# **SAFETY DATA SHEETS**

# This SDS packet was issued with item: 076209225

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

076207757 076209001 076209019 076209027 076209035 076209043 076209050 076209068 076209076 076209084 076209175 076209183 076209191 076209209 076209217 076209233 076209241 076209258 076209589



#### Substance / Preparation and Company name 1.

Product Name: riva self-cure capsules

Recommended use: For filling of cavitated teeth by dental professionals.

#### Manufacturer / Supplier

SDI Limited 3-13 Brunsdon Street, Bayswater Victoria, 3153, Australia	SDI Inc. 729 N.Route 83, Suite 315 Bensenville 60106 IL, USA
<u>Telephone</u> :	<u>Telephone</u> :
+61 3 8727 7111 (Business hours)	630 238 8300 (Business hours)
Southern Dental Industries Ltd Block 8, St Johns Court Swords Road Santry, Dublin 9, Ireland	SDI Brasil Indústria e Comércio Ltda Rua Dr. Virgílio de Carvalho Pinto, 612 Pinheiros, São Paulo, 05415-020 Brasil
<u>Telephone</u> :	<u>Telephone</u> :
+353 1 886 9577 (Business Hours)	+55 11 3092 7100 (Business Hours)

Emergency contact number: +61 3 8727 7111

#### 2. Composition / Information on ingredients

Composition:	<u>CAS No.</u>	<u>Wt. %</u>
Compartment 1:		
Polyacrylic Acid Tartaric acid	9003-01-4 87-69-4	20-30 10-15
Compartment 2:		
Fluoro Aluminosilicate glass Polyacrylic Acid	- 9003-01-4	90-95 5-10

#### 3. Hazard Identification

Xi - IRRITANT. Materials in the two compartments are irritants. However, under normal conditions of use, contact with these materials by the user is generally not expected.

Risk Phrases:	36 37 38	Irritating to eyes. Irritating to respiratory system. Irritating to skin.
Safety Phrases:	24/25 26	Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	28	After contact with skin, wash immediately with water and soap.



#### First Aid Measures 4.

Eye (contact):	Flush opened eye with running water for at least 5 minutes. Seek medical attention.	
Skin (contact):	Remove contaminated clothing. Wash skin with plenty of water. If irritation occurs seek medical attention.	
Inhalation:	Remove to fresh air. Seek medical attention if irritation develops or if feeling unwell.	
Ingestion:	Drink plenty of water. Seek medical attention if discomfort continues.	

#### 5. Fire Fighting Measures

Suitable extinguishing media: None required.

Unusual Fire and Explosion Hazards: None.

Special protective equipment: No special protective equipment required.

#### Accidental Release Measures 6.

Personal precautions:	Do not get into eyes, on skin or clothing.	
Environmental precautions:	Clear up spillages. Transfer to a container for disposal.	
Methods for cleaning up:	Wash the spillage area clean with water.	

#### 7. Handling and storage

Handling

Store sealed containers away from heat and light.

Storage by the end user (Dental Clinic) is recommended to be at temperatures between 4° - 20°C (39° - 68°F) and should be kept away from direct sunlight.

#### **Distribution**

During distribution, to our customers, this product can be transported in non-refrigerated conditions between 15° to 25° C. This product can also withstand temperatures up to 40° C for short periods (2 to 3 days) and intermittent peaks up to 50° C.

#### 8. Exposure controls and personal protection

Respiratory protection:	None required.
Hand protection:	Rubber, latex or PVC gloves.
Eye protection:	Recommended.
General safety and hygiene measures:	None.

<sup>&</sup>lt;u>Storage</u>



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### 9. Physical and chemical properties

Appearance:	Smooth, pale-coloured paste
Odour:	Slightly characteristic odour
Boiling point:	Approx. 100°C (212°F)
Melting point:	Not applicable
Specific gravity:	2.0 g/cm <sup>3</sup>
Flash point:	Not applicable
Flammable:	Not flammable
Autoflammability:	Not applicable
Explosive properties:	Does not present an explosion hazard
Oxidizing properties:	Not applicable
Vapour pressure (@ 20°C):	Approx. 23 hPa
Relative density:	<1.0
Solubility:	Miscible

#### 10. Stability and Reactivity

Stability:	Stable under normal conditions.
Conditions to avoid:	Avoid excessive heat
Materials to avoid:	None.
Hazardous decomposition products:	None when used as directed.
Hazardous reactivity (polymerization):	No hazardous reactions known.

