

# **Riva Luting Plus (liquid)**

**SDI Limited** 

Version No: 5.1.1.1 Safety Data Sheet (Conforms to Regulations (EC) No 2015/830) Issue Date: 18/03/2016 Print Date: 30/03/2016 Initial Date: Not Available L.REACH.GBR.EN

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1.Product Identifier

Product name	Riva Luting Plus (liquid)	
Synonyms	Available	
Other means of identification	Not Available	

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Professional dental use: Liquid for dental restorative cement.		
Uses advised against	Not Applicable	

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

Registered company name	SDI Limited	SDI Brazil Industria E Comercio Ltda	SDI Germany GmbH		
Address	ddress 3-15 Brunsdon Street VIC Bayswater 3153 Rua Dr. Virgilio de Carvalho Pinto, 612 São Paulo CEP 05415-020 Brazil		Hansestrasse 85 Cologne D-51149 Germany		
Telephone	<b>Telephone</b> +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				

#### 1.4. Emergency telephone number

Association / Organisation	SDI Limited	Not Available	Not Available	
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 HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

Considered a dangerous mixture according to directive 1999/45/EC, Reg. (EC) No 1272/2008 (if applicable) and their amendments. Not classified as Dangerous Goods for transport purposes.

DSD classification	In case of mixtures, classification has been prepared by following DPD (Directive 1999/45/EC) and CLP Regulation (EC) No 1272/2008 regulations			
DPD classification [1]	R36/37/38 Irritating to eyes, respiratory system and skin.  R43 May cause SENSITISATION by skin contact.			

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1. Classification by vendor; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI Legend:

> Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Skin Sensitizer Category 1, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation)

Legend:

1. Classification by vendor; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

#### 2.2. Label elements

Classification according to

regulation (EC) No

1272/2008 [CLP] [1]

**CLP label elements** 



SIGNAL WORD

WARNING

#### Hazard statement(s)

H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H317	May cause an allergic skin reaction.	
H335	May cause respiratory irritation.	

#### Supplementary statement(s)

Not Applicable

#### Precautionary statement(s) Prevention

P271	se only outdoors or in a well-ventilated area.	
P280	rotective gloves/protective clothing/eye protection/face protection.	
P261	void breathing dust/fume/gas/mist/vapours/spray.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

#### Precautionary statement(s) Response

P302+P352	ON SKIN: Wash with plenty of water and soap.		
P305+P351+P338	N 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 in accordance with local regulations.
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### 2.3. Other hazards

Cumulative effects may result following exposure\*.

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

#### **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

### 3.1.Substances

See 'Composition on ingredients' in Section 3.2

### 3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to directive 67/548/EEC [DSD]	Classification according to regulation (EC) No 1272/2008 [CLP]
1.868-77-9 2.212-782-2 3.607-124-00-X 4.01-2119490169-29-XXXX	25-35	2-hydroxyethyl methacrylate	R36/38, R43 <sup>[2]</sup>	Eye Irritation Category 2, Skin Corrosion/Irritation Category 2, Skin Sensitizer Category 1; H319, H315, H317 [3]
1.Not Available 2.Not Available 3.Not Available	10-25	dimethacrylate cross-linker	Not Applicable	Not Applicable

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4.Not Available				
1. Not Available 2. Not Available 3. Not Available 4. Not Available	10-20	acidic monomer	Not Applicable	Not Applicable
1.9003-01-4 2.Not Available 3.Not Available 4.Not Available	5-15	acrylic acid homopolymer	R36/37/38, R51/53 <sup>[1]</sup>	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation), Chronic Aquatic Hazard Category 2; H315, H319, H335, H411 <sup>[1]</sup>
1.87-69-4 2.201-766-0 3.Not Available 4.01-2119537204-47-XXXX, 01-2119851173-43-XXXX, 01-2119851174-41-XXXX	1-5	tartaric acid	R36/37/38 <sup>[1]</sup>	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Specific target organ toxicity - single exposure Category 3 (respiratory tract irritation); H315, H319, H335 [1]
Legend:		ation by vendor; 2. Classition drawn from C&L	sification drawn from EC Directive	e 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

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

#### 4.1. Description of first aid measures

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General	If skin or hair contact occurs:  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.  If this product comes in contact with eyes:  Wash out immediately with water.  If irritation continues, seek medical attention.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.  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.  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, without delay.  Immediately give a glass of water.  First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.  Seek medical attention.
Eye Contact	If this product comes in contact with eyes:  • Wash out immediately with water.  • If irritation continues, seek medical attention.  • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs:  ► Flush skin and hair with running water (and soap if available).  ► Seek medical attention in event of irritation.
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, without delay.</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>

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

See Section 11

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

Treat symptomatically.

