SAFETY DATA SHEETS

This SDS packet was issued with item:

071250521

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071132547 071250448 071250463 071250471 071250489 071250497 071250513 071250539 071410844 71132547 71250448 71250463 71250471 71250489 71250497 71250513 71250521 71250539



Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer SDI Limited

Version No: 8.1.1.1

Safety Data Sheet according to WHMIS 2015 requirements

lssue Date: 01/11/2019 Print Date: 09/10/2020 L.GHS.CAN.EN

SECTION 1 Identification

Product Identifier

Product name	Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer	
Synonyms	Not Available	
Other means of identification	Not Available	

Recommended use of the chemical and restrictions on use

Relevant identified uses	For filling of cavitated teeth by dental professionals.
--------------------------	---

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

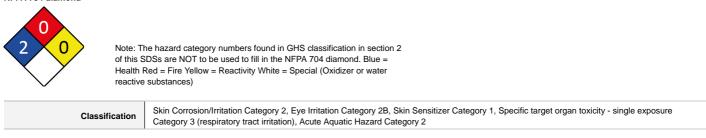
Registered company name	SDI Limited	SDI (North America) Inc.	SDI Dental Limited	
Address	3-15 Brunsdon Street Bayswater VIC 3153 Australia	1279 Hamilton Parkway Itasca IL 60143 United States	Block 8, St Johns Court Santry Dublin 9 Ireland	
Telephone	+61 3 8727 7111 (Business Hours)	+1 630 361 9200 (Business hours) 1 800 228 5166	+353 1 886 9577 (Business Hours) 800 0225 5734	
Fax	+61 3 8727 7222	+1 630 361 9222	Not Available	
Website	www.sdi.com.au	http://www.sdi.com.au	http://www.sdi.com.au/	
Email		USA.Canada@sdi.com.au	Ireland@sdi.com.au	
Registered company name		ING LIGHT		
Address	Rua Dr. Virgílio de Carvalho Pinto, 612 Pinheiros, Sao Paulo 05415-020 Brazil			
Telephone	+55 11 3092 7100 (Business Hours)			
Fax	+55 11 3092 7101			
Website	http://www.sdi.com.au/			
Email	Brasil@sdi.com.au			

Emergency phone number

Association / Organisation	SDI Limited	SDI Dental Limited	SDi
Emergency telephone numbers	+61 3 8727 7111	+61 3 8727 7111	+61 3 8727 7111
Other emergency telephone numbers	ray.cahill@sdi.com.au	Not Available	Not Available

SECTION 2 Hazard(s) identification

Classification of the substance or mixture NFPA 704 diamond



Label elements

Hazard pictogram(s)



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Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

Signal word Warning

Hazard statement(s)		
H315	Causes skin irritation.	
H320	Causes eye irritation.	
H317	May cause an allergic skin reaction.	
H335	May cause respiratory irritation.	
H401	Toxic to aquatic life.	

Physical and Health hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P261	Avoid breathing mist/vapours/spray.	
P273	Avoid release to the environment.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statement(s) Response

P321	Specific treatment (see advice on this label).
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.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
72869-86-4	3-20	diurethane dimethacrylate
109-16-0	0.01-7	triethylene glycol dimethacrylate
24448-20-2	15-18	2.2-bis[4-(2-methacryloxy)ethoxy)phenyl]propane

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	 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 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.
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. If irritation continues, seek medical attention.
Ingestion	Seek medical attention.

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Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

Treat symptomatically.

SECTION 5 Fire-fighting 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	None known.		
Special protective equipment a	 Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control the fire and cool adjacent area. Avoid spraying water onto liquid pools. 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. 		
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes. Decomposes on heating and produces: carbon dioxide (CO2) carbon monoxide (CO) 		

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	 Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up. Place spilled material in clean, dry, sealed container. Flush spill area with water.
Major Spills	 Minor hazard. Clear area of personnel. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services.

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

SECTION 7 Handling and storage

Precautions for safe handling

 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
Safe handling 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.

Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Print Date: 09/10/2020

Easyflow and LC Opaquer

Glacier, Wave, Wave WV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura

Other information

Avoid storage with reducing agents.	Storage incompatibility
 DO NOT repack. Use containers supplied by manufacturer only. Check that containers are clearly labelled and free from leaks 	Suitable container
seitiliditeqmooni yns pribul:	Conditions for safe storage, ind

SECTION 8 Exposure controls / personal protection

Do not store in direct sunlight.

Store between 10 and 25 deg. C.

