

# Riva Silver (powder)

**SDI Limited** 

Version No: 4.1.1.1 Safety Data Sheet (Conforms to Regulations (EC) No 2015/830) Issue Date: 18/03/2016 Print Date: 31/03/2016 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 Silver (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	For the making of dental 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		
Registered company name	SDI (North America) Inc.				
Address	1279 Hamilton Parkway IL Itasca 60143 United State	es			
Telephone	+1 630 361 9200 (Business hours)				
Fax	Not Available  Not Available  USA.Canada@sdi.com.au				
Website					
Email					

## 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  Not Available			
Other emergency telephone numbers				

# **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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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\*.

May produce discomfort of the eyes, respiratory tract and  $\mathsf{skin}^\star.$ 

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]	
Not Available     Not Applicable     Not Applicable     Anot Applicable     Anot Applicable	40-60	glass powder	Not Applicable	Not Applicable	
1.Not Available 2.Not Available 3.Not Available 4.Not Available	<10	polyacrylic acid Not Applicable		Not Applicable	
1.Not Available 2.Not Available 3.Not Available 4.Not Available	lot Available 30-50 alloy powde		Not Applicable	Not Applicable	
Legend:	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 4. Classification drawn from C&L			; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	

## **SECTION 4 FIRST AID MEASURES**

## 4.1. Description of first aid measures

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:

- 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.
- General

  Transport to hospital or doctor without delay.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### Seek medical attention.

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- ▶ Other measures are usually unnecessary.
- ► 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:

   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.

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	<ul> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> <li>Seek medical attention.</li> </ul>
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, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</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 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>Non combustible.</li> <li>Not considered a significant fire risk, however containers may burn.</li> <li>May emit poisonous fumes.May emit corrosive fumes.Decomposes on heating and produces; carbon dioxide (CO2) carbon monoxide (CO)</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>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Use dry clean up procedures and avoid generating dust.</li> <li>Place in a suitable, labelled container for waste disposal.</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. IF WET: Vacuum/shovel up and place in labelled containers for disposal.  ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.  If contamination of drains or waterways occurs, advise Emergency Services.

## 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

- ▶ Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
  - ▶ Prevent concentration in hollows and sumps.

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- ▶ DO NOT enter confined spaces until atmosphere has been checked.
- DO NOT allow material to contact humans, exposed food or food utensils
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately. Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- ► Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

#### Fire and explosion protection

See section 5

Other information

Store between 5 and 30 deg C. Do not store in direct sunlight.

Store in a dry and well ventilated-area, away from heat and sunlight.

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

Suitable container

- ▶ DO NOT repack. Use containers supplied by manufacturer only.
- ▶ Check that containers are clearly labelled and free from leaks
- Storage incompatibility ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

## 7.3. Specific end use(s)

See section 1.2

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

Material name

Not Available

#### 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	ILLL-I	ILLL-Z	TLLL-3
Riva Silver (powder)	Not Available	Not Available	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
glass powder	Not Available		Not Available	
polyacrylic acid	Not Available		Not Available	

# alloy powder MATERIAL DATA

## 8.2. Exposure controls

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

TEEL -2

Not Available

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:

- 8.2.1. Appropriate (a): particle dust respirators, if necessary, combined with an absorption cartridge; engineering controls
  - (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:

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Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 4-10 m/s (800-2000 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





Safety glasses with side shields





## Eye and face protection

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 chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

## Skin protection

#### See Hand protection below

#### Hands/feet protection

- ▶ Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber
- Rubber Gloves

#### **Body protection**

### See Other protection below

# Other protection

- Overalls. P.V.C. apron.
- ▶ Barrier cream.
- Skin cleansing cream.
- Eye wash unit.
- 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> Negative pressure demand \*\* - Continuous flow

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

## 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	Fine light grey powder with no odour, 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

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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
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**

