

LGWM 2 # 134-7569, 134-7610 (AUS) RS Components

Chemwatch: 5434-69 Version No: 2.1.1.1 Safety Data Sheet according to WHS and ADG requirements Chemwatch Hazard Alert Code: 3

Issue Date: 02/12/2020 Print Date: 03/12/2020 L.GHS.AUS.EN

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

Product Identifier

Product name	LGWM 2 # 134-7569, 134-7610 (AUS)
Chemical Name	Not Applicable
Synonyms	Not Available
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	Lubricant.

Details of the supplier of the safety data sheet

· · ·	
Registered company name	RS Components
Address	25 Pavesi Street Smithfield NSW 2164 Australia
Telephone	+1 300 656 636
Fax	+1 300 656 696
Website	www.au.rs-online.com
Email	Not Available

Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+61 2 9186 1132
Other emergency telephone numbers	+61 1800 951 288

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

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

ChemWatch Hazard Ratings

	Min	Max	
Flammability	1		
Toxicity	1		0 = Minimum
Body Contact	3		1 = Low
Reactivity	1		2 = Moderate
Chronic	3		3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification ^[1]	Skin Corrosion/Irritation Category 2, Skin Sensitizer Category 1, Serious Eye Damage Category 1, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3, Reproductive Toxicity Category 1B
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI



Signal word Danger

Hazard statement(s)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.
H360FD	May damage fertility. May damage the unborn child.

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.

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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER or doctor/physician.
P321	Specific treatment (see advice on this label).

Precautionary statement(s) Storage

Store locked up.

Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

P405

P501

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
68584-23-6	5-<10	(C10-16)alkylbenzenesulfonic acid, calcium salt
61789-86-4	3-<5	calcium petroleum sulfonate
70024-69-0	3-<5	(C16-24)alkylbenzenesulfonic acid, calcium salt
12007-56-6	1-<3	calcium borate
1335202-81-7	1-<2.5	(C10-13)alkylbenzenesulfonic acid, calcium salt
Not Available	NotSpec	mineral oil

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, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 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.
 Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

+ Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.

In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.

High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.
NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.

SECTION 5 Firefighting measures

Extinguishing media

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

Special hazards arising from the substrate or mixture

Fire Incompatibility	tc. as ignition may result
Fire Incompatibility	Ic. as ignition may result

Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon monoxide (CO) carbon dioxide (CO2) sulfur oxides (SOx) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes. CARE: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns. Foaming may cause overflow of containers and may result in possible fire.
HAZCHEM	Not Applicable

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	Slippery when spilt. Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Slippery when spilt.

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.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

Continued...

Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire. Avoid reaction with oxidising agents

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	mineral oil	Oil mist, refined mineral	5 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Emergency Emilia					
Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
mineral oil	Mineral oil, heavy or light; (paraffin oil; Deobase, deodorized; heavy para distillates; includes 64741-53-3, 64741-88-4, 8042-47-5, 8012-95-1; 647			1,500 mg/m3	8,900 mg/m3
Ingredient	Original IDLH	Revised IDLH			
(C10-16)alkylbenzenesulfonic acid, calcium salt	Not Available	Not Available			
calcium petroleum sulfonate	Not Available	Not Available			
(C16-24)alkylbenzenesulfonic acid, calcium salt	Not Available	Not Available			
calcium borate	Not Available	Not Available			
(C10-13)alkylbenzenesulfonic acid, calcium salt	Not Available	Not Available			
mineral oil	2,500 mg/m3	Not Available			

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
(C10-16)alkylbenzenesulfonic acid, calcium salt	E	≤ 0.01 mg/m³
calcium petroleum sulfonate	D	> 0.1 to ≤ 1 ppm
(C16-24)alkylbenzenesulfonic acid, calcium salt	E	≤ 0.01 mg/m³
(C10-13)alkylbenzenesulfonic acid, calcium salt	E	≤ 0.01 mg/m³
Notes:	Occupational exposure banding is a process of assigning chemicals into s adverse health outcomes associated with exposure. The output of this pro	

range of exposure concentrations that are expected to protect worker health.

