

Polishing Paste SDI (North America) Inc.

Version No: 6.1.1.1

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 01/11/2019 Print Date: 07/10/2020 L.GHS.USA.EN

SECTION 1 Identification

Product Identifier

Product name	Polishing Paste
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	For polishing of dental restoratives by dental professionals.

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

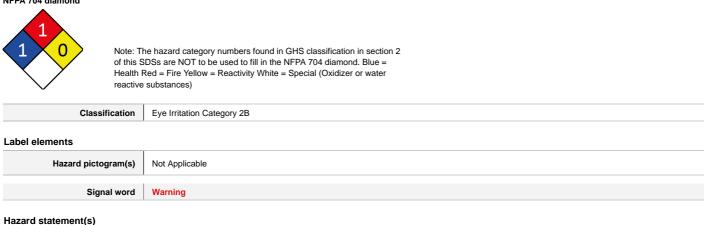
Registered company name	SDI (North America) Inc.	SDI Limited	SDi
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Registered company name	SDI Dental Limited		
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Telephone	+353 1 886 9577 (Business Hours) 800 0225 5734		
Fax	Not Available		
Website	http://www.sdi.com.au/		
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Emergency phone number

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

SECTION 2 Hazard(s) identification

Classification of the substance or mixture NFPA 704 diamond



H320 Causes eye irritation.

Hazard(s) not otherwise classified

Not Applicable

Precautionary statement(s) Prevention

P264	Wash all exposed external body areas thoroughly after handling.	
recautionary statement(s) Re	sponse	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P337+P313	If eye irritation persists: Get medical advice/attention.	

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
56-81-5	35	glycerol

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Seek medical attention.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-fighting measures

Extinguishing media

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

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result	
pecial protective equipment a	and precautions for fire-fighters	
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. 	
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. 	

On combustion, may emit toxic fumes of carbon monoxide (CO).
May emit acrid smoke.
Mists containing combustible materials may be explosive.
Combustion products include:
carbon dioxide (CO2)
acrolein
other pyrolysis products typical of burning organic material.
May emit poisonous fumes.
May emit corrosive fumes.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

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

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

SECTION 7 Handling and storage

	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.
	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.
Safe handling	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.
Other information	Store between 10 and 25 deg. C.
Other information	Do not store in direct sunlight.

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 reaction with oxidising agents

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	glycerol	Glycerin (anhydrous); Glycerol; Glycyl alcohol; 1,2,3- Propanetriol; Trihydroxypropane	Not Available	Not Available	Not Available	See Appendix D
US OSHA Permissible Exposure Levels (PELs) - Table Z1	glycerol	Glycerin (mist): Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	glycerol	Glycerin (mist): Total dust	15 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
glycerol	Glycerine (mist); (Glycerol; Glycerin)	45 mg/m3	180 mg/m3	1,100 mg/m3
Ingredient	Original IDLH	Revised IDLH		
glycerol	Not Available	Not Available		

MATERIAL DATA

Exposure controls

xposure controls			
Appropriate engineering controls	be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of 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 ventil "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circ overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ven or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, or velocities" of fresh circulating air required to effectively remove the contaminant. Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air). 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) diret spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into z		tilation that strategically rly. The design of a rcumstances. If risk of entilation in warehouse , determine the "capture Air Speed: 0.25-0.5 m/s (50-100 f/min) 0.5-1 m/s (100-200 f/min.) 1-2.5 m/s (200-500 f/min.) 2.5-10 m/s (500-2000 f/min.)
Personal protection			
Eye and face protection	the wearing of lenses or restrictions on use, should be cr and adsorption for the class of chemicals in use and an a their removal and suitable equipment should be readily a remove contact lens as soon as practicable. Lens should	enses may absorb and concentrate irritants. A written policy eated for each workplace or task. This should include a rev account of injury experience. Medical and first-aid personnel vailable. In the event of chemical exposure, begin eye irriga I be removed at the first signs of eye redness or irritation - le ads thoroughly. [CDC NIOSH Current Intelligence Bulletin 55	iew of lens absorption I should be trained in ation immediately and ens should be removed ir
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 		
Body protection	See Other protection below		
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit. 		