### **SECTION 5 FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

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

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

Fire Incompatibility	None known.		
5.3. 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 soray to control fire and cool adjacent area.</li> </ul>		

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	<ul> <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 clouds of acrid smokeMay emit poisonous fumes.May emit corrosive fumes.</li> </ul>

#### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

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

#### 6.2. Environmental precautions

See section 12

#### 6.3. Methods and material for containment and cleaning up

	► Clean up all spills immediately.
Minor Spills	<ul> <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>Clear area of personnel and move upwind.</li> <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>Stop leak if safe to do so.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Neutralise/decontaminate residue (see Section 13 for specific agent).</li> <li>Collect solid residues and seal in labelled drums for disposal.</li> <li>Wash area and prevent runoff into drains.</li> <li>After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

#### 6.4. Reference to other sections

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

### **SECTION 7 HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

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 containers.</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> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
Fire and explosion protection	See section 5
Other information	Store in a dry and well ventilated-area, away from heat and sunlight. Store between 5 and 25 deg. C.

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

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	► Avoid strong bases.

### 7.3. Specific end use(s)

See section 1.2

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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#### 8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

#### **EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
2-hydroxyethyl methacrylate	Hydroxyethyl methacrylate, 2-	0.71 mg/m3	7.8 mg/m3	1000 mg/m3
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	Revised IDLH
2-hydroxyethyl methacrylate	Not Available	Not Available
dimethacrylate cross-linker	Not Available	Not Available
acidic monomer	Not Available	Not Available
acrylic acid homopolymer	Not Available	Not Available
tartaric acid	Not Available	Not Available

#### 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

#### 8.2. Exposure controls

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear

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.

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.

An approved self contained breathing apparatus (SCBA) may be required in some situations.

Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

# 8.2.1. Appropriate engineering controls

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.)
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.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 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.

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8.2.2. Personal protection Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of Eye and face protection 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 ▶ Rubber Gloves Wear chemical protective gloves, e.g. PVC. Hands/feet protection ▶ Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** No special equipment needed when handling small quantities. OTHERWISE: Other protection Overalls. Barrier cream. Evewash unit. Thermal hazards Not Available

#### 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 P3	-	A-PAPR-AUS / Class 1 P3
up to 50 x ES	-	A-AUS / Class 1 P3	-
up to 100 x ES	-	A-2 P3	A-PAPR-2 P3 ^

<sup>^ -</sup> 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)

#### 8.2.3. Environmental exposure controls

See section 12

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Slightly yellow liquid with slight characteristic odour, mixes with water.		
Physical state	Liquid	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)	<2	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)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

### 9.2. Other information

Not Available

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**SECTION 10 STABILITY AND REACTIVITY** 

10.1.Reactivity	See section 7.2
•	
10.2.Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

#### **SECTION 11 TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

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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.

Inhalation hazard is increased at higher temperatures.

Acute effects from inhalation of high concentrations of vapour are pulmonary irritation, including coughing, with nausea; central nervous system depression  $characterised \ by \ headache \ and \ dizziness, increased \ reaction \ time, fatigue \ and \ loss \ of \ co-ordination$ 

#### 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 (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.

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.

Eve

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.

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

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.

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Sensitisation may give severe responses to very low levels of exposure, in situations where exposure may occur.

Disco Leating Disco (Const.4)	TOXICITY	IRRITATION
Riva Luting Plus (liquid)	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >3000 mg/kg <sup>[1]</sup>	* Rohm & Haas
2-hydroxyethyl methacrylate	Oral (rat) LD50: >4000 mg/kg <sup>[1]</sup>	Eye (rabbit): SEVERE *
		post-exposure
		Skin (rabbit): non-irritating*
acrylic acid homopolymer	TOXICITY	IRRITATION
	Oral (rat) LD50: 2500 mg/kgd <sup>[2]</sup>	Nil reported
	тохісіту	IRRITATION
tartaric acid	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Nil reported
	Oral (rat) LD50: ca.920 mg/kg <sup>[1]</sup>	
Legend:	Value obtained from Europe ECHA Registered Substance	s - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data

extracted from RTECS - Register of Toxic Effect of chemical Substances

#### 2-HYDROXYETHYL **METHACRYLATE**

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.

