# Hobson Engineering Co Pty Ltd

Chemwatch: 5252-89

Version No: 5.1 Print Date: 26/05/2022 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements L.GHS.AUS.EN.E

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

#### **Product Identifier**

Product name	Mungo MIT-SE PLUS, Comp. A
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	Adhesive mortar for fastening elements A-component (resin). Use according to manufacturer's directions.

### Details of the supplier of the safety data sheet

Registered company name	Hobson Engineering Co Pty Ltd	
Address	10 Clay Place Eastern Creek NSW 2176 Australia	
Telephone	+61 2 8818 0222	
Fax	+61 2 9620 1850	
Website	www.hobson.com.au	
Email	info@hobson.com.au	

#### Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE	
Emergency telephone numbers	+61 1800 951 288	
Other emergency telephone numbers	+61 3 9573 3188	

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

Poisons Schedule	Not Applicable	
Classification <sup>[1]</sup>	Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2B, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3	
Legend:	Legend: 1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	

### Label elements

Hazard pictogram(s)	

Signal word Warning

### Hazard statement(s)

H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H320	Causes eye irritation.		
H335	May cause respiratory irritation.		

### Precautionary statement(s) Prevention

• • • • •		
P271	Use only a well-ventilated area.	
P280	Wear protective gloves and protective clothing.	
P261	Avoid breathing mist/vapours/spray.	

Chemwatch Hazard Alert Code: 2

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 P264
 Wash all exposed external body areas thoroughly after handling.

 P272
 Contaminated work clothing should not be allowed out of the workplace.

### Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water and soap.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.		
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.		
P337+P313	If eye irritation persists: Get medical advice/attention.		
P362+P364	Take off contaminated clothing and wash it before reuse.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		

#### Precautionary statement(s) Storage

	-	
P405	Store locked up.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	

### Precautionary statement(s) Disposal

**P501** Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Not Applicable

### **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name
97-90-5	10-20	ethylene glycol dimethacrylate
923-26-2	1-<10	2-hydroxypropyl methacrylate
14808-60-7	1-<5 silica crystalline - quartz	
38668-48-3	0.1-<1 dipropoxy-p-toluidine	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&I - * FU IOFI Vs available	

### **SECTION 4 First aid measures**

#### Description of first aid measures If this product comes in contact with the eyes: 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 Eye Contact and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Skin Contact Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Inhalation Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. 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. Ingestion 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

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

- Carbon dioxide.
- Water spray or fog Large fires only.

### Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>Avoid spraying water onto liquid pools.</li> <li>Do not approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> <li>Mists containing combustible materials may be explosive.</li> </ul> Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2) nitrogen oxides (NOX) other pyrolysis products typical of burning organic material.
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	<ul> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Wear impervious gloves and safety goggles.</li> <li>Trowel up/scrape up.</li> <li>Place spilled material in clean, dry, sealed container.</li> <li>Flush spill area with water.</li> </ul>
Major Spills	<ul> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment as required.</li> <li>Prevent spillage from entering drains or water ways.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</li> <li>Wash area and prevent runoff into drains or waterways.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

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

### **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Limit all unnecessary personal contact.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>When handling DO NOT eat, drink or smoke.</li> <li>Always wash hands with soap and water after handling.</li> <li>Avoid physical damage to containers.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Store between 5 and 25 deg. C.</li> </ul>

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

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### Mungo MIT-SE PLUS, Comp. A

	<ul> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	<ul> <li>for multifunctional acrylates:</li> <li>Avoid exposure to free radical initiators (peroxides, persulfates), iron, rust, oxidisers, and strong acids and strong bases.</li> <li>Avoid heat, flame, sunlight, X-rays or ultra-violet radiation.</li> <li>Storage beyond expiration date, may initiate polymerisation. Polymerisation of large quantities may be violent (even explosive)</li> </ul>

### **SECTION 8 Exposure controls / personal protection**

#### **Control parameters**

### Occupational Exposure Limits (OEL)

## INGREDIENT DATA

<b>3</b> • • • •	Material Hallie	IWA	SIEL	Реак	Notes
Australia Exposure Standards silica crystalline	quartz Silica - Crystalline: Quartz (respira	ble dust) 0.05 mg/m3	Not Available	Not Available	Not Available

### Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
ethylene glycol dimethacrylate	9.9 mg/m3	110 mg/m3		650 mg/m3
silica crystalline - quartz	0.075 mg/m3	33 mg/m3		200 mg/m3
Ingredient	Original IDLH		Revised ID	LH
ethylene glycol dimethacrylate	Not Available		Not Availabl	e
2-hydroxypropyl methacrylate	Not Available		Not Availabl	e
silica crystalline - quartz	25 mg/m3 / 50 mg/m3		Not Available	
dipropoxy-p-toluidine	Not Available		Not Available	

#### Occupational Exposure Banding Ingredient **Occupational Exposure Band Rating Occupational Exposure Band Limit** ethylene glycol dimethacrylate ≤ 0.1 ppm Е 2-hydroxypropyl methacrylate Е ≤ 0.1 ppm dipropoxy-p-toluidine Е ≤ 0.01 ma/m<sup>3</sup> Notes: Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

MATERIAL DATA

NOTE D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed on Annex I

When they are placed on the market in a non-stabilised form, the label must state the name of the substance followed by the words "non-stabilised"

European Union (EU) List of harmonised classification and labelling hazardous substances, Table 3.1, Annex VI, Regulation (EC) No 1272/2008 (CLP) - up to the latest ATP

### 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: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulation air required to effectively remove the contaminant				
	Type of Contaminant:	Air Speed:			
Appropriate engineering	solvent, vapours, degreasing etc., evaporating from tank (i	0.25-0.5 m/s (50-100 f/min)			
controls	aerosols, fumes from pouring operations, intermittent conta drift, plating acid fumes, pickling (released at low velocity in	0.5-1 m/s (100-200 f/min.)			
	direct spray, spray painting in shallow booths, drum filling, generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)			
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).		2.5-10 m/s (500-2000 f/min.)		
	Within each range the appropriate value depends on:				
	Lower end of the range	Upper end of the range			
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents			
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity			
	3: Intermittent, low production.	3: High production, heavy use			
	4: Large hood or large air mass in motion	4: Small hood-local control only			

	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used. Refer also to protective measures for the other component used with the product. Read both SDS before using; store and attach SDS together.			
Personal protection				
Eye and face protection	<ul> <li>Safety glasses with side shields; or as required,</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>			
Skin protection	See Hand protection below	See Hand protection below		
Hands/feet protection	NOTE: • The material may produce skin sensitisation equipment, to avoid all possible skin contact • Contaminated leather items, such as shoes, General warning: Do NOT use latex gloves! Use Exposure condition Short time use; (few minutes less than 0.5 hour) Little physical stress Exposure condition Medium time use; less than 4 hours Physical stress (opening drums, using tools, etc.)	in predisposed individuals. Care must be taken, when removing gloves and other protective belts and watch-bands should be removed and destroyed. only recommended gloves - using the wrong gloves may increase the risk: Use of thin nitrile rubber gloves: Nitrile rubber (0.1 mm) Excellent tactibility ("feel"), powder-free Disposable Inexpensive Give adequate protection to low molecular weigh acrylic monomers Use of medium thick nitrile rubber gloves Nitrile rubber, NRL (latex) free; <0.45 mm Moderate tactibility ("feel"), powder-free Disposable Moderate price Gives adequate protection for most acrylates up to 4 hours Do NOT give adequate protection to low molecular weight monomers at exposures longer than 1 hour		
	Exposure condition       Initial procession         Long time       Cleaning operations         Cleaning operations       Gives adequate protection for most acrylates in combination with commonly used solvents up to 8 hours         Do NOT give adequate protection to low molecular weight monomers at exposures longer than 1 hour         Avoid use of ketones and acetates in wash-up solutions.         Where none of this gloves ensure safe handling (for example in long term handling of acrylates containing high levels of acetates and/ or ketones, use laminated multilayer gloves.         Guide to the Classification and Labelling of UV/EB Acrylates Third edition. 231 October 2007 - Cefic.			
Body protection	See Other protection below			
Other protection	<ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>			

### **Respiratory protection**

Type AK-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	AK-AUS P3	-	AK-PAPR-AUS / Class 1 P3
up to 50 x ES	-	AK-AUS / Class 1 P3	-
up to 100 x ES	-	AK-2 P3	AK-PAPR-2 P3 ^

^ - 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)

### **SECTION 9 Physical and chemical properties**

Appearance	Light beige paste with characteristic odour; insoluble in water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	1.52-1.68
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 Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	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 Applicable	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

# **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

### **SECTION 11 Toxicological information**

## Information on toxicological effects

Inhaled	Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. No report of respiratory illness in humans as a result of exposure to multifunctional acrylates has been found. Similarly evidence of systemic damage does not appear to exist.
Ingestion	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.
Skin Contact	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.
Eye	Limited evidence exists, or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals and/or is expected to 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.
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals. Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to a sathma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance who are likely to become hyper-responsive. Substances than can cuase occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing air-way hyper-responsiveness. The latter substances are not classified as asthmagens or respiratory sensitisers Wherever it is reasonably practicable, exposure to substances that can cuase occupational asthma should be prevented. Where this is not possible the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive.

Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance. TOXICITY IRRITATION Mungo MIT-SE PLUS, Comp. A Not Available Not Available ΤΟΧΙΟΙΤΥ IRRITATION dermal (rat) LD50: >2000 mg/kg<sup>[1]</sup> Eye: no adverse effect observed (not irritating)<sup>[1]</sup> ethylene glycol dimethacrylate Skin: no adverse effect observed (not irritating)<sup>[1]</sup> Oral (Mouse) LD50; 2000 mg/kg<sup>[2]</sup> TOXICITY IRRITATION Oral (Rat) LD50; 5050 mg/kg<sup>[2]</sup> Eye: adverse effect observed (irritating)<sup>[1]</sup> 2-hydroxypropyl methacrylate Skin: no adverse effect observed (not irritating)<sup>[1]</sup> TOXICITY IRRITATION silica crystalline - quartz Oral (Rat) LD50; 500 mg/kg<sup>[2]</sup> Not Available TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg[1] Eye (rabbit): slight\* \* = BAYER dipropoxy-p-toluidine Oral (Rat) LD50; >25<200 mg/kg<sup>[1]</sup> Skin (rabbit): 4h - Non irrit.\* 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise Leaend: specified data extracted from RTECS - Register of Toxic Effect of chemical Substances UV (ultraviolet)/ EB (electron beam) acrylates are generally of low toxicity UV/EB acrylates are divided into two groups; "stenomeric" and "eurymeric" acrylates. The first group consists of well-defined acrylates which can be described by a simple idealised chemical; they are low molecular weight species with a very narrow weight distribution profile. ETHYLENE GLYCOL The eurymeric acrylates cannot be described by an idealised structure and may differ fundamentally between various suppliers; they are of DIMETHACRYLATE relatively high molecular weigh and possess a wide weight distribution. Stenomeric acrylates are usually more hazardous than the eurymeric substances. Stenomeric acrylates are also well defined which allows comparison and exchange of toxicity data - this allows more accurate classification. The stenomerics cannot be classified as a group; they exhibit substantial variation. 2-HYDROXYPROPYL for CAS 963-26-2 2-hydroxypropyl methacrylate NOTE: Allergic contact dermatitis is reported following exposure of guinea pigs (mild) and METHACRYLATE humans (severe). for CAS 27813-02-1 1-hydroxypropyl methacrylate WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung SILICA CRYSTALLINE disease. QUARTZ Intermittent exposure produces; focal fibrosis, (pneumoconiosis), cough, dyspnoea, liver tumours. \* Millions of particles per cubic foot (based on impinger samples counted by light field techniques). NOTE : the physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles. 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. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested. Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible FTHYLENE GLYCOL airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal **DIMETHACRYLATE &** lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to 2-HYDROXYPROPYL the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a METHACRYLATE result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production. Based on the available oncogenicity data and without a better understanding of the carcinogenic mechanism the Health and Environmental Review Division (HERD), Office of Toxic Substances (OTS), of the US EPA previously concluded that all chemicals that contain the acrylate or methacrylate moiety (CH2=CHCOO or CH2=C(CH3)COO) should be considered to be a carcinogenic hazard unless shown otherwise by adequate testing.

This position has now been revised and acrylates and methacrylates are no longer de facto carcinogens.

Where no "official" classification for acrylates and methacrylates exists, there has been cautious attempts to create classifications in the absence of contrary evidence. For example

Monalkyl or monoarylesters of acrylic acids should be classified as R36/37/38 and R51/53 Monoalkyl or monoaryl esters of methacrylic acid should be classified as R36/37/38

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×

Serious Eye Damage/Irritation	¥	STOT - Single Exposure	¥
Respiratory or Skin sensitisation	<b>✓</b>	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: X − Data either not available or does not fill the criteria for classification	