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. 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.
Personal protection	
Eye 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.
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.
Body protection	See Other protection below

 Other protection

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

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.

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 ^

^ - Full-face

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)

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.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance Brown paste with characteristic odour; does not mix with water.

Dissolution in the form			
Physical state	Non Slump Paste	Relative density (Water = 1)	0.9 @20C
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Applicable
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
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Inhaled

Information on toxicological effects

The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (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 and that suitable control measures be used in an occupational setting.

Inhalation hazard is increased at higher temperatures.

	Not normally a hazard due to non-volatile nature of product Inhalation of oil droplets/ aerosols may cause discomfort and may p	produce chemical pneumonitis.
	Accidental ingestion of the material may be damaging to the health	· · · · · · · · · · · · · · · · · · ·
Ingestion	Ingestion of anionic surfactants/ hydrotropes may produce diarrhoea from 1 to 5 gm/kg.	a, intestinal distension and occasional vomiting. Lethal doses in animals range
Skin Contact	following direct contact, and/or produces significant inflammation we inflammation being present twenty-four hours or more after the end repeated exposure; this may result in a form of contact dermatitis (n and swelling (oedema) which may progress to blistering (vesiculatic may be intercellular oedema of the spongy layer of the skin (spongi The material may accentuate any pre-existing dermatitis condition Repeated exposure may cause skin cracking, flaking or drying follow	
	become sore. Papular dermatitis may also develop. Sensitive individent open cuts, abraded or irritated skin should not be exposed to this mentry into the blood-stream through, for example, cuts, abrasions, p	ollowing the removal of natural oils. The skin may appear red and may duals may exhibit cracking, scaling and blistering. naterial puncture wounds or lesions, may produce systemic injury with harmful effects.
Eye	Direct eye contact with some concentrated anionic surfactants/ hydrogeneration and the source of the	e ocular lesions which are present twenty-four hours or more after instillation.
	Practical experience shows that skin contact with the material is cap individuals, and/or of producing a positive response in experimental	pable either of inducing a sensitisation reaction in a substantial number of l animals.
	There is sufficient evidence to provide a strong presumption that hu clear evidence in animal studies of impaired fertility in the absence dose levels as other toxic effects but which is not a secondary non- There is sufficient evidence to provide a strong presumption that hu on the basis of:	Iman exposure to the material may result in impaired fertility on the basis of: - of toxic effects, or evidence of impaired fertility occurring at around the same specific consequence of other toxic effects. Iman exposure to the material may result in developmental toxicity, generally n observed in the absence of marked maternal toxicity, or at around the same
Chronic	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a secc Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined mine absorption. Exposure to oil mists frequently elicits respiratory conditions, such Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to nitrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be
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LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined mine absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryit Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and n responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1]	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to ittrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies. IRRITATION Not Available IRRITATION IRRITATION