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**

Information on toxic			
Inhaled	following inhalation. In contrast to most organs, the lur the damage. The repair process, which initially evolved damage resulting in the impairment of gas exchange, involving the recruitment and activation of many cell typ	ng is able to respond to a chemical insult be to protect mammalian lungs from foreign in the primary function of the lungs. Respiratives, mainly derived from the vascular system asses and conditions such as emphysema as occurred or if kidney damage has been	or chronic bronchitis, may incur further disability if excessive
Ingestion	Accidental ingestion of the material may be damaging	to the health of the individual.	
Skin Contact	being present twenty-four hours or more after the end of result in a form of contact dermatitis (nonallergic). The progress to blistering (vesiculation), scaling and thicke the skin (spongiosis) and intracellular oedema of the e Open cuts, abraded or irritated skin should not be expo	ammation when applied to the healthy inta of the exposure period. Skin irritation may a dermatitis is often characterised by skin re ning of the epidermis. At the microscopic la pidermis. used to this material abrasions, puncture wounds or lesions, ma	ct skin of animals, for up to four hours, such inflammation Iso be present after prolonged or repeated exposure; this ma
	,	external darriage is sultably protected.	
Eye	Limited evidence exists, or practical experience suggest produce significant ocular lesions which are present two	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of	to the eye(s) of experimental animals. Repeated or prolonge
Eye	Limited evidence exists, or practical experience suggest produce significant ocular lesions which are present two eye contact may cause inflammation characterised by	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of ar.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneumores)	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of vision classified by EC Directives using animal models); acconiosis) caused by particles less than 0.5 micron
Chronic	Limited evidence exists, or practical experience sugges produce significant ocular lesions which are present tweeye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occula	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of ar.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneumores)	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of vision classified by EC Directives using animal models); acconiosis) caused by particles less than 0.5 micron
<u> </u>	Limited evidence exists, or practical experience suggest produce significant ocular lesions which are present two eye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occularly consistent exposure to the product is not thought to prince of the product is not the product	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of ur.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneum is breathlessness. Lung shadows show	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of vision classified by EC Directives using animal models); acconiosis) caused by particles less than 0.5 micron
Chronic Riva Silver (powder)	Limited evidence exists, or practical experience sugges produce significant ocular lesions which are present two eye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occular to the product is not thought to provertheless exposure by all routes should be minimised.  Long term exposure to high dust concentrations may of penetrating and remaining in the lung. A prime sympto	sts, that the material may cause eye irritatic wenty-four hours or more after instillation in temporary redness (similar to windburn) of ur.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneum is breathlessness. Lung shadows show	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of vision classified by EC Directives using animal models); acconiosis) caused by particles less than 0.5 micron
Chronic	Limited evidence exists, or practical experience sugges produce significant ocular lesions which are present twe eye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occulong-term exposure to the product is not thought to prince the exposure by all routes should be minimised.  Long term exposure to high dust concentrations may openetrating and remaining in the lung. A prime symptoto TOXICITY  Not Available	sts, that the material may cause eye irritatic wenty-four hours or more after instillation in temporary redness (similar to windburn) of ur.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneum is breathlessness. Lung shadows show  IRRITATION  Not Available	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of visit classified by EC Directives using animal models); occiniosis) caused by particles less than 0.5 micron
Chronic Riva Silver (powder)	Limited evidence exists, or practical experience suggest produce significant ocular lesions which are present two eye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occulate the exposure to the product is not thought to provertheless exposure by all routes should be minimised. Long term exposure to high dust concentrations may openetrating and remaining in the lung. A prime symptote to Available  TOXICITY  Not Available  TOXICITY  Not Available	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of ur.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneum in s breathlessness. Lung shadows show  IRRITATION  Not Available  IRRITATION  Not Available	to the eye(s) of experimental animals. Repeated or prolonge the conjunctiva (conjunctivitis); temporary impairment of vision sclassified by EC Directives using animal models); accomiosis) caused by particles less than 0.5 micron
Chronic  Riva Silver (powder)  glass powder	Limited evidence exists, or practical experience sugges produce significant ocular lesions which are present twe eye contact may cause inflammation characterised by and/or other transient eye damage/ulceration may occul. Long-term exposure to the product is not thought to pronevertheless exposure by all routes should be minimised. Long term exposure to high dust concentrations may openetrating and remaining in the lung. A prime symptomatical material symptomatical materials and remaining in the lung. Toxicity  Not Available  1. Value obtained from Europe ECHA Registered Substitute.	sts, that the material may cause eye irritatic venty-four hours or more after instillation in temporary redness (similar to windburn) of ur.  oduce chronic effects adverse to health (as ed as a matter of course.  cause changes in lung function (i.e. pneum in s breathlessness. Lung shadows show  IRRITATION  Not Available  IRRITATION  Not Available	oconiosis) caused by particles less than 0.5 micron on X-ray.