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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 high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to nours 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. 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

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.

Dermal (rabbit): >5000 mg/kg\* Effects persist beyond 21 days

# ACRYLIC ACID HOMOPOLYMER

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 high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with 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:

NOT 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 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 high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with 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. Convulsions, haemorrhage recorded.

Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	✓	Reproductivity	0
Serious Eye Damage/Irritation	<b>✓</b>	STOT - Single Exposure	0
Respiratory or Skin sensitisation	<b>✓</b>	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

Legend:

🗶 – Data available but does not fill the criteria for classification

Data required to make classification available

### **SECTION 12 ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
2-hydroxyethyl methacrylate	LC50	96	Fish	>100mg/L	2
2-hydroxyethyl methacrylate	EC50	48	Crustacea	210mg/L	2
2-hydroxyethyl methacrylate	EC50	504	Crustacea	90.1mg/L	2
2-hydroxyethyl methacrylate	NOEC	504	Crustacea	24.1mg/L	2
2-hydroxyethyl methacrylate	EC50	72	Algae or other aquatic plants	345mg/L	2
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
	Extracted from 1. IUCL	D Toxicity Data 2. Europe ECHA Re	eaistered Substances - Ecotoxicological Infor	rmation - Aquatic Toxicity 3. EPIWI	N Suite V3.12

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.

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### Riva Luting Plus (liquid)

Ingredient	Persistence: Water/Soil	Persistence: Air
2-hydroxyethyl methacrylate	LOW	LOW
acrylic acid homopolymer	LOW	LOW
tartaric acid	LOW	LOW

### 12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
2-hydroxyethyl methacrylate	LOW (BCF = 1.54)
acrylic acid homopolymer	LOW (LogKOW = 0.4415)
tartaric acid	LOW (LogKOW = -1.0017)

#### 12.4. Mobility in soil

Ingredient	Mobility
2-hydroxyethyl methacrylate	HIGH (KOC = 1.043)
acrylic acid homopolymer	HIGH (KOC = 1.201)
tartaric acid	HIGH (KOC = 1)

#### 12.5. Results of PBT and vPvB assessment

	P	В	Т
Relevant available data	Not Available	Not Available	Not Available
PBT Criteria fulfilled?	Not Available	Not Available	Not Available

#### 12.6. Other adverse effects

No data available

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

#### 13.1. 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>
Waste treatment options	Not Available
Sewage disposal options	Not Available

### **SECTION 14 TRANSPORT INFORMATION**

#### **Labels Required**

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADR): NO	REGULATED FOR TRANSP	ORT OF DANGEROUS GOODS		
14.1.UN number	Not Applicable	Not Applicable		
14.2.Packing group	Not Applicable			
14.3.UN proper shipping name	Not Applicable			
14.4.Environmental hazard	Not Applicable			
14.5. Transport hazard class(es)	Class Not Applicable Subrisk Not Applicable			
14.6. Special precautions for user	Hazard identification (Kemler)  Classification code  Hazard Label  Special provisions  Limited quantity	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable		

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

14.1. UN number	Not Applicable
14.2. Packing group	Not Applicable

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Riva Luting Plus (liquid)

	4			
14.3. UN proper shipping name	Not Applicable			
14.4. Environmental hazard	Not Applicable			
14.5. Transport hazard class(es)	ICAO/IATA Class Not Applicable ICAO / IATA Subrisk Not Applicable ERG Code Not Applicable			
	Special provisions Not Applicable			
	Cargo Only Packing Instructions	Not Applicable		
	Cargo Only Maximum Qty / Pack	Not Applicable		
14.6. Special precautions for user	Passenger and Cargo Packing Instructions	Not Applicable		
usci	Passenger and Cargo Maximum Qty / Pack	Not Applicable		
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable		
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable		
Sea transport (IMDG-Code	/ / GGVSee): NOT REGULATED FOR TRANSPORT O	F DANGEROUS GOODS		
14.1. UN number	Not Applicable			
14.2. Packing group	Not Applicable			
14.3. UN proper shipping name	Not Applicable	**		
14.4. Environmental hazard	Not Applicable			
14.5. Transport hazard class(es)	IMDG Class Not Applicable  IMDG Subrisk Not Applicable			
14.6. Special precautions for user	EMS Number Not Applicable  Special provisions Not Applicable  Limited Quantities Not Applicable			
Inland waterways transpor	t (ADN): NOT REGULATED FOR TRANSPORT OF D	ANGEROUS GOODS		
14.1. UN number	Not Applicable			
14.2. Packing group	Not Applicable			
14.3. UN proper shipping name	Not Applicable			
14.4. Environmental hazard	Not Applicable			
14.5. Transport hazard class(es)	Not Applicable Not Applicable			
14.6. Special precautions for user	Classification code Not Applicable  Special provisions Not Applicable  Limited quantity Not Applicable  Equipment required Not Applicable			
	Fire cones number Not Applicable			