Em\pm 001,S

£m\pm 000,7

E-133T

(2-methacryloxy)ethoxy)phenyl]propane

triethylene glycol dimethacrylate

Occupational Exposure Banding (2-methacryloxy)ethoxy)phenyl]propane

triethylene glycol dimethacrylate

triethylene glycol dimethacrylate

Occupational Exposure Limits (OEL)

diurethane dimethacrylate

diurethane dimethacrylate

Control parameters

diurethane dimethacrylate

Ξ

Ξ

Ξ

9ldslisvA toN

9Id6lisvA toV

9ldslisvA toN

Original IDLH

Diurethane dimethacrylate

Material name

Occupational Exposure Band Rating

Methacrylic acid, diester with triethylene glycol; (Polyester TGM3)

:səioN

-4]sid-2,5

Ingredient

-4]sid-2,5

Ingredient

Ingredient Emergency Limits **9**IdelievA toN ATAO TNAIOARONI

remove the contaminant. workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively ensure adequate protection. Provide adequate ventilation in warehouses and enclosed storage areas. Air contaminants generated in the overexposure exists, west approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances. If risk of Employers may need to use multiple types of controls to prevent employee overexposure. ventilation system must match the particular process and chemical of contaminant in use. "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically Process controls which involve changing the way a job activity or process is done to reduce the risk. The basic types of engineering controls are: be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can Exposure controls ATAO JAIRETAM

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

the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which Occupational exposure bandaria a process of assigning chemicals into specific categories or bands based on a chemical's potency and

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9IdslisvA toN

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5m/pm 55

20 mg/m3

1-JEEL-1

Occupational Exposure Band Limit

£m\pm 085

2-133T

£m\pm 00£,1

	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	
	Lower end of the range	Upper end of the range	
	Within each range the appropriate value depends on:		
	grinding, abrasive blasting, tumbling, high speed wheel ger very high rapid air motion)	erated dusts (released at high initial velocity into z	2.5-10 s/m 01-7.5 (.nim\1 0002-007)
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge i generation into zone of rapid air motion)		
gnineenigne engineering Slonnoo	(acitoreace evides to each etdivide levery acitore count bios painted this		
	solvent, vapours, degreasing etc., evaporating from tank (in still air).		
	Type of Contaminant:	Air Speed:	

4: Large hood or large air mass in motion

3: Intermittent, Iow production.

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, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases

4: Small hood-local control only

3: High production, heavy use

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Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

	producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.
Personal protection	
Eye and face protection	 No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: Safety glasses with side shields. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber Rubber Gloves
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1	-
up to 50	1000	-	A-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	A-2
up to 100	10000	-	A-3
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

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	Tooth coloured viscous/ flowable paste with ester-like odour, insoluble in water.			
Physical state	Free-flowing Paste	Relative density (Water = 1)	1.5-2.0	
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)	Gel before boiling	Molecular weight (g/mol)	Not Applicable	
Flash point (°C)	Not Available	Taste	Not Available	
Evaporation rate	Not Available	Explosive properties	Not Available	
Flammability	Not Available	Oxidising properties	Not Available	
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available	
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available	
Vapour pressure (kPa)	Not Available	Gas group	Not Available	
Solubility in water	Immiscible	pH as a solution (1%)	Not Available	
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available	

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Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

Reactivity	See section 7
Chemical stability	Product is considered stable and 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	Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant 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.
Ingestion	The material has NOT 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	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.

Glacier, Wave, Wave MV, Wave HV,	TOAIOITT	IRRITATION
ICE, Luna, Aura, Aura Bulk Fill, eASY, Aura Easyflow and LC Opa	Net Asselle Le	Not Available
	ΤΟΧΙΟΙΤΥ	IRRITATION
diurethane dimethac	ylate Not Available	Eye: no adverse effect observed (not irritating) ^[1]
		Skin: no adverse effect observed (not irritating) $\ensuremath{\left[1\right]}$
	тохісіту	IRRITATION
triethylene glycol dimethac	ylate Oral (mouse) LD50: 10750 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral (rat) LD50: 10837 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]
2,2-1	is[4- TOXICITY	IRRITATION
(2-methacryloxy)ethoxy)phenyl]pro	Not Available	Not Available
Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless oth specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