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LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate (C16-24)alkylbenzenesulfonic	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined minu absorption. Exposure to oil mists frequently elicits respiratory conditions, such Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and m responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >5000 mg/kg ^[2]	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to nitrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies.
LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a secc Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined mine absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and n responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >20000 mg/kg ^[2] TOXICITY	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to itrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies.
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LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate (C16-24)alkylbenzenesulfonic	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco- Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined minu absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and n responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >50000 mg/kg ^[2] TOXICITY Not Available	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to intrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies. iteration iteration Not Available iferitation iferitation iferitation Not Available iferitation iferitation Not Available iferitation iferitating iferita
LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate (C16-24)alkylbenzenesulfonic acid, calcium salt	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined minu absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and m responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >20000 mg/kg ^[2] TOXICITY Not Available	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to nitrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies.
LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate (C16-24)alkylbenzenesulfonic acid, calcium salt	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined mine absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and n responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >20000 mg/kg ^[2] TOXICITY Not Available TOXICITY Not Available	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczematous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to ittrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies.
LGWM 2 # 134-7569, 134-7610 (AUS) (C10-16)alkylbenzenesulfonic acid, calcium salt calcium petroleum sulfonate (C16-24)alkylbenzenesulfonic acid, calcium salt	Exposure to the material may cause concerns for humans owing to appropriate animal studies provide strong suspicion of development the same dose levels as other toxic effects but which are not a seco Limited evidence suggests that repeated or long-term occupational biochemical systems. Principal route of exposure is by skin contact; lesser exposures incl with mineral oils carries with it the risk of skin conditions such as oil warts on the sole of the foot (plantar warts). With highly refined minu absorption. Exposure to oil mists frequently elicits respiratory conditions, such a Prolonged or repeated skin contact may cause degreasing with dryi Absorbed sulfonates are quickly distributed through living systems a proteins and the ability of sulfonates to translocate potassium and m responsible for respiratory allergies and, in some instances, minor of TOXICITY Not Available TOXICITY Oral (rat) LD50: >16000 mg/kg ^[1] Oral (rat) LD50: >20000 mg/kg ^[2] TOXICITY Not Available	possible developmental toxic effects, generally on the basis that results in tal toxicity in the absence of signs of marked maternal toxicity, or at around ondary non-specific consequence of other toxic effects. exposure may produce cumulative health effects involving organs or ude inhalation of fumes from hot oils, oil mists or droplets. Prolonged contact folliculitis, eczernatous dermatitis, pigmentation of the face (melanosis) and eral oils no appreciable systemic effects appear to result through skin as asthma; the provoking agent is probably an additive. ing, cracking and dermatitis following. and are readily excreted. Toxic effects may result from the effects of binding to nitrate (NO3-) ions from cellular to interstitial fluids. Airborne sulfonates may be dermal allergies. IRRITATION Not Available IRRITATION Not Available IRRITATION Not Available IRRITATION Eye: no adverse effect observed (not irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]