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

Not Applicable

#### **SECTION 15 REGULATORY INFORMATION**

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

#### 2-HYDROXYETHYL METHACRYLATE(868-77-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS EU European Chemicals Agency (ECHA) Community Rolling Action Plan (CoRAP) List of European Union (EU) Annex I to Directive 67/548/EEC on Classification and Labelling of Substances Dangerous Substances - updated by ATP: 31 European Customs Inventory of Chemical Substances ECICS (English) European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English) ACRYLIC ACID HOMOPOLYMER(9003-01-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS EU REACH Regulation (EC) No 1907/2006 - Annex XVII - Restrictions on the manufacture, International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

placing on the market and use of certain dangerous substances, mixtures and articles European Customs Inventory of Chemical Substances ECICS (English)

Monographs

### TARTARIC ACID(87-69-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

European Customs Inventory of Chemical Substances ECICS (English) European List of Notified Chemical Substances (ELINCS)

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS) (English)

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### Riva Luting Plus (liquid)

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This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable -: 67/548/EEC, 1999/45/EC, 98/24/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments as well as the following British legislation: - The Control of Substances Hazardous to Health Regulations (COSHH) 2002 - COSHH Essentials - The Management of Health and Safety at Work Regulations 1999

#### 15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

#### **ECHA SUMMARY**

Ingredient	CAS number Index No ECHA Dossier			
2-hydroxyethyl methacrylate	868-77-9 607-124-00-X		01-2119490169-29-XXXX	
Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)		Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2		GHS07, Wng	H315, H317, H319
2	Skin Sens. 1, Eye Irrit. 2, Skin Irrit. 2, Skin S Classified	Sens. 1B, Aquatic Chronic 4, Not	GHS07, Wng	H317, H319, H315

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No		ECHA Dossi	ier
acrylic acid homopolymer	9003-01-4	Not Available		Not Available	
Harmonisation (C&L	Hazard Class and Category Code(s)		Pictograms S	•	Hazard Statement Code(s)

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Not Classified	Wng, GHS08, Dgr, GHS05, GHS09, GHS02	H319, H335, H340, H350, H314, H332, H317, H290, H226, H302, H312
2	Not Classified, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Muta. 1B, Carc. 1A, Skin Corr. 1B, Aquatic Chronic 3, Skin Corr. 1A, Acute Tox. 4, Met. Corr. 1, Flam. Liq. 3, Aquatic Acute 1	Wng, GHS08, Dgr, GHS05, GHS09, GHS02	H319, H335, H340, H350, H314, H332, H317, H290, H226, H302, H312
2	Skin Corr. 1B, Eye Dam. 1	GHS05, Dgr	H314

 $Harmonisation\ Code\ 1 = The\ most\ prevalent\ classification.\ Harmonisation\ Code\ 2 = The\ most\ severe\ classification.$ 

Ingredient	CAS number	Index No	ECHA Dossier
tartaric acid	87-69-4	Not Available	01-2119537204-47-XXXX, 01-2119851173-43-XXXX, 01-2119851174-41-XXXX

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4, Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, STOT SE 3	GHS07, Wng	H302, H315, H317, H319, H335
2	Eye Dam. 1, Skin Irrit. 2, Acute Tox. 4, Skin Sens. 1, Eye Irrit. 2, STOT SE 3, Not Classified, Aquatic Chronic 3, Eye Irrit. 2A	GHS05, Dgr, Wng, GHS06	H318, H315, H302, H317, H335

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Υ
Canada - NDSL	N (acrylic acid homopolymer; tartaric acid; 2-hydroxyethyl methacrylate)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	N (acrylic acid homopolymer)
Japan - ENCS	Υ
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Υ
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**

#### Full text Risk and Hazard codes

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

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### Riva Luting Plus (liquid)

