Environmental hazard - contain spillage.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable, labelled container for waste disposal.

#### Major Spills

Environmental hazard - contain spillage.

Minor hazard.

- Clear area of personnel.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact with the substance, by using protective equipment as required.
- Prevent spillage from entering drains or water ways.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.
- Wash area and prevent runoff into drains or waterways.
- If contamination of drains or waterways occurs, advise emergency services.

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.  
Avoid contact with moisture.  
Avoid contact with incompatible materials.  
When handling, DO NOT eat, drink or smoke.  
Keep containers securely sealed when not in use.  
Avoid physical damage to containers.  
Always wash hands with soap and water after handling.  
Work clothes should be laundered separately. Launder contaminated clothing before re-use.  
Use good occupational work practice.  
Observe manufacturer's storage and handling recommendations contained within this SDS.  
Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.  
**DO NOT allow clothing wet with material to stay in contact with skin**

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**Other information** Store in original containers.  
 Keep containers securely sealed.  
 No smoking, naked lights or ignition sources.  
 Store in a cool, dry, well-ventilated area.  
 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.

**Conditions for safe storage, including any incompatibilities**

**Suitable container** Polyethylene or polypropylene container.  
 Packing as recommended by manufacturer.  
 Check all containers are clearly labelled and free from leaks.

**Storage incompatibility** Avoid reaction with oxidising agents

## Section 8 - Exposure Controls and Personal Protection

**Control parameters**

OCCUPATIONAL EXPOSURE LIMITS (OEL)

**INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethylene glycol	Ethylene glycol (particulate)	10 mg/m <sup>3</sup>	Not Available	Not Available	Not Available
Australia Exposure Standards	ethylene glycol	Ethylene glycol (vapour)	52 mg/m <sup>3</sup> / 20 ppm	104 mg/m <sup>3</sup> / 40 ppm	Not Available	Not Available

**EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol	Ethylene glycol	30 ppm	40 ppm	60 ppm

Ingredient	Original IDLH	Revised IDLH
propyzamide	Not Available	Not Available
ethylene glycol	Not Available	Not Available
formaldehyde/ alkylnaphthalene sulfonates, sodium salts	Not Available	Not Available
formaldehyde/ naphthalenesulfonic acid, sodium	Not Available	Not Available
fatty acids, tallow, sodium salts	Not Available	Not Available
gum xanthan	Not Available	Not Available
water	Not Available	Not Available

**MATERIAL DATA**

**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.

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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.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood - local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

### Personal protection



### Eye and face protection

Safety glasses with side shields.

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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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

### Skin protection

See Hand protection below

### Hands/feet protection

- Wear chemical protective gloves, e.g. PVC.
  - Wear safety footwear or safety gumboots, e.g. Rubber
- NOTE:
- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
  - Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

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 moisturizer is recommended.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material.

Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.

Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model.

Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

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Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential

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.

### Body protection

See Other protection below

### Other protection

Overalls.  
P.V.C. apron.  
Barrier cream.  
Skin cleansing cream.  
Eye wash unit.

**Thermal hazards:** Not Available

### Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "**Forsberg Clothing Performance Index**".

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

Swan Propyzamide 500 SC Herbicide

Material	CPI
BUTYL	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
TEFLON	C
VITON	C

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**NOTE:** As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

### Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

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Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

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)

^ - Full-face

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

## Section 9 - Physical and Chemical Properties:

### Information on basic physical and chemical properties

Appearance Liquid; partly mixes with water.

Physical state	Liquid
Odour	Not Available
Odour threshold	Not Available
pH (as supplied)	Not Available
Melting point / freezing point (°C)	Not Available
Initial boiling point and boiling range (°C)	Not Available
Flash point (°C)	Not Applicable
Evaporation rate	Not Available
Flammability	Not Applicable
Upper Explosive Limit (%)	Not Applicable
Lower Explosive Limit (%)	Not Applicable
Vapour pressure (kPa)	Not Available
Solubility in water (g/L)	Partly miscible
Vapour density (Air = 1)	Not Available

Relative density (Water = 1)	Not Available
Partition coefficient n-octanol / water	Not Available
Auto-ignition temperature (°C)	Not Applicable
Decomposition temperature	Not Available
Viscosity (cSt)	Not Available
Molecular weight (g/mol)	Not Applicable
Taste	Not Available
Explosive properties	Not Available
Oxidising properties	Not Available
Surface Tension (dyn/cm or mN/m)	Not Available
Volatile Component (%vol)	Not Available
Gas group	Not Available
pH as a solution (1%)	Not Available
VOC g/L	Not Available