#### **11.** Toxicological information

Acute toxicity:	Contact with skin and eyes may cause irritation.
Eye (contact):	Irritating to eyes
Skin (contact):	Possible skin irritant
Inhalation:	Not expected due to product containment and dosage size.
Ingestion:	Irritant not likely in small amounts

#### 12. Ecological information

Self assessment: Not readily biodegradable. Avoid large quantities entering drains, surface water or ground water.



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#### 13. Disposal considerations

Dispose of in accordance with local official regulations.

#### 14. Transport Information

Not classified as a Dangerous Good by road, rail, sea, or air.

#### 15. Regulatory information

This product is regulated by TGA Medical Devices Directive 93/42/EEC FDA National regulations

#### 16. Other information

The information contained in the Material 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.

Prepared by:		Street, Bayswater , Australia	Phone Number: +61 3 8727 7111
Department i Contact:	ssuing MSDS:	Research and Developme Operations Director	ent



#### **SDI Limited**

Version No: 4.1.1.1 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Issue Date: 29/01/2016 Print Date: 30/03/2016 Initial Date: Not Available L.GHS.USA.EN

#### **SECTION 1 IDENTIFICATION**

#### **Product Identifier**

Product name	Riva Self Cure Capsules
Synonyms	Not Available
Other means of identification	Not Available
Recommended use of the chemical and restrictions on use	

#### Recommended use of the chemical and restrictions on use

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

Registered company name	SDI Limited	SDI Brazil Industria E Comercio Ltda	SDI Germany GmbH
Address	3-15 Brunsdon Street VIC Bayswater 3153 Australia	Rua Dr. Virgilio de Carvalho Pinto, 612 São Paulo CEP 05415-020 Brazil	Hansestrasse 85 Cologne D-51149 Germany
Telephone	+61 3 8727 7111 (Business Hours)	+55 11 3092 7100	+49 0 2203 9255 0
Fax	+61 3 8727 7222	+55 11 3092 7101	+49 0 2203 9255 200
Website	www.sdi.com.au	www.sdi.com.au	www.sdi.com.au
Email	info@sdi.com.au	brasil@sdi.com.au	germany@sdi.com.au
Registered company name	SDI (North America) Inc.		
Address	1279 Hamilton Parkway IL Itasca 60143 United States		
Telephone	+1 630 361 9200 (Business hours)		
Fax	Not Available		
Website	Not Available		
Email	USA.Canada@sdi.com.au		

#### Emergency phone number

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

#### SECTION 2 HAZARD(S) IDENTIFICATION

#### Classification of the substance or mixture

#### NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation)

Label elements

GHS label elements	
SIGNAL WORD	WARNING
Hazard statement(s)	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

#### Hazard(s) not otherwise specified

Not Applicable

#### Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### Precautionary statement(s) Response

P362	Take off contaminated clothing and wash before reuse.	
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 or doctor/physician if you feel unwell.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P302+P352	IF ON SKIN: Wash with plenty of soap and water.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	

#### 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 in accordance with local regulations.

#### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name
		Compartment 1 contains
9003-01-4	20-30	acrylic acid homopolymer
87-69-4	10-15	tartaric acid
		Compartment 2 contains:
Not Available	90-95	fluoro aluminosilicate glass

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

#### **SECTION 4 FIRST-AID MEASURES**

#### Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: <ul> <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>Seek medical attention.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> <li>Seek medical attention.</li> </ul>

#### Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

#### SECTION 5 FIRE-FIGHTING MEASURES

#### Extinguishing media

Foam is generally ineffective.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
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#### Special protective equipment and precautions for fire-fighters

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>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> <li>Combustion products include; carbon dioxide (CO2) other pyrolysis products typical of burning organic materialMay emit poisonous fumes.May emit corrosive fumes.</li> </ul>