H340	May cause genetic defects.
H350	May cause cancer.
H411	Toxic to aquatic life with long lasting effects.
R36/38	Irritating to eyes and skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Other information

### DSD / DPD label elements



Relevant risk statements are found in section 2.1

Indication(s) of danger	Xi
SAFETY ADVICE	
S02	Keep out of reach of children.
S23	Do not breathe gas/fumes/vapour/spray.
S24	Avoid contact with skin.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water.
S46	If swallowed, seek medical advice immediately and show this container or label.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

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.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

### **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

Date of preparation/revision: 23rd September 2015 Department issuing SDS: Research and Development

Contact: Technical Director



## **Riva Luting Plus (powder)**

#### **SDI Limited**

Version No: 6.1.1.1 Safety Data Sheet (Conforms to Regulations (EC) No 2015/830) Issue Date: 18/03/2016 Print Date: 30/03/2016 Initial Date: Not Available L.REACH.GBR.EN

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1.Product Identifier

Product name	va Luting Plus (powder)	
Synonyms	Not Available	
Other means of identification	Not Available	

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Powder for the making of dental restorative cement by dental professionals.
Uses advised against	Not Applicable

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

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
	1		
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		

#### 1.4. Emergency telephone number

Association / Organisation	SDI Limited	Not Available	Not Available
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 HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

Not considered a dangerous mixture according to directive 1999/45/EC, Reg. (EC) No 1272/2008 (if applicable) and their amendments. Not classified as Dangerous Goods for transport purposes.

DSD classification	In case of mixtures, classification has been prepared by following DPD (Directive 1999/45/EC) and CLP Regulation (EC) No 1272/2008 regulations
DPD classification	Not Applicable
Classification according to regulation (EC) No 1272/2008 [CLP]	Not Applicable

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### Riva Luting Plus (powder)

2.2. Label elements

CLP label elements	Not Applicable
SIGNAL WORD	NOT APPLICABLE

#### Hazard statement(s)

Not Applicable

### Supplementary statement(s)

Not Applicable

### Precautionary statement(s) Prevention

Not Applicable

#### Precautionary statement(s) Response

Not Applicable

#### Precautionary statement(s) Storage

Not Applicable

### Precautionary statement(s) Disposal

Not Applicable

#### 2.3. Other hazards

Ingestion may produce health damage\*.

Cumulative effects may result following exposure\*.

May produce discomfort of the eyes, respiratory tract and skin\*.

REACh - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

#### **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

#### 3.1.Substances

See 'Composition on ingredients' in Section 3.2

#### 3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to directive 67/548/EEC [DSD]	Classification according to regulation (EC) No 1272/2008 [CLP]
1. Not Available 2. Not Available 3. Not Available 4. Not Available	95-100	glass powder	Not Applicable	Not Applicable
Legen		1. Classification by vendor; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI 4. Classification drawn from C&L		

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

### 4.1. Description of first aid measures

General	If skin or hair contact occurs:  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.  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.  If fumes or combustion products are inhaled remove from contaminated area.  Seek medical attention.  Immediately give a glass of water.  First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.  Seek medical attention.
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 or hair contact occurs:  ► Flush skin and hair with running water (and soap if available).  ► Seek medical attention in event of irritation.
Inhalation	<ul> <li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li> <li>▶ Seek medical attention.</li> </ul>
Ingestion	Immediately give a glass of water.     First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.  Seek medical attention.

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### Riva Luting Plus (powder)

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### **SECTION 5 FIREFIGHTING MEASURES**

#### 5.1. Extinguishing media

Foam is generally ineffective.

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

Fire Incompatibility	None known
5.3. 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 in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding 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>May emit poisonous fumes.May emit corrosive fumes.Decomposes on heating and produces; carbon dioxide (CO2)</li> </ul>

### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

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

See section 8

### 6.2. Environmental precautions

See section 12

#### 6.3. Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing dust and contact with skin and eyes.</li> <li>Wear protective clothing, gloves, safety glasses and dust respirator.</li> <li>Use dry clean up procedures and avoid generating dust.</li> <li>Sweep up, shovel up or</li> <li>Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).</li> <li>Place spilled material in clean, dry, sealable, labelled container.</li> </ul>
Major Spills	Moderate hazard.  CAUTION: Advise personnel in area.  Alert Emergency Services and tell them location and nature of hazard.  Control personal contact by wearing protective clothing.  Prevent, by any means available, spillage from entering drains or water courses.  Recover product wherever possible.  IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal.  MET: Vacuum/shovel up and place in labelled containers for disposal.  ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.  If contamination of drains or waterways occurs, advise Emergency Services.