## Section 10 - Stability and Reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> <li>➤ Unstable in the presence of incompatible materials.</li> <li>➤ Product is considered stable.</li> <li>➤ Hazardous polymerisation will not occur.</li> </ul>
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

### Information on toxicological effects

<b>Inhaled</b>	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
<b>Ingestion</b>	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.
<b>Skin Contact</b>	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.  Open cuts, abraded or irritated skin should not be exposed to this material.  Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds 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.
<b>Eye</b>	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
<b>Chronic</b>	On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.  Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.  Limited evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a significant number of individuals at a greater frequency than would be expected from the response of a normal population.  Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking.  There exists limited evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals.  There is some evidence to provide a presumption that human exposure to the material may result in impaired fertility on the basis of: some evidence in animal studies of impaired fertility in the absence of toxic effects, or evidence of impaired fertility occurring at around the same dose levels as other toxic effects but which is not a secondary non-specific consequence of other toxic effects.  There is some evidence that human exposure to the material may result in developmental toxicity. This evidence is based on animal studies where effects have been observed in the

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	absence of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not secondary non-specific consequences of the other toxic effects. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).
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<b>Spalding Propyzamide 500 SC</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>propyzamide</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >3160 mg/kg[2] Oral (rat) LD50: 3350 mg/kg[2]	<b>IRRITATION</b> Eye: slight Skin: slight
<b>ethylene glycol</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: 9530 mg/kg[2] Inhalation (rat) LC50: 100.2 mg/l/8hr[2] Oral (rat) LD50: 4700 mg/kg[2]	<b>IRRITATION</b> Eye (rabbit): 100 mg/1h – mild Eye (rabbit): 12 mg/m <sup>3</sup> /3D Eye (rabbit): 1440mg/6h-moderate Eye (rabbit): 500 mg/24h – mild Skin (rabbit): 555 mg(open)-mild
<b>formaldehyde/ alkylnaphthalene sulfonates, sodium salts</b>	<b>TOXICITY</b> Oral (rat) LD50: >5000 mg/kg[2]	<b>IRRITATION</b> Eye (rabbit): irritating * Skin (rabbit): non-irritating *
<b>formaldehyde/ naphthalenesulfonic acid, sodium</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >2000 mg/kg[2] Inhalation (rat) LC50: 17.4 mg/l/4ht[2] Oral (rat) LD50: >2000 mg/kg[2]	<b>IRRITATION</b> Eye (rabbit); non-irritant Skin (rabbit): non-irritant Skin (rabbit): slight
<b>fatty acids, tallow, sodium salts</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>gum xanthan</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>water</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> 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

<b>FORMALDEHYDE/ NAPHTHALENESULFONIC ACID, SODIUM</b>	as Tamol SN Dermal LD50: > 200 mg/kg Eye (rabbit): slight [R&H] as Tamol NN-8906
<b>FATTY ACIDS, TALLOW, SODIUM SALTS</b>	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. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a on-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. 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. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible

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	<p>after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.</p> <p>Tallow derivatives used in the manufacture of cosmetic products such as fatty acids, glycerol, fatty acid esters and soap are regarded as safe if they are obtained by the following minimal processes which must be strictly certified:</p> <ul style="list-style-type: none"> <li>- transesterification or hydrolysis at 200°C, under pressure for 20 minutes (glycerol and fatty acids and esters)</li> <li>- saponification with NaOH 12M (glycerol and soap)</li> </ul> <p>* batch process: at 95°C for 3 hours  * continuous process: at 140°C, 2 bars for 8 minutes or equivalent.</p> <p>Moreover, other tallow derivatives (e.g. fatty alcohols, fatty amines, fatty amides) produced from the above mentioned and submitted to further processes are regarded as safe.</p> <p>Opinion of The Scientific Committee on Cosmetic Products and Non-Food Products intended for Consumers concerning Tallow Derivatives revised and adapted opinion of 24.6.97 adopted by the plenary session of the SCCNFP of 23 September 1998</p> <p>None of the constituents of tallow were toxic through oral and dermal exposure, they were not ocular or dermal irritants, and they were neither dermal sensitizers nor photosensitizers. The same was true for other oils which contain varying concentrations of the constituents of tallow.</p> <p>Based on the CIR safety evaluations of the individual constituents of tallow and of cosmetic ingredients containing the constituents of tallow, and on the approval of tallow for use in foods and other consumer products, it is concluded that tallow, tallow glyceride, tallow glycerides, hydrogenated tallow glyceride, and hydrogenated tallow glycerides are safe as cosmetic ingredients in the present practices of use Cosmetic Ingredient Review Expert Panel</p> <p>Fatty acid salts are of low acute toxicity. Their skin and eye irritation potential is chain length dependent and decreases with increasing chain length - they are poorly absorbed through the skin nor are they skin sensitizers. The available repeated dose toxicity data demonstrate the low toxicity of the fatty acids and their salts. Also, they are not considered to be mutagenic, genotoxic or carcinogenic, and are not reproductive or developmental toxicants. Accidental ingestion of fatty acid salt containing detergent products is not expected to result in any significant adverse health effects. This assessment is based on toxicological data demonstrating the low acute oral toxicity of fatty acid salts and the fact that not a single fatality has been reported in the UK following accidental ingestion of detergents containing fatty acid salts.</p> <p>Also in a report published by the German Federal Institute for Health Protection of Consumers and Veterinary Medicine, detergent products were not mentioned as dangerous products with a high incidence of poisoning. The estimated total human exposure to fatty acid salts, from the different exposure scenarios for the handling and use of detergent products containing fatty acid salts, showed a margin of exposure (MOE) of 258,620. This extremely large MOE is large enough to be reassuring with regard to the relatively small variability of the hazard data on which it is based. Also, in the UK, the recommended dietary fatty acid intake by the Department of Health is about 100 g of fatty acids per day or 1.7 g (1700 mg) of fatty acids per kilogram body weight per day. This exposure is several orders of magnitude above that resulting from exposure to fatty acid salts in household cleaning products. Based on the available data, the use of fatty acid salts in household detergent and cleaning products does not raise any safety concerns with regard to consumer.</p>
<b>FORMALDEHYDE/  NAPHTHALENESULFONIC  ACID, SODIUM &amp; FATTY  ACIDS, TALLOW, SODIUM</b>	No significant acute toxicological data identified in literature search.

## SAFETY DATA SHEET

SALTS & GUM XANTHAN & WATER	
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Acute Toxicity	⊘	Carcinogenicity	✓
Skin Irritation/Corrosion	⊘	Reproductivity	⊘
Serious Eye Damage/Irritation	⊘	STOT - Single Exposure	⊘
Respiratory or Skin sensitisation	⊘	STOT – Repeated	⊘
Exposure	⊘	Mutagenicity Aspiration Hazard	⊘

**Legend:** ✘ – Data available but does not fill the criteria for classification

✓ – Data available to make classification

⊘ – Data Not Available to make classification

## Section 12 - Ecological Information

### Toxicity

Spalding Propyzamide 500 SC	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
propyzamide	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	72.0mg/L	4
	EC50	48	Crustacea	>5.6mg/L	4
	EC50	72	Algae or other aquatic plants	0.287mg/L	4
	NOEC	72	Algae or other aquatic plants	0.05mg/L	4
ethylene glycol	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	8050mg/L	4
	EC50	48	Crustacea	5046.29mg/L	4
	EC50	96	Algae or other aquatic plants	6500-13000mg/L	1
	NOEC	552	Crustacea	>=1000mg/L	2
formaldehyde/alkylnaphthalene sulfonates, sodium salts	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
formaldehyde/naphthalenesulfonic acid, sodium	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
fatty acids, tallow, sodium salts	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available
gum xanthan	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	LC50	96	Fish	420mg/L	4
water	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
	Not Available	Not Available	Not Available	Not Available	Not Available

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**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

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**DO NOT discharge into sewer or waterways.**

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
propyzamide	HIGH	HIGH
ethylene glycol	LOW (Half-life = 24 days)	LOW (Half-life = 3.46 days)
water	LOW	LOW

#### Bioaccumulative potential

Ingredient	Bioaccumulation
propyzamide	LOW (LogKOW = 3.5747)
ethylene glycol	LOW (BCF = 200)
water	(LogKOW = -1.38)

#### Mobility in soil

Ingredient	Mobility
propyzamide	LOW (KOC = 1587)
ethylene glycol	HIGH (KOC = 1)
water	(KOC = 14.3)