## **SECTION 12 Ecological information**

	Endpoint	Test Duration (hr)	Species	Value	Source
lungo MIT-SE PLUS, Comp. A	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	96h	Algae or other aquatic plants	0.804mg/l	2
	LC50	96h	Fish	15.95mg/l	2
thylene glycol dimethacrylate	EC50	72h	Algae or other aquatic plants	17.3mg/l	2
	EC50	48h	Crustacea	44.9mg/l	2
	EC50	96h	Algae or other aquatic plants	10.1mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	833mg/l	2
-hydroxypropyl methacrylate	EC50	72h	Algae or other aquatic plants	>97.2mg/l	2
	EC50	48h	Crustacea	>143mg/l	2
	NOEC(ECx)	504h	Crustacea	45.2mg/l	2
silica crystalline - quartz	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96h	Fish	17mg/l	2
dipropoxy-p-toluidine	EC50	72h	Algae or other aquatic plants	245mg/l	2
	EC50	48h	Crustacea	28.8mg/l	2
		48h	Crustacea	28.8mg/l	2

DO NOT discharge into sewer or waterways.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol dimethacrylate	LOW	LOW
2-hydroxypropyl methacrylate	LOW	LOW
dipropoxy-p-toluidine	HIGH	HIGH

## **Bioaccumulative potential**

Ingredient	Bioaccumulation
ethylene glycol dimethacrylate	LOW (LogKOW = 2.2088)
2-hydroxypropyl methacrylate	LOW (BCF = 3.2)
dipropoxy-p-toluidine	LOW (LogKOW = 2.0121)

### Mobility in soil

Ingredient	Mobility
ethylene glycol dimethacrylate	LOW (KOC = 27.15)
2-hydroxypropyl methacrylate	LOW (KOC = 10)
dipropoxy-p-toluidine	LOW (KOC = 10)

### **SECTION 13 Disposal considerations**

<ul> <li>Product / Packaging disposal</li> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Material may be disposed of by controlled burning in an approved incinerator or buried in an approved landfill.</li> <li>Prior to disposal in a landfill the material should be mixed with the other component and reacted to render the material inert.</li> <li>Extreme caution should be taken when heating the resin/curing agent mix.</li> <li>Recycle containers where possible, or dispose of in an authorised landfill.</li> </ul>	
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### **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

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

Product name	Group
ethylene glycol dimethacrylate	Not Available
2-hydroxypropyl methacrylate	Not Available
silica crystalline - quartz	Not Available
dipropoxy-p-toluidine	Not Available

#### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
ethylene glycol dimethacrylate	Not Available
2-hydroxypropyl methacrylate	Not Available
silica crystalline - quartz	Not Available
dipropoxy-p-toluidine	Not Available

#### **SECTION 15 Regulatory information**

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

#### ethylene glycol dimethacrylate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

#### 2-hydroxypropyl methacrylate is found on the following regulatory lists

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

#### silica crystalline - quartz is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Model Work Health and Safety Regulations - Hazardous chemicals (other than lead) requiring health monitoring Australian Inventory of Industrial Chemicals (AIIC)

### dipropoxy-p-toluidine is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Australian Inventory of Industrial Chemicals (AIIC)

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

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

#### **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (ethylene glycol dimethacrylate; 2-hydroxypropyl methacrylate; silica crystalline - quartz; dipropoxy-p-toluidine)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes

National Inventory	Status
Taiwan - TCSI	Yes
Mexico - INSQ	No (dipropoxy-p-toluidine)
Vietnam - NCI	Yes
Russia - FBEPH	No (dipropoxy-p-toluidine)
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	26/05/2022
Initial Date	17/05/2017

#### SDS Version Summary

Version	Date of Update	Sections Updated
4.1	15/04/2021	Classification change due to full database hazard calculation/update.
5.1	26/05/2022	Classification, Ingredients, 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。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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TEL (+61 3) 9572 4700.

# Hobson Engineering Co Pty Ltd

Chemwatch: 5252-90

Version No: 8.1 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements L.GHS.AUS.EN.E

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

#### **Product Identifier**

Product name	Mungo MIT-SE PLUS, Comp. B
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	Adhesive mortar for fastening elements, B-component (hardener). Use according to manufacturer's directions.
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### Details of the supplier of the safety data sheet

Registered company name	Hobson Engineering Co Pty Ltd
Address	10 Clay Place Eastern Creek NSW 2176 Australia
Telephone	+61 2 8818 0222
Fax	+61 2 9620 1850
Website	www.hobson.com.au
Email	info@hobson.com.au

#### Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE	
Emergency telephone numbers	+61 1800 951 288	
Other emergency telephone numbers	+61 3 9573 3188	