### 6.4. Reference to other sections

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

#### **SECTION 7 HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

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> </ul>
Safe handling	<ul> <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 uter</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> </ul>

Avoid physical damage to containers.

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Always wash hands with soap and water after handling.
 Work clothes should be laundered separately. Launder contaminated clothing before re-use.
 Use good occupational work practice.
 Observe manufacturer's storage and handling recommendations contained within this SDS.
 Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

Fire and explosion protection

See section 5

Store between 5 and 25 deg. C.
Do not store in direct sunlight.

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

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

#### 7.3. Specific end use(s)

See section 1.2

#### **SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Motorial name

#### 8.1. Control parameters

DERIVED NO EFFECT LEVEL (DNEL)

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

#### **EMERGENCY LIMITS**

ingredient	Waterial Harrie	TEEE-1	ILLE-Z	TEEE-0
Riva Luting Plus (powder)	Not Available	Not Available	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
glass powder	Not Available		Not Available	

### MATERIAL DATA

#### 8.2. Exposure controls

8.2.1. Appropriate engineering controls Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

TEEL-2

TEEL-3

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.

TEEL -1

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- ▶ If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered.

Such protection might consist of:

- (a): particle dust respirators, if necessary, combined with an absorption cartridge;
- (b): filter respirators with absorption cartridge or canister of the right type;
- (c): fresh-air hoods or masks.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:	
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 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

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	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 4-10 m/s (800-2000 f/min) for extraction of crusher dusts generated 2 metres distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.
8.2.2. 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	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	No special equipment needed when handling small quantities.  OTHERWISE:  Overalls.  Barrier cream.  Eyewash unit.
Thermal hazards	Not Available

#### Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:000 & 149:001, ANSI Z88 or national equivalent)

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

 $<sup>^{\</sup>star}$  - Negative pressure demand  $\ ^{\star\star}$  - Continuous flow

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

#### 8.2.3. Environmental exposure controls

See section 12

### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1. Information on basic physical and chemical properties

	<u> </u>		
Appearance	Fine white odourless powder, insoluble in water.		
Physical state	Divided Solid	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 Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available

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Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

### 9.2. Other information

Not Available

### **SECTION 10 STABILITY AND REACTIVITY**

40.4 Panathulau	0
10.1.Reactivity	See section 7.2
10.2.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>
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

### **SECTION 11 TOXICOLOGICAL INFORMATION**

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	Accidental ingestion of the material may be damaging to the health of the individual.				
Skin Contact	Limited evidence exists, or practical experience predicts, that the material ei following direct contact, and/or produces significant inflammation when appl being present twenty-four hours or more after the end of the exposure perior result in a form of contact dermatitis (nonallergic). The dermatitis is often ch progress to blistering (vesiculation), scaling and thickening of the epidermis 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 is skin prior to the use of the material and ensure that any external damage is say	ied to the healthy intact. Skin irritation may all aracterised by skin re. At the microscopic le	at skin of animals, for up to four hours, such inflammation so be present after prolonged or repeated exposure; this may dness (erythema) and swelling (oedema) which may evel there may be intercellular oedema of the spongy layer of		
Еуе	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 airw Limited evidence suggests that repeated or long-term occupational exposur Long term exposure to high dust concentrations may cause changes in lung penetrating and remaining in the lung. A prime symptom is breathlessness.	e may produce cumula g function (i.e. pneumo	ative health effects involving organs or biochemical systems.		
		Lung shadows show o			
	тохісіту	Lung shadows show o			
Riva Luting Plus (powder)	TOXICITY  Not Available				
Riva Luting Plus (powder)  Legend:		IRRITATION  Not Available	on X-ray.		
	Not Available  1. Value obtained from Europe ECHA Registered Substances - Acute toxici	IRRITATION  Not Available	on X-ray.		
Legend:	Not Available  1. Value obtained from Europe ECHA Registered Substances - Acute toxici extracted from RTECS - Register of Toxic Effect of chemical Substances	IRRITATION  Not Available  ty 2.* Value obtained fi	on X-ray.  The control of the contro		
Legend: Acute Toxicity	Not Available  1. Value obtained from Europe ECHA Registered Substances - Acute toxici extracted from RTECS - Register of Toxic Effect of chemical Substances	IRRITATION  Not Available  ty 2.* Value obtained for Carcinogenicity	on X-ray.		
Legend:  Acute Toxicity Skin Irritation/Corrosion Serious Eye	Not Available  1. Value obtained from Europe ECHA Registered Substances - Acute toxici extracted from RTECS - Register of Toxic Effect of chemical Substances	IRRITATION  Not Available  ty 2.* Value obtained for Carcinogenicity  Reproductivity	on X-ray.		