DIURETHANE DIMETHACRYLATE	* Possible carcinogen; possible sensitizer; possible irreversible effects * Polysciences MSDS The skin sensitising potential of the test substance was investigated in a Local Lymph Node Assay (LLNA) in mice according to OECD Guideline 429 and in compliance with GLP (Vogel, 2009). The highest technically achievable test substance concentration was 50% (w/w) in dimethylformamide. To determine the highest non-irritant test concentration, a pre-test was performed in two animals. Two mice were treated with concentrations of 25 and 50% each on three consecutive days. No signs of irritation or systemic toxicity were observed at the tested concentrations. In the main study, four female CBA/CaOlaHsd mice per test group were treated with the test substance at concentrations of 10, 25 and 50% (w/w) in dimethylformamide or with vehicle alone for three consecutive days by open application on the ears (25 µL/ear). Three days after the last exposure, all animals were injected with 3H-methyl thymidine and approximately after five hours the draining (auricular) lymph nodes were excised and pooled for each test group. After precipitating the DNA of the lymph node cells, radioactivity measurements were performed. Treatment with test substance concentrations of 10, 25 and 50% (w/w) in dimethylformamide resulted in DPM values per lymph node of 1266.3, 1363.5 and 3562.1, respectively. The EC3 value was calculated for the substance concentrations 10, 25 and 50% were 1.58, 1.70 and 4.44, respectively. The EC3 value was calculated to be 36.9%. Based on the results, the test substance was regarded as a skin sensitizer under the conditions of the test. Repeat Dose Toxicity: NOAEL = 100 mg/kg bw/day for females The lowest observed adverse effect level (LOAEL) in male animals is 300 mg/kg bw/day. According to Annex I of Regulation (EC) No 1272/2008 classification as STOT RE Category 2 is applicable, when significant toxic effects observed in a 90-day repeated-dose study conducted in experimental animals are seen to occur within the guidanc

Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

2.2-BIS[4- (2-METHACRYLOXY)ETHOXY)PHENYLJPROPANE	28-day study the guidance value is increased by a factor of three. The available repeated dose toxicity study was conducted in combination with the reproductive/developmental toxicity screening test. Male animals were exposed to the test substance for 56 days. Thus, the guidance value is increased by particer of 1.8 days days and the range of 16.2 – 160 mg/sg pawday for a classification as STOT RE Category 2. The LOAEL of 300 mg/sg/bw/day in the present study is above the guidance value for a classification with regard to repeated seposure. Thus, he substance has the range of the substance to of sufficient for classification. Genetic toxicity. The available data on genetic toxicity are not sufficient for classification according to Regulation (EC) No 12722008. Gene mutation in batterin a backerial gene mutation assay with the test substance was performed in accordance with OECD Guideline 471 and in compliance with GLP (Paulus, 2009). In two independent experiments, the Salamonella typhirumuru tarim TA 97A, TA 98, TA 100, TA 102 and TA 1533 were exposed to the test substance dissolved in DMSO using either the preincubation or the plate incorporation test with and without method with and without methodic activation. Ng sing of cytoxicity were selected for the plate incorporation test with a postnaneous revertants 0, the controls and all posive control values were within the range of historical data. Under the conditions of this segmetimer, the situ substance dia net substance did not induce an increase in the mutation frequency of the tester strains in the presence and absence of a metabolic activation system. The adtermined white with the test substance distored (2 ad wight) the number of micrower distores system tester substance distored of mutation sequences and all posive control values were within the range of historical data. Under the controls and all posive control values were within the range of historical data. Under the controls and all posive control values were within the range of hist
DIURETHANE DIMETHACRYLATE	Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test, oral (OECD 422), rat:
DIURETHANE DIMETHACRYLATE & TRIETHYLENE GLYCOL DIMETHACRYLATE	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.
DIURETHANE DIMETHACRYLATE & TRIETHYLENE GLYCOL DIMETHACRYLATE & 2,2-BIS[4-	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to

Glacier, Wave, Wave MV, Wave HV, ROK, ICE, Luna, Aura, Aura Bulk Fill, Aura eASY, Aura Easyflow and LC Opaquer

