

A S Harrison & Co Pty Limited

Version No: **3.1**Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issue Date: 10/03/2023 Print Date: 10/07/2023 L.GHS.AUS/NZ.EN.E

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

Product Identifier			
Product name	Iselux		
Chemical Name	Not Applicable		
Synonyms	Not Available		
Chemical formula	Not Applicable		
Other means of identification	20048		

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

Relevant identified uses Industrial applications: Manufacture of cosmetics.
Use according to manufacturer's directions.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	A S Harrison & Co Pty Limited	A S Harrison & Co Pty Limited		
Address	20 Jarvis Way East Tamaki Auckland 2019 New Zealand	75 Old Pittwater Rd Brookvale NSW 2100 Australia		
Telephone	+64 9 309 8120	+61 2 89781000		
Fax	Not Available	Not Available		
Website Not Available		Not Available		
Email quality.ash@harrison.com.au quality.ash@harrison.com.au		quality.ash@harrison.com.au		

Emergency telephone number

Association / Organisation	ASH Emergency Information	ASH Emergency Information	CHEMWATCH EMERGENCY RESPONSE AUS (24/7)	
Emergency telephone numbers	0800 737 435	1800 009 162	+61 1800 951 288	
Other emergency telephone numbers	Not Available	Not Available	+61 3 9573 3188	
Association / Organisation	CHEMWATCH EMERGENCY RESPONSE NZL (24/7)			
Emergency telephone numbers	+64 800 700 112			
Other emergency telephone numbers	+61 3 9573 3188			

Once connected and if the message is not in your preferred 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.

Poisons Schedule	Not Applicable		
Classification [1]	Serious Eye Damage/Eye Irritation Category 2A		
Legend: 1. Classification by vendor; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI			

Label elements

Hazard pictogram(s)



Signal word

Warning

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Hazard statement(s)

H319 Causes serious eye irritation.

Precautionary statement(s) Prevention

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

P264 Wash all exposed external body areas thoroughly after handling.

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.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

Classification ^[1]	Serious Eye Damage/Eye Irritation Category 2
Legend:	1. Classification by vendor; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by using GHS/HSNO criteria	6.4A

Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

H319 Causes serious eye irritation.

Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

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.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No %[weight]		Name	
928663-45-0	>60	sodium lauroyl 2-methyl isethionate	
Legend:	1. Classification by vendor; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; Classification drawn from C&I ** FIJ IOFI Vs. available		

SECTION 4 First aid measures

Description of first aid measures

If this product comes in contact with the eyes:

Eye Contact

Wash out immediately with fresh 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.

• Seek medical attention without delay; if pain persists or recurs seek medical attention.

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	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.

SECTION 5 Firefighting measures

Extinguishing media

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Advice for firefighters

Special hazards arising from the substrate or mixture

Fire Fighting

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

- 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.
- 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.

Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions.

- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited particles exceeding this limit will generally not form flammable dust clouds; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.
- In the same way as gases and vapours, dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL) are applicable to dust clouds but only the LEL is of practical use; this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC).
- When processed with flammable liquids/vapors/mists,ignitable (hybrid) mixtures may be formed with combustible dusts. Ignitable mixtures will increase the rate of explosion pressure rise and the Minimum Ignition Energy (the minimum amount of energy required to ignite dust clouds MIE) will be lower than the pure dust in air mixture. The Lower Explosive Limit (LEL) of the vapour/dust mixture will be lower than the individual LELs for the vapors/mists or dusts.
- A dust explosion may release of large quantities of gaseous products; this in turn creates a subsequent pressure rise of explosive force capable of damaging plant and buildings and injuring people.

Usually the initial or primary explosion takes place in a confined space such as plant or machinery, and can be of sufficient force to damage or rupture the plant. If the shock wave from the primary explosion enters the surrounding area, it will disturb any settled dust layers, forming a second dust cloud, and often initiate a much larger secondary explosion. All large scale explosions have resulted from chain reactions of this type.

- Dry dust can be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport.
- ▶ Build-up of electrostatic charge may be prevented by bonding and grounding.
- Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
- All movable parts coming in contact with this material should have a speed of less than 1-meter/sec
- A sudden release of statically charged materials from storage or process equipment, particularly at elevated temperatures and/ or pressure, may result in ignition especially in the absence of an apparent ignition source.
- One important effect of the particulate nature of powders is that the surface area and surface structure (and often moisture content) can vary widely from sample to sample, depending of how the powder was manufactured and handled; this means that it is virtually impossible to use flammability data published in the literature for dusts (in contrast to that published for gases and vapours).
- Autoignition temperatures are often quoted for dust clouds (minimum ignition temperature (MIT)) and dust layers (layer ignition temperature (LIT)); LIT generally falls as the thickness of the layer increases.