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

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 hand	ling
Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>DO NOT allow material to contact humans, exposed food or food utensils.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to contariers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>Use good occupational work practice.</li> </ul>
	<ul> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

	Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Other information	Store between 5 and 25 deg. C. Do not store in direct sunlight.
Conditions for safe storag	Store in a dry and well ventilated-area, away from heat and sunlight.
Suitable container	<ul> <li>DO NOT repack. Use containers supplied by manufacturer only.</li> <li>Check that containers are clearly labelled and free from leaks</li> </ul>
Storage incompatibility	None known

#### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control parameters**

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

#### EMERGENCY LIMITS

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
acrylic acid homopolymer	Acrylic acid polymers; (Acrylic polymer or resin)		7.5 mg/m3	83 mg/m3	500 mg/m3
tartaric acid	Tartaric acid		1.6 mg/m3	17 mg/m3	100 mg/m3
Ingredient	Original IDLH	Rev	Revised IDLH		
acrylic acid homopolymer	Not Available	Not	Not Available		
tartaric acid	Not Available	Not	Not Available		
fluoro aluminosilicate glass	Not Available	Not	Not Available		

#### MATERIAL DATA

Exposure controls

	Engineering controls are used to remove a hazard or place a barrier between the worker and the ha effective in protecting workers and will typically be independent of worker interactions to provide this 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 "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designe 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 re exists, wear approved respirator. Supplied-air type respirator may be required in special circumstan Provide adequate ventilation in warehouses and enclosed storage areas. Air contaminants generate which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove	high level of protection. the worker and ventilation that stra d property. The design of a ventilation equired in special circumstances. If ces. Correct fit is essential to ensu d in the workplace possess varying	tegically "adds" and on system must match risk of overexposure re adequate protection.
	Type of Contaminant:		Air Speed:
	solvent, vapours, degreasing etc., evaporating from tank (in still air).		0.25-0.5 m/s (50-100 f/min)
Appropriate engineering	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)		0.5-1 m/s (100-200 f/min.)
controls	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas di 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 ve 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 ex of distance from the extraction point (in simple cases). Therefore the air speed at the extraction poin distance from the contaminating source. The air velocity at the extraction fan, for example, should be solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerat apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when	t should be adjusted, accordingly, a a minimum of 1-2 m/s (200-400 f/m ions, producing performance deficit	fter reference to nin) for extraction of s within the extraction
Personal protection			

Eye and face protection	<ul> <li>Safety glasses with side shields.</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	PVC gloves     Rubber Gloves
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>
Thermal hazards	Not Available

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance	Appearance Smooth, pale-coloured paste with slightly characteristic odour, partially mixes with water.					
Physical state	Non Slump Paste	Relative density (Water = 1)	Not Available			
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 Available	Molecular weight (g/mol)	Not Applicable			
Flash point (°C)	Not Available	Taste	Not Available			
Evaporation rate	Not Available	Explosive properties	Not Available			
Flammability	Not Available	Oxidising properties	Not Available			
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available			
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available			
Vapour pressure (kPa)	Not Available	Gas group	Not Available			
Solubility in water (g/L)	Partly miscible	pH as a solution (1%)	Not Available			
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available			

#### SECTION 10 STABILITY AND REACTIVITY

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	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.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	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 (erytherna) and swelling (oederna) which may progress to

	bistering (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. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.				
Eye	ocular lesions which are present twenty-four hours or more after instillation into Repeated or prolonged eye contact may cause inflammation characterised by	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant cular 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 conjunctivita (conjunctivitis); emporary 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 Limited evidence suggests that repeated or long-term occupational exposure n	s involving difficult breathing and related systemic problems. nay produce cumulative health effects involving organs or biochemical systems.			
Riva Self Cure Capsules	TOXICITY Not Available	IRRITATION Not Available			
acrylic acid homopolymer	TOXICITY Oral (rat) LD50: 2500 mg/kgd <sup>[2]</sup>	IRRITATION Nil reported			
tartaric acid	TOXICITY           dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Oral (rat) LD50: ca.920 mg/kg <sup>[1]</sup>	IRRITATION Nil reported			
Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - Acute toxicity a extracted from RTECS - Register of Toxic Effect of chemical Substances</li> </ol>	2.* Value obtained from manufacturer's SDS. Unless otherwise specified data			
		o the material ceases. This may be due to a non-allergenic condition known as posure to high levels of highly irritating compound. Key criteria for the diagnosis			