Respiratory protection

Type A-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
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Polishing Paste

up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^{^ -} Full-face

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

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White viscous paste with no odour, mixes with water.		
Physical state	Free-flowing Paste	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation models). Nevertheless, good hygiene practice requires that exposure be occupational setting.		
Ingestion	51nil\$a Ingestion may result in nausea, abdominal irritation, pain and vomiting		
Skin Contact	The material is not thought to produce adverse health effects or skin irrita models). Nevertheless, good hygiene practice requires that exposure be setting. Open cuts, abraded or irritated skin should not be exposed to this materia Entry into the blood-stream through, for example, cuts, abrasions, punctu Examine the skin prior to the use of the material and ensure that any exter	kept to a minimum and that suitable gloves be used in an occupational al ire wounds or lesions, may produce systemic injury with harmful effects.	
Eye	Evidence exists, or practical experience predicts, that the material may ca prolonged eye contact may cause inflammation (similar to windburn) chan temporary impairment of vision and/or other transient eye damage/ulcera	racterised by a temporary redness of the conjunctiva (conjunctivitis);	
Chronic	Limited evidence suggests that repeated or long-term occupational exposibiochemical systems.	sure may produce cumulative health effects involving organs or	
	TOXICITY	IRRITATION	
Polishing Paste	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
glycerol	Oral (mouse) LD50: ~23000 mg/kg ^[2]	Not Available	

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	Oral (mouse) LD50: ~26000 mg/kg ^[2]	
	Oral (rat) LD50: =12600 mg/kg ^[2]	
	Oral (rat) LD50: >10000 mg/kg ^[2]	
	Oral (rat) LD50: 27200 mg/kg ^[2]	
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute to specified data extracted from RTECS - Register of Toxic Effect of chem 	
GLYCEROL	 low potential to irritate the skin and the eye. The available human and a the absence of case reports of sensitisation, indicate that glycerol is not Repeat dose toxicity: Repeated oral exposure to glycerol does not ind The overall NOEL after prolonged treatment with glycerol is 10,000 mg/ were observed. For inhalation exposure to aerosols, the NOAEC for loc mg/m3 for systemic effects. Genotoxicity: Glycerol is free from structural alerts, which raise concer strains, chromosomal effects in mammalian cells or primary DNA damawere of uncertain biological relevance. <i>In vivo</i>, glycerol produced no stal lethal study. However, the limited details provided and the absence of a vivo data. Overall, glycerol is not considered to possess genotoxic potel Carcinogenicity. Data from non-guideline studies designed to investigate of glycerol up to 20 weeks had a weak promotion effects on fertility and the server interview. 	ch can occur following exposure to high levels of highly irritating of preceding respiratory disease, in a non-atopic individual, with abrupt locumented exposure to the irritant. A reversible airflow pattern, on ctivity on methacholine challenge testing and the lack of minimal d in the criteria for diagnosis of RADS. RADS (or asthma) following an ocentration of and duration of exposure to the irritating substance. If of exposure due to high concentrations of irritating substance (often s. The disorder is characterised by dyspnea, cough and mucus ity with LD50 values in excess of 4000 mg/kg bw. At very high dose -intestinal -tract. Skin and eye irritation studies indicate that glycerol has nimal data, together with the very widespread potential for exposure and a skin sensitiser. uce adverse effects other than local irritation of the gastro-intestinal tract. kg bw/day (20% in diet). At this dose level no systemic or local effects al irritant effects to the upper respiratory tract is 165 mg/m3 and 662 nn for mutagenicity. Glycerol does not induce gene mutations in bacterial ge <i>in vitro</i> . Results of a limited gene mutation test in mammalian cells tistically significant effect in a chromosome aberrations and dominant positive control, prevent any reliable conclusions to be drawn from the <i>in</i> ntial. tudy in the rat does not provide any basis for concerns in relation to e unmour promotion activity in male mice suggest that oral administration e of tumour formation. reproductive performance were observed in a two generation study with ernal toxicity or teratogenic effects were seen in the rat, mouse or rabbit at

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
			available or does not fill the criteria for classification to make classification

SECTION 12 Ecological information

Toxicity

Polishing Paste	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
glycerol	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	>0.011-mg/L	2
Legend:			red Substances - Ecotoxicological Information - Aquotox database - Aquatic Toxicity Data 5. ECETOC A		

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
glycerol	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation	
glycerol	LOW (LogKOW = -1.76)	

Ingredient	Mobility
glycerol	HIGH (KOC = 1)

SECTION 13 Disposal considerations

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

SECTION 14 Transport information

Labels Required		
Marine Pollutant	NO	
Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS		

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

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

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

Not Applicable

SECTION 15 Regulatory information

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

glycerol is found on the following regulatory lists

US DOE Temporary Emergency Exposure Limits (TEEL	.s)
US NIOSH Recommended Exposure Limits (RELs)	

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Limits - Annotated Table Z-1 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	No
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	No
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4) None Reported

US. California Proposition 65 None Reported

National Inventory Status

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

SECTION 16 Other information

Revision Date	01/11/2019
Initial Date	10/11/2015

SDS Version Summary

Version	Issue Date	Sections Updated
4.1.1.1	29/01/2016	Disposal, Storage (suitable container)
6.1.1.1	01/11/2019	One-off system update. NOTE: This may or may not change the GHS classification

Other information

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

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average PC – STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit. IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level 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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