			Skin: no adverse	e effect observed (not irritating) ^[1]
mineral oil	Т	DXICITY	IRRITATION	
	N	ot Available	Not Available	
Legend:	 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 			
MINERAL OIL Source of the original crude. A small but definite risk of occupat years. This risk has been attributed		Toxicity and Irritation data for petroleum-based mineral of source of the original crude. A small but definite risk of occupational skin cancer occu years. This risk has been attributed to the presence of co Petroleum oils which are solvent refined/extracted or set	urs in workers exposed to per- ertain polycyclic aromatic hyd	sistent skin contamination by oils over a period of rocarbons (PAH) (typified by benz[a]pyrene).
(C10-16)ALKYLBENZENESULFO ACID, CALCIUM SALT & CALC PETROLEUM SULFONAT (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO ACID, CALCIUM S	IUM E& NIC T& NIC	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. for alkaryl sulfonate petroleum additives: Mammalian Toxicology - Acute . Existing data on acute mammalian toxicity indicates a low concern for acute toxicity. Acute oral toxicity: In all but one studies, there were no deaths that could be attributed to treatment with the test material when administered at the limit dose of 2000 or 5000 mg/kg. In some studies, the primary clinical observations were diarrhea and reduced food consumption (without a change in body weight). These effects are consistent with the gastrointestinal irritant properties of detergents in a oil-based vehicle.		
(C10-16)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO ACID, CALCIUM S	T & NIC	condition known as reactive airways dystunction 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 non-atopic individual, with abruit oper of persistent astma-like symptoms within minutes to hours of a documentated exposure to the irritant. A reversible sinflow		
(C10-16)ALKYLBENZENESULFONIC ACID, CALCIUM SALT & (C16-24)ALKYLBENZENESULFONIC ACID, CALCIUM SALT & (C10-13)ALKYLBENZENESULFONIC ACID, CALCIUM SALT		No significant acute toxicological data identified in literature search. Linear alkylbenzene sulfonates (LAS) are classified as Irritant (Xi) with the risk phrases R38 (Irritating to skin) and R41 (Risk of serious damage to eyes) according to CESIO (CESIO 2000). LAS are not included in Annex 1 of list of dangerous substances of Council Directive 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong acids (pKa<2) are classified as corrosive (R34) Branched materials exhibit comparable toxicity to linear species. Acute toxicity : The available data indicate minimal to moderate toxicity. Available dermal exposure data also shows a lack of significant toxicity.		
ACID, CALCIUM SAL (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO	.T& NIC .T& NIC	damage to eyes) according to CESIO (CESIO 2000). LA 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong ac Branched materials exhibit comparable toxicity to linear Acute toxicity: The available data indicate minimal to m	S are not included in Annex 4 ids (pKa<2) are classified as species. noderate toxicity, with LD50 va	I of list of dangerous substances of Council Directive corrosive (R34) alues ranging from 500 to 2000 mg/kg body weight
ACID, CALCIUM SAL (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO	.T& NIC .T& NIC	damage to eyes) according to CESIO (CESIO 2000). LA 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong ac Branched materials exhibit comparable toxicity to linear Acute toxicity: The available data indicate minimal to m	S are not included in Annex 4 ids (pKa<2) are classified as species. noderate toxicity, with LD50 va	I of list of dangerous substances of Council Directive corrosive (R34) alues ranging from 500 to 2000 mg/kg body weight
ACID, CALCIUM SAL (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO ACID, CALCIUM S	.T & NIC .T & NIC ALT	damage to eyes) according to CESIO (CESIO 2000). LA 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong ac Branched materials exhibit comparable toxicity to linear Acute toxicity: The available data indicate minimal to m	S are not included in Annex 1 ids (pKa<2) are classified as species. noderate toxicity, with LD50 va cant toxicity.Available dermal	I of list of dangerous substances of Council Directive corrosive (R34) alues ranging from 500 to 2000 mg/kg body weight exposure data also shows a lack of significant toxicity
ACID, CALCIUM SAL (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO ACID, CALCIUM S ACID, CALCIUM S	T & NIC T & NIC ALT	damage to eyes) according to CESIO (CESIO 2000). LA 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong ac Branched materials exhibit comparable toxicity to linear Acute toxicity: The available data indicate minimal to m	S are not included in Annex 1 ids (pKa<2) are classified as species. ioderate toxicity, with LD50 va cant toxicity.Available dermal Carcinogenicity	I of list of dangerous substances of Council Directive corrosive (R34) alues ranging from 500 to 2000 mg/kg body weight exposure data also shows a lack of significant toxicity
ACID, CALCIUM SAL (C16-24)ALKYLBENZENESULFO ACID, CALCIUM SAL (C10-13)ALKYLBENZENESULFO ACID, CALCIUM S ACID, CALCIUM S Acute Toxicity Skin Irritation/Corrosion	T & NIC T & NIC ALT	damage to eyes) according to CESIO (CESIO 2000). LA 67/548/EEC. Linear alkylbenzene sulfonic acids (LABS) are strong ac Branched materials exhibit comparable toxicity to linear Acute toxicity: The available data indicate minimal to m (bw). Acute inhalation data also indicate a lack of signific	S are not included in Annex 1 ids (pKa<2) are classified as species. noderate toxicity, with LD50 va cant toxicity.Available dermal Carcinogenicity Reproductivity	I of list of dangerous substances of Council Directive corrosive (R34) alues ranging from 500 to 2000 mg/kg body weight exposure data also shows a lack of significant toxicity