Legend:

X − Data available but does not fill the criteria for classification
 ✓ − Data required to make classification available

O – Data Not Available to make classification

### **SECTION 12 ECOLOGICAL INFORMATION**

### 12.1. Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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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.

#### 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

#### 12.4. Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

#### 12.5. Results of PBT and vPvB assessment

	P	В	Т
Relevant available data	Not Available	Not Available	Not Available
PBT Criteria fulfilled?	Not Available	Not Available	Not Available

#### 12.6. Other adverse effects

No data available

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

#### 13.1. 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>
Waste treatment options	Not Available
Sewage disposal options	Not Available

### **SECTION 14 TRANSPORT INFORMATION**

#### **Labels Required**

14.

Marine Pollutant	NO
HAZCHEM	Not Applicable
Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS	
14.1.UN number	Not Applicable
14.2.Packing group	Not Applicable
14.3.UN proper shipping name	Not Applicable

### 14.4.Environmental hazard Not Applicable

user

14.5. Transport hazard class(es)	Class Not Applicable  Subrisk Not Applicable	
	Hazard identification (Kemler)	Not Applicable
	Classification code	Not Applicable
.6. Special precautions for	Hazard Labol	Not Applicable

Special provisions

Limited quantity

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

14.1. UN number	Not Applicable
14.2. Packing group	Not Applicable
14.3. UN proper shipping name	Not Applicable

Not Applicable Not Applicable Version No: 6.1.1.1 Page 8 of 9 Issue Date: 18/03/2016 Print Date: 30/03/2016

### Riva Luting Plus (powder)

14.4. Environmental hazard	Not Applicable		
	ICAO/IATA Class Not Applicable		
14.5. Transport hazard class(es)	ICAO / IATA Subrisk Not Applicable		
0.000(00)	ERG Code Not Applicable		
	Special provisions	Not Applicable	
	Cargo Only Packing Instructions	Not Applicable	
	Cargo Only Maximum Qty / Pack	Not Applicable	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions	Not Applicable	
user	Passenger and Cargo Maximum Qty / Pack	Not Applicable	
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable	
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable	

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

	·
14.1. UN number	Not Applicable
14.2. Packing group	Not Applicable
14.3. UN proper shipping name	Not Applicable
14.4. Environmental hazard	Not Applicable
14.5. Transport hazard class(es)	IMDG Class Not Applicable  IMDG Subrisk Not Applicable
14.6. Special precautions for user	EMS Number Not Applicable Special provisions Not Applicable Limited Quantities Not Applicable

#### Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable
14.2. Packing group	Not Applicable
14.3. UN proper shipping name	Not Applicable
14.4. Environmental hazard	Not Applicable
14.5. Transport hazard class(es)	Not Applicable Not Applicable
	Classification code Not Applicable
	Special provisions Not Applicable
14.6. Special precautions for user	Limited quantity Not Applicable
	Equipment required Not Applicable
	Fire cones number Not Applicable

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

Not Applicable

### **SECTION 15 REGULATORY INFORMATION**

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

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 67/548/EEC, 1999/45/EC, 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments as well as the following British legislation: - The Control of Substances Hazardous to Health Regulations (COSHH) 2002 - COSHH Essentials - The Management of Health and Safety at Work Regulations 1999

#### 15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

### **ECHA SUMMARY**

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Y
Canada - NDSL	Y
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y

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N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

### Riva Luting Plus (powder)

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

Υ

Υ Υ

Υ

Y = All ingredients are on the inventory

#### Full text Risk and Hazard codes

#### Other information

Japan - ENCS

Korea - KECI New Zealand - NZIoC

USA - TSCA

Legend:

Philippines - PICCS

#### DSD / DPD label elements

Not Applicable

Relevant risk statements are found in section 2.1

Indication(s) of danger Not Applicable

SAFETY ADVICE

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.

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.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices

#### **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.

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