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

Fire/Explosion Hazard

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Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Remove all ignition sources Clean up all spills immediately. Avoid contact with skin and eyes. **Minor Spills** Control personal contact with the substance, by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labelled container for waste disposal. Moderate hazard. ► CAUTION: Advise personnel in area. ▶ Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. **Major Spills** Recover product wherever possible. F IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains. 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

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- DO NOT allow material to contact humans, exposed food or food utensils.
- ▶ Avoid contact with incompatible materials.
- 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.
- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)
- Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.
- Safe handling Establish good housekeeping practices.
 - ▶ Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds.
 - buse continuous suction at points of dust generation to capture and minimise the accumulation of dusts. Particular attention should be given to overhead and hidden horizontal surfaces to minimise the probability of a "secondary" explosion. According to NFPA Standard 654, dust layers 1/32 in.(0.8 mm) thick can be sufficient to warrant immediate cleaning of the area
 - Do not use air hoses for cleaning.
 - Minimise dry sweeping to avoid generation of dust clouds. Vacuum dust-accumulating surfaces and remove to a chemical disposal area. Vacuums with explosion-proof motors should be used.
 - Control sources of static electricity. Dusts or their packages may accumulate static charges, and static discharge can be a source of ignition.
 - Solids handling systems must be designed in accordance with applicable standards (e.g. NFPA including 654 and 77) and other national quidance.
 - Do not empty directly into flammable solvents or in the presence of flammable vapors.
 - ▶ The operator, the packaging container and all equipment must be grounded with electrical bonding and grounding systems. Plastic bags and plastics cannot be grounded, and antistatic bags do not completely protect against development of static charges.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

Store in original containers.

- ▶ Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Other information For major quantities

- Consider storage in bunded areas ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams).
- Figure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities

Conditions for safe storage, including any incompatibilities

Suitable container

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

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Storage incompatibility

Avoid reaction with oxidising agents

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Ingredient

Emergency Limits

Iselux	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
sodium lauroyl 2-methyl isethionate	Not Available		Not Available	
Occupational Exposure Banding				
Ingredient	Occupational Exposure Band Rating		Occupational Exposure Band Limit	
sodium lauroyl 2-methyl isethionate	E		≤ 0.01 mg/m³	
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the			

MATERIAL DATA

Exposure 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:

adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a

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.

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.
- If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of:
- (a): particle dust respirators, if necessary, combined with an absorption cartridge;

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

- (b): filter respirators with absorption cartridge or canister of the right type;
- (c): fresh-air hoods or masks
 - Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding.
- Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to efficiently remove the contaminant.

Appropriate engineering controls

Type of Contaminant:	Air Speed:
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 ft/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 ft/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 4-10 m/s (800-2000 ft/min) for extraction of crusher dusts generated 2 metres 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.

Individual protection measures, such as personal protective equipment











protective equipment

- ► Safety glasses with side shields.
- ► Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]
- Eye and face protection

 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

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> 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 eve redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

Skin protection

See Hand protection below

NOTE:

- Fig. 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 moisturiser 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.

Hands/feet protection

As defined in ASTM F-739-96 in any application, gloves are rated as:

- · Excellent when breakthrough time > 480 min
- · Good when breakthrough time > 20 min
- · Fair when breakthrough time < 20 min
- · Poor when glove material degrades

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.

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

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

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

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

Body protection

See Other protection below

Other protection

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

Respiratory protection

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

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

* - Negative pressure demand ** - Continuous flow

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

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

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appropriate government standards such as NIOSH (US) or CEN (EU)

- \cdot Use approved positive flow mask if significant quantities of dust becomes airborne.
- \cdot Try to avoid creating dust conditions.

Class P2 particulate filters are used for protection against mechanically and thermally generated particulates or both.

P2 is a respiratory filter rating under various international standards, Filters at least 94% of airborne particles Suitable for:

- $\cdot \ \text{Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.}$
- Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
 Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

. ,			
Appearance White waxy solid, flakes or chunks with slight odour; miscible with water.			
Physical state	Solid	Relative density (Water = 1)	1.1
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	>400
pH (as supplied)	Not Available	Decomposition temperature (°C)	>200
Melting point / freezing point (°C)	147.5	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	>200 (decomposes)	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	228 (CC)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	5.5-7 (10% solution)
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

Information on toxicological effects

Inhaled	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.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. 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.
Еуе	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.

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Chronic

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.