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

Poisons Schedule	Not Applicable	
Classification <sup>[1]</sup>	Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2A	
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	

#### Label elements

Hazard pictogram(s)	
Signal word	Warning
Hazard statement(s)	

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

# Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P261	Avoid breathing mist/vapours/spray.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Chemwatch Hazard Alert Code: 2

Issue Date: 26/05/2022 Print Date: 27/05/2022

### Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

### Precautionary statement(s) Storage

Not Applicable

### Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Not Applicable

### **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
94-36-0	10-<20	dibenzoyl peroxide
5444-75-7	<5	2-ethylhexylbenzoate
Not Available	<5	reaction mass of diethylene glycol dibenzoate,
Not Available		dipropylene glycol dibenzoate and triethylene
Not Available		glycol dibenzoate
14808-60-7	1-<5	silica crystalline - quartz
Not Available	balance	Ingredients determined not to be hazardous
Legend:	<ol> <li>Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; Classification drawn from C&amp;L * EU IOELVs available</li> </ol>	

### **SECTION 4 First aid measures**

#### Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>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.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

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

Treat symptomatically.

## **SECTION 5 Firefighting measures**

### Extinguishing media

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

Fire Incompatibility	None known			
Advice for firefighters				
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>			
Fire/Explosion Hazard	<ul> <li>The material is not readily combustible under normal conditions.</li> <li>However, it will break down under fire conditions and the organic component may burn.</li> <li>Not considered to be a significant fire risk.</li> <li>Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> </ul>			

	May emit acrid smoke.
	Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2)
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	<ul> <li>Slippery when spilt.</li> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Wear impervious gloves and safety goggles.</li> <li>Trowel up/scrape up.</li> <li>Place spilled material in clean, dry, sealed container.</li> <li>Flush spill area with water.</li> </ul>
Major Spills	<ul> <li>Slippery when spilt.</li> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Control personal contact with the substance, by using protective equipment as required.</li> <li>Prevent spillage from entering drains or water ways.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.</li> <li>Wash area and prevent runoff into drains or waterways.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

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

# **SECTION 7 Handling and storage**

# Precautions for safe handling

Safe handling	<ul> <li>Limit all unnecessary personal contact.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>When handling DO NOT eat, drink or smoke.</li> <li>Always wash hands with soap and water after handling.</li> <li>Avoid physical damage to containers.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Store between 5 and 25 deg. C.</li> <li>Protect from light.</li> </ul>

## Conditions for safe storage, including any incompatibilities

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

	For benzoyl peroxide:
	Avoid reaction with acids, alkalis, oxidising and reducing agents, metals and metal oxides, and combustible materials.
	Amines and solutions of cobalt salts used as promoters and accelerators in polyester compounds if mixed with benzoyl peroxide will cause spontaneous decomposition (detonation).
	Alkalis cause rapid decomposition of benzoyl peroxide with generation of large volumes of carbon dioxide gas (CO2) and may pressurise containers.
	Avoid contact with copper, brass, lead and zinc.
	Confined storage of the dry chemical may lead to decomposition and explosion.
	Extremely reactive oxidiser.
Storage incompatibility	An explosive that is sensitive to friction, shock, and heat.
	May decompose below its melting point (103 C).
	Fire and/ or explosion may result from contamination with alcohols, amines, aniline, N,N-dimethylaniline, ethers, polymerisation catalysts, lithium aluminium carbide, lithium tetrahydroaluminate, metallic naphthenates, methyl methacrylate, organic matter, charcoal.
	Attacks some plastics, rubber and coatings.
	Avoid cross contamination between the two liquid parts of product (kit).
	If two part products are mixed or allowed to mix in proportions other than manufacturer's recommendation, polymerisation with gelation and evolution of heat (exotherm) may occur.
	This excess heat may generate toxic vapour
	Avoid any contamination of this material as it is very reactive and any contamination is potentially hazardous

# 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	dibenzoyl peroxide	Benzoyl peroxide	5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	silica crystalline - quartz	Silica - Crystalline: Quartz (respirable dust)	0.05 mg/m3	Not Available	Not Available	Not Available