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			1
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
			Data available but does not fill the criteria for classification  Pote required to make classification available.

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
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**

Not Applicable

## Labels Required

14.4.Environmental hazard

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	

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	ı			
14.5. Transport hazard	Class   Not Applicable			
class(es)	Subrisk Not Applicable			
	Hazard identification (Kemler)	Not Applicable		
	Classification code	Not Applicable		
14.6. Special precautions for user	Hazard Label	Not Applicable		
400.	Special provisions	Not Applicable		
	Limited quantity	Limited quantity Not Applicable		
Air transport (ICAO-IATA / [	) OGR): NOT REGULATED FOR	R TRANSPORT OF DAN	GEROUS GOODS	
14.1. UN number	ber Not Applicable			
14.2. Packing group	Not Applicable			
14.3. UN proper shipping name	Not Applicable			
14.4. Environmental hazard	Not Applicable			
	ICAO/IATA Class Not Ap	pplicable		
14.5. Transport hazard		pplicable		
class(es)	l <del></del>	pplicable		
		,		
	Special provisions		Not Applicable	
	Cargo Only Packing Instruction	s	Not Applicable	
	Cargo Only Maximum Qty / Pack		Not Applicable	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions		Not Applicable	
	Passenger and Cargo Maximum Qty / Pack		Not Applicable	
	Passenger and Cargo Limited C	Quantity Packing Instructions	Not Applicable	
	Passenger and Cargo Limited Maximum Qty / Pack		Not Applicable	
Sea transport (IMDG-Code	/ GGVSee): NOT REGULATE	ED FOR TRANSPORT O	F DANGEROUS GOODS	
Sea transport (IMDG-Code	/ GGVSee): NOT REGULATE  Not Applicable	ED FOR TRANSPORT O	F DANGEROUS GOODS	
		ED FOR TRANSPORT O	F DANGEROUS GOODS	
14.1. UN number	Not Applicable	ED FOR TRANSPORT O	F DANGEROUS GOODS	
14.1. UN number 14.2. Packing group 14.3. UN proper shipping	Not Applicable  Not Applicable	ED FOR TRANSPORT O	F DANGEROUS GOODS	
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Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

# **SECTION 15 REGULATORY INFORMATION**

Version No: **4.1.1.1** Page **9** of **10** Issue Date: **18/03/2016** 

## Riva Silver (powder)

Print Date: 31/03/2016

#### GLASS POWDER(NOT APPLICABLE) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

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**

Ingredient	CAS number	Index No	ECHA Dossier
glass powder		Not Applicable	Not Applicable

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
Not Available	Not Available	Not Available	Not Available

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

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	Y
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
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

Other information

## DSD / DPD label elements

Not Applicable

Relevant risk statements are found in section 2.1

Indication(s) of danger	Not Applicable
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#### SAFETY ADVICE

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**

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## Riva Silver (powder)

Print Date: 31/03/2016

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:

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

Contact: Technical Director