ACRYLIC ACID HOMOPOLYMER	of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production. The substance is classified by IARC as Group 3: <b>NOT</b> classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.			
TARTARIC ACID	Asthma-like symptoms may continue for months or even years reactive airways dysfunction syndrome (RADS) which can or of RADS include the absence of preceding respiratory diseas to hours of a documented exposure to the irritant. A reversible on methacholine challenge testing and the lack of minimal lym of RADS. RADS (or asthma) following an irritating inhalation irritating substance. Industrial bronchitis, on the other hand, is (often particulate in nature) and is completely reversible after Convulsions, haemorrhage recorded.	scur following exposure to high levels e, in a non-atopic individual, with abr a airflow pattern, on spirometry, with th aphocytic inflammation, without eosir is an infrequent disorder with rates r s a disorder that occurs as result of o	s of highly irritating compound. Key criteria for the diagnosis upt onset of persistent asthma-like symptoms within minutes he presence of moderate to severe bronchial hyperreactivity nophilia, have also been included in the criteria for diagnosis elated to the concentration of and duration of exposure to the exposure due to high concentrations of irritating substance	
Acute Toxicity	0	Carcinogenicity	0	
Skin Irritation/Corrosion	¥	Reproductivity	0	
Serious Eye Damage/Irritation	*	STOT - Single Exposure	0	
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	$\otimes$	
Mutagenicity	0	Aspiration Hazard	0	
		Legend: 🗙	- Data available but does not fill the criteria for classification	

✓ – Data required to make classification available

S – Data Not Available to make classification

#### SECTION 12 ECOLOGICAL INFORMATION

#### Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
acrylic acid homopolymer	EC50	384	Crustacea	389.869mg/L	3
acrylic acid homopolymer	EC50	96	Algae or other aquatic plants	8596.446mg/L	3
acrylic acid homopolymer	LC50	96	Fish	1684.686mg/L	3
tartaric acid	EC50	96	Algae or other aquatic plants	434.65983mg/L	3
tartaric acid	LC50	96	Fish	>100mg/L	2
tartaric acid	EC50	48	Crustacea	93.313mg/L	2
tartaric acid	EC50	72	Algae or other aquatic plants	51.4043mg/L	2

tartaric acid	NOEC	72	Algae or other aquatic plants	3.125mg/L	2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -				
-	Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
acrylic acid homopolymer	LOW	LOW
tartaric acid	LOW	LOW

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
acrylic acid homopolymer	LOW (LogKOW = 0.4415)
tartaric acid	LOW (LogKOW = -1.0017)

#### Mobility in soil

Ingredient	Mobility
acrylic acid homopolymer	HIGH (KOC = 1.201)
tartaric acid	HIGH (KOC = 1)

#### SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	<ul> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Bury residue in an authorised landfill.</li> </ul>

#### **SECTION 14 TRANSPORT INFORMATION**

# Marine Pollutant NO Land transport (DOT): 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

#### ACRYLIC ACID HOMOPOLYMER(9003-01-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
TARTARIC ACID(87-69-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS	

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

#### **Federal Regulations**

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SECTION 311/312 HAZARD CATEGORIES

Immediate (acute) health hazard	YES
Delayed (chronic) health hazard	NO
Fire hazard	NO
Pressure hazard	NO
Reactivity hazard	NO

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

#### State Regulations

#### US. CALIFORNIA PROPOSITION 65

None Reported

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (acrylic acid homopolymer; tartaric acid)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (acrylic acid homopolymer)
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

#### **SECTION 16 OTHER INFORMATION**

#### 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 LOAEL: Lowest Observed Adverse Effect Level 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 Date of preparation/revision: 23rd September 2015 Department issuing SDS: Research and Development Contact: Technical Director