Legend:

X - Data either not available or does not fill the criteria for classification Data available to make classification

SECTION 12 Ecological information

LGWM 2 # 134-7569, 134-7610 (AUS)	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
(C10-16)alkylbenzenesulfonic acid, calcium salt	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	NOEC	72	Algae or other aquatic plants	1-mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	>1-mg/L	2
calcium petroleum sulfonate	EC50	48	Crustacea	>1-mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	NOEC	72	Algae or other aquatic plants	1-mg/L	2
(C16-24)alkylbenzenesulfonic acid, calcium salt	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	>1-mg/L	2
	EC50	48	Crustacea	>1-mg/L	2
	EC50	72	Algae or other aquatic plants	>1-mg/L	2
	NOEC	72	Algae or other aquatic plants	1-mg/L	2

calcium borate	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48	Crustacea	>100mg/L	2
	EC50	72	Algae or other aquatic plants	>100mg/L	2
	EC10	72	Algae or other aquatic plants	79mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	1.67mg/L	2
(C10-13)alkylbenzenesulfonic	EC50	48	Crustacea	2.5mg/L	2
acid, calcium salt	EC50	96	Algae or other aquatic plants	2.736mg/L	2
	EC0	24	Crustacea	6mg/L	2
	NOEC	672	Fish	0.15mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
mineral oil	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4.	HA Registered Substances - Ecotoxicological Informa US EPA, Ecotox database - Aquatic Toxicity Data 5. E TI (Japan) - Bioconcentration Data 8. Vendor Data		

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **DO NOT** discharge into sewer or waterways.

Persistence and degradability

Persistence: Water/Soil	Persistence: Air		
No Data available for all ingredients	No Data available for all ingredients		
Bioaccumulation			
No Data available for all ingredients			
Mobility			
No Data available for all ingredients			
	No Data available for all ingredients Bioaccumulation No Data available for all ingredients Mobility		

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	 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.

SECTION 14 Transport information

Labels Required	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

SECTION 15 Regulatory information

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

(C10-16)alkylbenzenesulfonic acid, calcium salt is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

calcium petroleum sulfonate is found on the following regulatory lists

LGWM 2 # 134-7569, 134-7610 (AUS)

Australian Inventory of Industrial Ch	nemicals (AIIC)		
(C16-24)alkylbenzenesulfonic ac	id, calcium salt is found on the following regulatory lists		
Australian Inventory of Industrial Ch	nemicals (AIIC)		
calcium borate is found on the fo	ollowing regulatory lists		
	rmation System (HCIS) - Hazardous Chemicals		
Australia Standard for the Uniform	Scheduling of Medicines and Poisons (SUSMP) - Schedule 4		
Australian Inventory of Industrial Ch	nemicals (AIIC)		
(C10-13)alkylbenzenesulfonic ac	id, calcium salt is found on the following regulatory lists		
Australian Inventory of Industrial Ch	nemicals (AIIC)		
mineral oil is found on the follow	ring regulatory lists		
International Agency for Research	on Cancer (IARC) - Agents Classified by the IARC Monographs		
National Inventory Status			
National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	No (calcium borate)		
Canada - NDSL	No ((C10-16)alkylbenzenesulfonic acid, calcium salt; calcium petroleum sulfonate; (C16-24)alkylbenzenesulfonic acid, calcium salt; (C10-13)alkylbenzenesulfonic acid, calcium salt)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No ((C10-16)alkylbenzenesulfonic acid, calcium salt; calcium borate)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	No (calcium borate)		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	No ((C10-16)alkylbenzenesulfonic acid, calcium salt; calcium petroleum sulfonate; (C16-24)alkylbenzenesulfonic acid, calcium salt)		
Vietnam - NCI	Yes		
Russia - ARIPS	No ((C10-16)alkylbenzenesulfonic acid, calcium salt; calcium petroleum sulfonate; (C16-24)alkylbenzenesulfonic acid, calcium salt)		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)		

No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	02/12/2020
Initial Date	02/12/2020

SDS Version Summary

Version	Issue Date	Sections Updated
2.1.1.1	02/12/2020	Supplier Information, Use

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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_o IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest 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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