	Emergency Limits					
	Ingredient	TEEL-1	TEEL-2		TEEL-3	
	dibenzoyl peroxide	15 mg/m3	1,200 mg/m3		7,000 mg/m3	
	silica crystalline - quartz	0.075 mg/m3	33 mg/m3		200 mg/m3	
	Ingredient	Original IDLH		Revised ID	DLH	
	Ingredient dibenzoyl peroxide	Original IDLH 1,500 mg/m3		Revised II	DLH	
	Ingredient dibenzoyl peroxide 2-ethylhexylbenzoate	Original IDLH 1,500 mg/m3 Not Available		Revised II Not Availat Not Availat	DLH	
_	Ingredient dibenzoyl peroxide 2-ethylhexylbenzoate silica crystalline - quartz	Original IDLH 1,500 mg/m3 Not Available 25 mg/m3 / 50 mg/m3		Revised II Not Availat Not Availat Not Availat	DLH	

### MATERIAL DATA

## Exposure controls

	Use in a well-ventilated area Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure aviets wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate wortilation in workeouse			
	or closed storage areas. Air contaminants generated in the w velocities" of fresh circulating air required to effectively remov	orkplace possess varying "escape" velocities which, in turn ve the contaminant.	, determine the "capture	
	Type of Contaminant:		Air Speed:	
	solvent, vapours, degreasing etc., evaporating from tank (in	0.25-0.5 m/s (50-100 f/min)		
Appropriate engineering controls	aerosols, fumes from pouring operations, intermittent conta drift, plating acid fumes, pickling (released at low velocity in	0.5-1 m/s (100-200 f/min.)		
	direct spray, spray painting in shallow booths, drum filling, generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)		
	grinding, abrasive blasting, tumbling, high speed wheel gen very high rapid air motion).	nerated dusts (released at high initial velocity into zone of	2.5-10 m/s (500-2000 f/min.)	
	Within each range the appropriate value depends on:			
	Lower end of the range	Upper end of the range		
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents		
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity		
	3: Intermittent, low production.	3: High production, heavy use		
	4: Large hood or large air mass in motion	4: Small hood-local control only		
	Simple theory shows that air velocity falls rapidly with distanc with the square of distance from the extraction point (in simpl accordingly, after reference to distance from the contaminatir	e away from the opening of a simple extraction pipe. Veloci e cases). Therefore the air speed at the extraction point sho ng source. The air velocity at the extraction fan, for example	ty generally decreases ould be adjusted, , should be a minimum of	

	1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used. Refer also to protective measures for the other component used with the product. Read both SDS before using; store and attach SDS together.
Personal protection	
Eye and face protection	<ul> <li>Safety glasses with side shields; or as required,</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>NOTE:</li> <li>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.</li> <li>Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul>
Body protection	See Other protection below
Other protection	<ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>

### **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)

### **SECTION 9** Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Black paste with characteristic odour; insoluble in water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	1.59
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	116	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	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 Applicable	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (Not Available%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

le and hazardous polymerisation will not occur.