Prolonged or repeated skin contact may cause degreasing with drying, cracking and dermatitis following.

I I	TOXICITY	IRRITATION
Iselux	Not Available	Not Available
	TOXICITY	IRRITATION
sodium lauroyl 2-methyl isethionate	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
	Oral (Rat) LD50: 8400 mg/kg ^[1]	Skin: adverse effect observed (irritating) ^[1]
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	

The CIR Expert Panel concluded that the twelve isethionate salts used in cosmetics are safe in the present practices and concentrations when formulated to be non-irritating. These isethionate salts are reported to function mostly as surfactants and cleansing agents in cosmetic products. The Panel considered that the available data on isethionate salts and noted the lack of systemic toxicity at high doses in single dose and repeated dose oral animal studies, no teratogenic effects in animal studies, and little or no irritation or sensitization in multiple tests of dermal and ocular exposure. The Panel acknowledged the absence of carcinogenicity data but considered the data demonstrating that sodium cocoyl isethionate and sodium isethionate were not genotoxic in Ames tests and mammalian assays adequate to support the safety of these ingredients The Panel noted that most surfactants exhibit some irritancy, as was the case with sodium cocoyl isethionate at 2.9%.

The Panel considered pertinent data indicating that incidental inhalation exposures to some of these ingredients in such aerosolized cosmetic products would not cause adverse health effects, including dermal irritation and sensitization. The potential for inhalation toxicity is not limited to respirable droplets/particles deposited in the lungs; in principle, inhaled droplets/particles deposited in the nasopharyngeal and thoracic regions of the respiratory tract may cause toxic effects depending on their chemical and other properties. However, coupled with the small actual exposure in the breathing zone, the available information indicates that incidental inhalation would not be a significant route of exposure that might lead to local respiratory or systemic effects.

Although there are data gaps, the similar chemical structures, physicochemical properties, functions and concentrations in cosmetics, and the expected bio-handling enabled grouping these ingredients and reading across the available toxicological data to support the safety assessment of each individual compound in the entire group.

Cosmetic Ingredient Review (CIR): Amended Safety Assessment of Isethionate Salts as Used in Cosmetics: International Journal of Toxicology 2017, Vol 36

For sodium fatty acid isethionates:

In a hydrolysis study with sodium lauryl isethionate it was found to degrade by approximately 30% in simulated gastric fluid, which was considered to be probably due to acid hydrolysis, producing a single major labeled metabolite. In simulated intestinal fluid degradation was approximately 10% in 6 hours. Degradation was almost complete in the presence of porcine liver esterase over 6 hour with apparently the same major metabolite being produced.

It was concluded that sodium lauryl isethionate was shown to be unstable in conditions likely to be met in the stomach, small intestine and that when subsequently absorbed would probably be completely metabolized in the liver before entering the systemic bloodstream.

In the hydrolysis study with sodium stearyl isethionate, hydrolysis in the simulated gastric juice was 40% with 10% in simulated intestinal fluid. But degradation was only 20% with the porcine esterase after 6 hours. This indicates that sodium]stearyl isethionate, would be more slowly metabolized than the sodium lauryl isethionate. This slower metabolism for the sodium stearyl isethionate is considered to be due to it having predominantly C18 fatty acid linked to the isethionate, rather than C12. The C18 fatty acid present in the sodium stearyl isethionate being expected to be more slowly metabolized than fatty acids with shorter carbon chains such as C12.

SODIUM LAUROYL 2-METHYL ISETHIONATE

In the toxicokinetic studies the 12 hour in vivo rat dermal penetration study the penetration rate plateaued at 0.6 ug/cm2 /h indicating that the material remaining associated with the skin would have been available for absorption. In the in-vitro dermal penetration study in rat skin penetration was not detected over the 24 hour period, but this was considered due to limitation in the experiment.

In the in vitro dermal penetration study with human skin over 48 hours 30 ug/cm2 penetrated with approximately 10% of the dose associated with the skin at the end of the experiment which was considered to have been bioavailable for absorption.

In the metabolism experiments the labelled sodium lauryl isethionate (fatty acids, C12-18 and C18-unsaturated, 2-sulfoethyl esters, sodium salt CAS No 85408-62-4) was administered as aqueous solution either subcutaneously under the skin of the thorax or intraperitoneally. Both subcutaneous and intraperitoneal administration resulted in approximately 80% being recovered as labelled CO2, indicating that breaking of the isethionate/ laurate ester bond and oxidation of the resultant lauric acid is the major route of metabolism. This was being demonstrated by measuring the expired labelled CO2 in the first 24 hours. The urinary and faecal routes of excretion were only minor. The other product produced by hydrolysis of the ester bond was sodium isethionate; from this study, it cannot be determined whether this metabolite was further metabolized nor its route of excretion.