(2-METHACRYLOXY)ETHOXY)PI	HENYL]PROPANE	disease, in a non-atopic individua documented exposure to the irrita bronchial hyperreactivity on meth eosinophilia, have also been inclu inhalation is an infrequent disorde substance. Industrial bronchitis, c of irritating substance (often partii	I, with abrupt onset of persistent asth ant. A reversible airflow pattern, on sp acholine challenge testing and the lad uded in the criteria for diagnosis of RA er with rates related to the concentrati on the other hand, is a disorder that or culate in nature) and is completely rev	of RADS include the absence of preceding respiratory ma-like symptoms within minutes to hours of a irometry, with the presence of moderate to severe ek of minimal lymphocytic inflammation, without .DS. RADS (or asthma) following an irritating on of and duration of exposure to the irritating excurs as result of exposure due to high concentrations versible after exposure ceases. The disorder is
DIURETHANE DIMETHACRYLATE & 2,2-BIS[4- (2-METHACRYLOXY)ETHOXY)PHENYL]PROPANE UV EB (electron beam) acrylates are generally of low toxicity UV UV UV UV EB (electron beam) acrylates are generally of low toxicity UV UV UV EB (electron beam) acrylates are divided into two groups; "stenomeric" acrylates. The first group consists of well-defined acrylates which can be described by a simple idealised chemical; they are molecular weight species with a very narrow weight distribution profile. The eurymeric acrylates cannot be described by an idealised structure and may differ fundamentally between suppliers; they are of relatively high molecular weigh and possess a wide weight distribution. Stenomeric acrylates are usually more hazardous than the eurymeric substances. Stenomeric acrylates are al which allows comparison and exchange of toxicity data - this allows more accurate classification. The stenomeric acrylates are usually more hazardous than the eurymeric substances (OTS), of the US EPA previously conclude chemicals that contain the acrylate or methacrylate moiety (CH2=CHCOO or CH2=C(CH3)COO) should be coa a acricingenic hazard unless shown otherwise by adequate testing. This position has now been revised and acrylate		eric" acrylates. ad by a simple idealised chemical;they are low and may differ fundamentally between various de weight distribution. substances. Stenomeric acrylates are also well defined ore accurate classification. ial variation. anding of the carcinogenic mechanism the Health and TS), of the US EPA previously concluded that all OO or CH2=C(CH3)COO) should be considered to be re no longer <i>de facto</i> carcinogens. , there has been cautious attempts to create 5/37/38 and R51/53		
Acute Toxicity	×		Carcinogenicity	×
Skin Irritation/Corrosion	~		Reproductivity	×
Serious Eye Damage/Irritation	~		STOT - Single Exposure	✓
Respiratory or Skin sensitisation	~		STOT - Repeated Exposure	×

Legend:

Aspiration Hazard

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

×

SECTION 12 Ecological information

sensitisation Mutagenicity

×

Toxicity

Not Available	Not Availabl
).1mg/L).001-0.2mg/L).68mg/L	2
0.001-0.2mg/L 0.68mg/L	2
).68mg/L	
0	2
).001-0.2mg/l	
	2
001-0.2mg/L	2
Value	Sourc
16.4mg/L	2
72.8mg/L	2
18.6mg/L	2
Value	Source
Not Available	Not Availabl
	Value Not

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient Pers	rsistence: Water/Soil	Persistence: Air
triethylene glycol dimethacrylate LOW	W	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation	
triethylene glycol dimethacrylate	LOW (LogKOW = 1.88)	

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Mobility in soil

Ingredient	Mobility
triethylene glycol dimethacrylate	LOW (KOC = 10)

SECTION 13 Disposal considerations Waste treatment methods		
SECTION 14 Transport infor	mation	
Labels Required		

Marine Pollutant NO

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

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

Not Applicable

SECTION 15 Regulatory information

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

diurethane dimethacrylate is found on the following regulatory lists

Canada Non-Domestic Substances List (NDSL)

triethylene glycol dimethacrylate is found on the following regulatory lists Canada Categorization decisions for all DSL substances

2,2-bis[4-(2-methacryloxy)ethoxy)phenyl]propane is found on the following regulatory lists

Canada Categorization decisions for all DSL substances

Canada Domestic Substances List (DSL)

Canada Domestic Substances List (DSL)

National Inventory Status

National Inventory	Status		
Australia - AIIC	Yes		
Australia - Non-Industrial Use	No (diurethane dimethacrylate; triethylene glycol dimethacrylate; 2,2-bis[4-(2-methacryloxy)ethoxy)phenyl]propane)		
Canada - DSL	No (diurethane dimethacrylate)		
Canada - NDSL	No (triethylene glycol dimethacrylate; 2,2-bis[4-(2-methacryloxy)ethoxy)phenyl]propane)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No (diurethane dimethacrylate)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	No (diurethane dimethacrylate)		
Vietnam - NCI	Yes		
Russia - ARIPS	No (diurethane dimethacrylate; 2,2-bis[4-(2-methacryloxy)ethoxy)phenyl]propane)		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)		

SECTION 16 Other information

Revision Date	01/11/2019
Initial Date	02/11/2015

SDS Version Summary

Version	Issue Date	Sections Updated
7.1.1.1	08/02/2017	Ingredients

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Version	Issue Date	Sections Updated
8.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by SDI Limited 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 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

The information contained in the Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

Other information: Prepared by: SDI Limited 3-15 Brunsdon Street, Bayswater Victoria, 3153, Australia Phone Number: +61 3 8727 7111 Department issuing SDS: Research and Development Contact: Technical Director