# **SECTION 11 Toxicological information**

### Information on toxicological effects

Inhaled	Not normally a hazard due to non-volatile nature of product		
Ingestion	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.		
Skin Contact	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.		
Eye	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.		
Chronic	Practical experience shows that skin contact with the material is capable individuals, and/or of producing a positive response in experimental anim Substances that can cause occupational asthma (also known as asthma hyper-responsiveness via an immunological, irritant or other mechanism. the substance, sometimes even to tiny quantities, may cause respiratory asthma. Not all workers who are exposed to a sensitiser will become hyp become hyper-responsive. Substances than can cuase occupational asthma should be distinguishe with pre-existing air-way hyper-responsiveness. The latter substances ar Wherever it is reasonably practicable, exposure to substances that can co possible the primary aim is to apply adequate standards of control to pre Activities giving rise to short-term peak concentrations should receive pa surveillance is appropriate for all employees exposed or liable to be expo should be appropriate consultation with an occupational health professio	either of inducing a sensitisation reaction in a substantial number of nals. gens and respiratory sensitisers) can induce a state of specific airway . Once the airways have become hyper-responsive, further exposure to symptoms. These symptoms can range in severity from a runny nose to ber-responsive and it is impossible to identify in advance who are likely to d from substances which may trigger the symptoms of asthma in people re not classified as asthmagens or respiratory sensitisers cuase occupational asthma should be prevented. Where this is not vent workers from becoming hyper-responsive. rticular attention when risk management is being considered. Health based to a substance which may cause occupational asthma and there nal over the degree of risk and level of surveillance.	
Mungo MIT-SE PLUS, Comp. B	TOXICITY Not Available	IRRITATION Not Available	
dibenzoyl peroxide	TOXICITY dermal (mammal) LD50: >1000 mg/kg <sup>[2]</sup>	IRRITATION Eye (rabbit): 500 mg/24h - mild	
	Oral (Rat) LD50; 7710 mg/kg <sup>[2]</sup>	Skin effects (MAK): very weak	
2-ethylhexylbenzoate	TOXICITY           dermal (rat) LD50: >=5000 mg/kg <sup>[1]</sup> Oral (Pat) LD50: 2500 mg/kg <sup>[1]</sup>	IRRITATION Not Available	
silica crystalline - quartz	ΤΟΧΙΟΙΤΥ	IRRITATION	
since of ystannic - quartz	Oral (Rat) LD50; 500 mg/kg <sup>[2]</sup>	Not Available	
Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - Acute to specified data extracted from RTECS - Register of Toxic Effect of chemic</li> </ol>	xicity 2.* Value obtained from manufacturer's SDS. Unless otherwise cal Substances	
DIBENZOYL PEROXIDE	The following information refers to contact allergens as a group and may Contact allergies quickly manifest themselves as contact eczema, more eczema involves a cell-mediated (T lymphocytes) immune reaction of the involve antibody-mediated immune reactions. The significance of the cor distribution of the substance and the opportunities for contact with it are distributed can be a more important allergen than one with stronger sens clinical point of view, substances are noteworthy if they produce an allerg The material may be irritating to the eye, with prolonged contact causing conjunctivitis. The material may cause skin irritation after prolonged or repeated exposs dermatitis is often characterised by skin redness (erythema) and swelling spongy layer (spongiosis) and intracellular oedema of the epidermis. For benzoyl peroxide:	not be specific to this product. rarely as urticaria or Quincke's oedema. The pathogenesis of contact e delayed type. Other allergic skin reactions, e.g. contact urticaria, ntact allergen is not simply determined by its sensitisation potential: the equally important. A weakly sensitising substance which is widely itising potential with which few individuals come into contact. From a gic test reaction in more than 1% of the persons tested. inflammation. Repeated or prolonged exposure to irritants may produce ure and may produce a contact dermatitis (nonallergic). This form of g epidermis. Histologically there may be intercellular oedema of the	
		Continued	

	The acture of al toxicity of benzoof perioxide is very low. I rats following inhalation of 24.3 mg/L. Visible effects inc rates and motor activity. Benzoyl peroxide was slightly irritating to skins in 24 hr- 5 minutes after instillation, however, if the chemical was Positive results from sensitisation tests in guinea pigs a peroxide is a skin sensitiser. In the combined repeated dose and reproduction/devel or biochemical adverse effects. Repeated administratio testes and epididymis in male rats. The NOAEL for rep- This substance did not cause gene mutation in bacteria Lung) cells. An <i>in vivo</i> mammalian erythrocytes micronic conclusion that benzoyl peroxide is not a mutagen. There is no evidence to suggest that benzoyl peroxide i peroxide is a skin tumour promoter. In the combined repeated dose and reproduction/devel rate of copulation, fertility and gestation were noted in a in parental male rats with the reduction of reproductive were observed during the test period. The NOAEL for r seen was that body weight gain of pups at dose of 1,00 500 mg/kg bw/day. The substance is classified by IARC as Group 3: <b>NOT</b> classifiable as to its carcinogenicity to humans.	LDS0 >2,000 mg/kg bw in mice, and 5 cluded eye squint, dyspnea, salivation, -patch tests. Benzoyl peroxide was no s not washed out until 24 hours later, it and mice, and from a maximization tes opmental toxicity study (OECD TG 42: on by oral gavage up to 1,000 mg/kg bw eated dose toxicity was 500 mg/kg bw, a (OECD TG 471 & 472) and <i>in vitro</i> ch ucleus test (OECD TG 474) produced is a carcinogen. However, there is son opmental toxicity study [OECD TG 42: any treated group. Adverse effects wer organ weight and slight testes degene eproduction toxicity in male rats was 5 00 mg/kg bw/day was significantly decr	<ul> <li>(acrimation, erythema and changes of respiratory</li> <li>t irritating to the eyes of rabbits if washed out within</li> <li>proved to be irritating.</li> <li>t in human volunteers, indicate that benzoyl</li> <li>(2), benzoyl peroxide did not produce hematological</li> <li>(/day for 29 days resulted in decreased weights of</li> <li>(/day.</li> <li>noromosomal aberration in CHL (Chinese Hamster</li> <li>negative result. The available evidence supports the</li> <li>ne evidence from nonguidelines studies that benzoyl</li> <li>(2), no treatment-related changes in precoital time,</li> <li>re shown at the highest dose of 1,000 mg/kg bw/day</li> <li>rration. In parental female rats, no adverse effects</li> <li>(00 mg/kg bw/day. In the offspring, the only effect</li> <li>reased. The NOAEL for developmental toxicity was</li> </ul>
	Evidence of carcinogenicity may be inadequate or limite	ed in animal testing.	
2-ETHYLHEXYLBENZOATE	No significant acute toxicological data identified in litera	ature search.	
SILICA CRYSTALLINE - QUARTZ	<ul> <li>WARNING: For inhalation exposure <u>ONLY</u>: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS</li> <li>The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (&lt;5 um) crystalline silica as being carcinogenic to humans. This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease. Intermittent exposure produces; focal fibrosis, (pneumoconiosis), cough, dyspnoea, liver tumours.</li> <li>* Millions of particles per cubic foot (based on impinger samples counted by light field techniques). NOTE : the physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles.</li> </ul>		
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 nor V – Data available	t available or does not fill the criteria for classification to make classification