## 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 cannot 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.

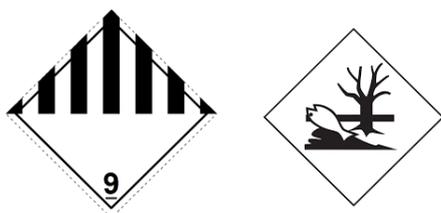
**DO NOT allow wash water from cleaning or process equipment to enter drains.**

- 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 Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

#### SAFETY DATA SHEET

## Section 14 - Transport Information

### Labels Required



### Marine Pollutant

HAZCHEM: •3Z

#### Land transport (ADG)

**UN number:** 3082  
**UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains propyzamide)  
**Transport hazard:** Class 9  
 class(es) Subrisk: Not Applicable  
**Packing group:** III  
**Environmental hazard:** Environmentally hazardous  
**Special precautions for User:** Special provisions 274 331 335 375 AU01  
 Limited quantity 5 L

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- (a) packagings;
  - (b) IBCs; or
  - (c) any other receptacle not exceeding 500 kg(L).
- Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

#### Air transport (ICAO-IATA / DGR)

**UN number:** 3082  
**UN proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. \* (contains propyzamide)  
**Transport hazard class(es):** ICAO/IATA - Class 9  
 ICAO / IATA - Subrisk Not Applicable  
 ERG Code - 9L  
**Packing group:** III  
**Environmental hazard:** Environmentally hazardous  
**Special precautions for user:** Special provisions A97 A158 A197  
 Cargo Only Packing Instructions 964  
 Cargo Only Maximum Qty / Pack 450 L  
 Passenger and Cargo Packing Instructions 964  
 Passenger and Cargo Maximum Qty / Pack 450 L  
 Passenger and Cargo Limited Quantity Packing Instructions Y964  
 Passenger and Cargo Limited Maximum Qty / Pack 30 kg G

#### Sea transport (IMDG-Code / GGVSee)

**UN number:** 3082  
**UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains propyzamide)  
**Transport hazard class(es):** IMDG - Class 9  
 IMDG - Subrisk Not Applicable

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**Packing group:** III  
**Environmental hazard:** Marine Pollutant  
**Special precautions for user:** EMS Number F-A, S-F  
Special provisions 274 335 969  
Limited Quantities 5 L

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

Not Applicable

## Section 15 - Regulatory Information

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

### **PROPYZAMIDE(23950-58-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)

### **ETHYLENE GLYCOL(107-21-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards  
Australia Hazardous Substances Information System - Consolidated Lists  
Australia Inventory of Chemical Substances (AICS)

### **FORMALDEHYDE/ ALKYLNAPHTHALENE SULFONATES, SODIUM SALTS(68425-94-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

### **FORMALDEHYDE/ NAPHTHALENESULFONIC ACID, SODIUM(9084-06-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

### **FATTY ACIDS, TALLOW, SODIUM SALTS(8052-48-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

### **GUM XANTHAN(11138-66-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

### **WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Inventory of Chemical Substances (AICS)

#### **National Inventory Status**

Australia - AICS Y

Canada - DSL N (propyzamide)

Canada - NDSL N (formaldehyde/ naphthalenesulfonic acid, sodium; fatty acids, tallow, sodium salts; propyzamide; gum xanthan; water; ethylene glycol; formaldehyde/ alkylnaphthalene sulfonates, sodium salts)

China - IECSC N (propyzamide)

Europe - EINEC / ELINCS / NLP N (formaldehyde/ naphthalenesulfonic acid, sodium; formaldehyde/ alkylnaphthalene sulfonates, sodium salts)

Japan - ENCS N (fatty acids, tallow, sodium salts; propyzamide; formaldehyde/ alkylnaphthalene sulfonates, sodium salts)

Korea - KECI Y

New Zealand - NZIoC Y

Philippines - PICCS N (propyzamide)

USA - TSCA N (propyzamide)

*Legend:*

*Y = All ingredients are on the inventory*

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*N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)*

## Section 16 - Other Information

### Ingredients with multiple cas numbers

Name	CAS No
formaldehyde/ naphthalenesulfonic acid, sodium	9008-63-3, 9084-06-4, 172451-47-7, 201363-93-1, 205454-04-2, 80296-99-7

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  
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

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