From these experiments it can be seen that sodium lauryl isethionate can be absorbed through skin at a low to moderate rate. Once within the body, metabolism to sodium isethionate, lauric acid (and its subsequent oxidation) is extensive.

This information is directly applicable also to coco fatty acids 2-sulfoethyl ester, sodium salt (sodium cocoyl isethionate) CAS No 61789-32-0, which has an overlapping carbon chain distribution, but with a significantly lower proportion of the less easily metabolized C16 and C18 fatty acid. The common metabolite of all the above is sodium isethionate (CAS RN: 1562-00-1) whose toxicity determines overall toxicity.

Reproductive toxicity

In studies with sodium lauryl isethionate there was no evidence of any adverse effects on reproduction in the parental animals or on the prenatal and post natal development of the offspring at the 1000 mg/kg bodyweight/day limit dose used there was no evidence of any adverse effects on reproduction in the parental animals or on the prenatal and post natal development of the offspring at the 1000 mg/kg bodyweight/day limit dose used.

REACh Dossier

The skin irritating potential of secondary alkyl sulfonate anionic surfactants (SAS) is about the same as for alkyl sulfates. SAS may therefore also be classified as Irritant (Xi) with R38 (Irritating to skin) and R41 (Risk of serious damage to eyes). SAS are not included in Annex 1 of list of dangerous substances of Council Directive 67/548/EEC.

SAS are readily absorbed from the gastrointestinal tract of rats after oral administration. Following administration of C12 and C16 SAS the main metabolite is butyric acid-4-sulfonate. This metabolite is eliminated in the urine.

The acute toxicity of a SAS of non-specified chain length in the rat was moderate with LD50 values between 1,000 and 3,000 mg/kg body weight when administered by the oral route.

The irritating potential of SAS to skin is almost the same as that of alkyl sulfates. Concentrations of more than 20% alkane sulfonate are strongly irritating to the skin of rabbits.

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Subchronic studies with rats receiving 300 mg SAS/kg body weight/day orally for 45 and 90 days revealed no adverse effects. Similarly, rats fed 0.5% SAS in their diets for 91 days developed no adverse symptoms et al. There was no indication of increased risk of cancer after oral ingestion of SAS in studies that were not further specified

Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Detergent Products, Environment Project, 615, 2001. Torben Madsen et al: Miljoministeriet (Danish Environmental Protection Agency)

for secondary alkane sulfonates (syn: alkylsulfonates, SAS)

The toxicological data show that SAS was not genotoxic in vitro or in vivo, did not induce tumours in rodents after two years daily dosing using both, the oral and dermal route of exposure, and failed to induce either reproductive toxicity or developmental or teratogenic effects. The critical adverse effects identified are of local nature mainly due to the irritating properties of high concentrated SAS.

Comparison of the aggregate consumer exposure to SAS with a systemic NOEL of 180 mg/kg body weight per day (assuming 90% absorption) which is based on a chronic feeding study, results in an estimated Margin of Exposure (MOE) of 46500. This is a very large Margin of Exposure, large enough to account for the inherent uncertainty and variability of the hazard database and inter species and intraspecies extrapolations (which are usually conventionally estimated at a factor of 100).

Neat SAS is an irritant to skin and eyes in rabbits. The irritation potential of aqueous solutions of SAS depends on concentration. However, well documented human volunteer studies indicate that SAS up to concentrations of 60% active matter is not a significant skin irritant in humans. Local effects of hand wash solutions containing SAS do not cause concern given that SAS is not a contact sensitiser and that the concentrations of SAS in such solutions are well below 1% and therefore not expected to be irritating to eye or skin. Laundry pre-treatment tasks, which may translate into brief hand skin contact with higher concentrations of SAS, may occasionally result in mild irritation easily neutralized by prompt rinsing of the hands in water. Potential irritation of the respiratory tract is not a concern given the very low levels of airborne SAS generated as a consequence of cleaning spray aerosols or laundry powder detergent dust.

In view of the extensive database on toxic effects, the low exposure values calculated and the resulting large Margin of Exposure described above, it can be concluded that use of SAS in household laundry and cleaning products raises no safety concerns for the consumers. HERA Human & Environmental Risk Assessment on ingredients of household cleaning products:

April 2005 for Secondary Alkane Sulfonate (SAS) (CAS 68037-49-0)

No significant acute toxicological data identified in literature search.