# **SECTION 12 Ecological information**

	Endpoint	Test Duration (hr)	Species	Value	Source
ungo MIT-SE PLUS, Comp. B	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC10(ECx)	504h	Crustacea	0.001mg/l	2
dibenzoyl peroxide	LC50	96h	Fish	0.06mg/l	2
	EC50	72h	Algae or other aquatic plants	0.042mg/l	2
	EC50	48h	Crustacea	0.11mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	NOEC(ECx)	96h	Algae or other aquatic plants	>=0.035mg/l	2
	LC50	96h	Fish	>0.66mg/l	2
2-ethylnexylbenzoate	EC50	72h	Algae or other aquatic plants	8.14mg/l	2
	EC50	48h	Crustacea	>0.125mg/l	2
	EC50	96h	Algae or other aquatic plants	>0.035mg/l	2
silica crystalline - quartz	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Availabl

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

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
dibenzoyl peroxide	LOW (Half-life = 14 days)	LOW (Half-life = 21.25 days)
2-ethylhexylbenzoate	LOW	LOW

#### Bioaccumulative potential

Ingredient	Bioaccumulation
dibenzoyl peroxide	LOW (LogKOW = 3.46)
2-ethylhexylbenzoate	HIGH (LogKOW = 5.1924)

### Mobility in soil

Ingredient	Mobility
dibenzoyl peroxide	LOW (KOC = 771)
2-ethylhexylbenzoate	LOW (KOC = 5178)

#### **SECTION 13 Disposal considerations**

Waste treatment methods	
Product / Packaging disposal	<ul> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Material may be disposed of by controlled burning in an approved incinerator or buried in an approved landfill.</li> <li>Prior to disposal in a landfill the material should be mixed with the other component and reacted to render the material inert.</li> <li>Extreme caution should be taken when heating the resin/curing agent mix.</li> <li>Recycle containers where possible, or dispose of in an authorised landfill.</li> </ul>

### **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

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

Product name	Group
dibenzoyl peroxide	Not Available
2-ethylhexylbenzoate	Not Available
silica crystalline - quartz	Not Available

### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
dibenzoyl peroxide	Not Available
2-ethylhexylbenzoate	Not Available
silica crystalline - quartz	Not Available

## **SECTION 15 Regulatory information**

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

#### dibenzoyl peroxide is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 2

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4  $\,$ 

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5  $\,$ 

Australian Inventory of Industrial Chemicals (AIIC)

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

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

2-ethylhexylbenzoate is found on the following regulatory lists Not Applicable

#### silica crystalline - quartz is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Model Work Health and Safety Regulations - Hazardous chemicals (other than lead) requiring health monitoring

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

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

#### **National Inventory Status**

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	No (2-ethylhexylbenzoate)	
Canada - DSL	Yes	
Canada - NDSL	No (dibenzoyl peroxide; 2-ethylhexylbenzoate; silica crystalline - quartz)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	No (2-ethylhexylbenzoate)	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (2-ethylhexylbenzoate)	
Vietnam - NCI	Yes	
Russia - FBEPH	No (2-ethylhexylbenzoate)	
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	26/05/2022
Initial Date	17/05/2017

#### **SDS Version Summary**

Version	Date of Update	Sections Updated
7.1	10/12/2021	Classification change due to full database hazard calculation/update.
8.1	26/05/2022	Classification, 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 Cancel ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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