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:

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

Data available to make classification

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Iselux	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	46.3mg/l	2
sodium lauroyl 2-methyl isethionate	EC50	48h	Crustacea	14.08mg/l	2
iscinonate	LC50	96h	Fish	>25mg/l	2
NOEC		96h	Algae or other aquatic plants	<0.1mg/l	2

Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

No Data available for all ingredients	Ingredient	Persistence: Water/Soil	Persistence: Air
TWO Data available for all ingredients		No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

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.

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▶ Where in doubt contact the responsible authority.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

Only dispose to the environment if a tolerable exposure limit has been set for the substance

Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

Land transport (UN): 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

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

Product name	Group
sodium lauroyl 2-methyl isethionate	Not Available

Transport in bulk in accordance with the IGC Code

Product name	Ship Type
sodium lauroyl 2-methyl isethionate	Not Available

SECTION 15 Regulatory information

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002521	Animal Nutritional and Animal Care Products Group Standard 2020
HSR002530	Cleaning Products Subsidiary Hazard Group Standard 2020
HSR002535	Gases under Pressure Mixtures Subsidiary Hazard Group Standard 2020
HSR002503	Additives Process Chemicals and Raw Materials Subsidiary Hazard Group Standard 2020
HSR002606	Lubricants Lubricant Additives Coolants and Anti freeze Agents Subsidiary Hazard Group Standard 2020
HSR002612	Metal Industry Products Subsidiary Hazard Group Standard 2020
HSR002624	N.O.S. Subsidiary Hazard Group Standard 2020
HSR002638	Photographic Chemicals Subsidiary Hazard Group Standard 2020
HSR002644	Polymers Subsidiary Hazard Group Standard 2020
HSR002647	Reagent Kits Group Standard 2020
HSR002648	Refining Catalysts Group Standard 2020
HSR002653	Solvents Subsidiary Hazard Group Standard 2020
HSR002670	Surface Coatings and Colourants Subsidiary Hazard Group Standard 2020
HSR002684	Water Treatment Chemicals Subsidiary Hazard Group Standard 2020
HSR100425	Pharmaceutical Active Ingredients Group Standard 2020
HSR002600	Leather and Textile Products Subsidiary Hazard Group Standard 2020
HSR002605	Lubricants Low Hazard Group Standard 2020
HSR002544	Construction Products Subsidiary Hazard Group Standard 2020
HSR002549	Corrosion Inhibitors Subsidiary Hazard Group Standard 2020
HSR002552	Cosmetic Products Group Standard 2020
HSR002558	Dental Products Subsidiary Hazard Group Standard 2020
HSR002565	Embalming Products Subsidiary Hazard Group Standard 2020
HSR002571	Fertilisers Subsidiary Hazard Group Standard 2020

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HSR Number Group Standard HSR002573 Fire Fighting Chemicals Group Standard 2021 HSR002578 Food Additives and Fragrance Materials Subsidiary Hazard Group Standard 2020 HSR002585 Fuel Additives Subsidiary Hazard Group Standard 2020 HSR002596 Laboratory Chemicals and Reagent Kits Group Standard 2020 Tattoo and Permanent Makeup Substances Group Standard 2020 HSR100580 HSR100757 Veterinary Medicines Limited Pack Size Finished Dose Group Standard 2020 HSR100758 Veterinary Medicines Non dispersive Closed System Application Group Standard 2020 HSR100759 Veterinary Medicines Non dispersive Open System Application Group Standard 2020 HSR100592 Agricultural Compounds Special Circumstances Group Standard 2020 HSR100756 Active Ingredients for Use in the Manufacture of Agricultural Compounds Group Standard 2020

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

sodium lauroyl 2-methyl isethionate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

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Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantities
Not Applicable	Not Applicable

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)	Maximum quantity per package for each classification
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (sodium lauroyl 2-methyl isethionate)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	No (sodium lauroyl 2-methyl isethionate)	
Japan - ENCS	No (sodium lauroyl 2-methyl isethionate)	
Korea - KECI	No (sodium lauroyl 2-methyl isethionate)	
New Zealand - NZIoC	No (sodium lauroyl 2-methyl isethionate)	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (sodium lauroyl 2-methyl isethionate)	
Vietnam - NCI	Yes	
Russia - FBEPH	No (sodium lauroyl 2-methyl isethionate)	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

SECTION 16 Other information

Revision Date	10/03/2023
Initial Date	06/01/2022

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Version	Date of Update	Sections Updated	
3.1	10/03/2023	Classification change due to full database hazard calculation/update.	

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources 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 Limit₀

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard OSF: Odour Safety Factor

TLV: Threshold Limit Value

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List

NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances