SAFETY DATA SHEET VioSeal Paste A

SECTION 1. IDENTIFICATION

Contact Person

Product Name VioSeal Paste A

Identified uses root canal filling material. For dental professionals only.

Supplier

SPIDENT Co.,Ltd. www.spident.co.kr

Manufacturer 203&312, Korea Industrial Complex, 722, Gojan-Dong, Namdong-Gu, Incheon,

Korea 405-821

Tel: +82) 32-821-0071 Fax: +82) 32-821-0074

SECTION 2. HAZARI	O(S) IDENTIFICA	ATION	
GHS Classification	Skin Sensitization		1
	Eye Irritation		2A
	Respiration-Sensitization		1
GHS Pictogram	<u>(1)</u>		
Signal Word	Warning		
Hazard Statements	H315	May cause skin irritation	
	H317	May cause an allergic skin reaction.	
	H319	May cause serious eye irritation.	
	H334	May cause allergy or asthma symptoms or breathing	
		difficulties if inhaled.	
Precautionary Statements	Prevention		
	P261	Avoid breathing vapor.	
	P264	Avoid breathing dust/fume/gas/mist/vapours/spray.	
	P272		
	P280	Wear protective gloves and eye protection	
	P284	Wear respiratory protection.	
	Response		
	P302+P352	If on skin, wash with plenty of soap and water.	
	P304+P340	IF INHALED: Remove victim to fresh air and Keep at res in a position comfortable for breathing.	
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do Continue rinsing.	
	P333+P313	IF SKIN irritation or rash occurs: Get medical advice/attention.	
	P362+P364	Take off contaminated clothing and wash it before reuse.	
	P321	Specific treatment reference to supplemental first aid	
		instruction. Manufacturer/ supplier	

	authority may specify a cleansing agent if appropriate.	
P337+P313	IF eye irritation persists: Get medical advice/attention.	
P342+P311	IF experiencing respiratory symptoms: call a POISON	
	CENTER or doctor/physician.	
Storage		
P403-P233	Store in a well-ventilated place. Keep container tightly	
	closed.	
Disposal		
P501	Dispose of contents/container to in accordance with	
	local/regional/national/international regulations to be	
	specified. Manufacturer/supplier or the competent authority	
	to specify whether disposal requirements apply to contents,	
	container or both.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS				
Ingredient	CAS No.	EC No.	% by Wt	
Zirconium Oxide	1314-23-4	215-227-2	20~30	
Calcium Oxide	1305-78-8	215-138-9	≤ 10	

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

General Information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once.

Ingestion

Try to induce vomiting. Get medical attention if any discomfort continues.

Skin Contact

Wash the skin immediately with soap and water.

Eve Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

Most important symptoms and effects, both acute and delayed

Ingestion

Slightly irritating. (DIGESTIVE SYSTEM.)

Skin Contact

Slightly irritating. May cause sensitization by skin contact.

Eye Contact

Slightly Irritating.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

CAUTION! First aid personnel must be aware of own risk during rescue! Wear suitable protective clothing.

SECTION 5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Flash point (°C)

Not available.

Extinguishing Media

Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

Specific Hazards

When heated and in case of fire, irritating vapors/gases may be formed.

Special Fire Fighting Procedures

Avoid breathing fire vapors.

Protective Equipment For Fire-Fighters

Wear full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions

Do not allow to enter drains, sewers or watercourses.

Spill Clean Up Methods

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections

For personal protection, see section 8.

SECTION 7. HANDLING AND STORAGE

Handling

All handling to take place in well-ventilated area.

Storage

Store in a cool, dark place (0-25°C, 32-77°F). Keep away from heat, direct sunlight, sparks and open flames.

Storage Class

Chemical storage.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

In case of inadequate ventilation use suitable respirator.

Hand Protection

Wear protective gloves.

Eve Protection

Wear approved safety goggles.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash

promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin

cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Paste Paste

Color Yellow White

Odor No information available. Solubility No information available.

Initial boiling point and boiling range

Melting point (°C)

Not available.

Not available.

Relative density 1.9

Vapor density (air=1)Not available.Vapor pressureNot available.Evaporation rateNot available.

pH-Value, Conc. Solution 7

pH-Value, Diluted Solution Not available. Viscosity Not available. Not available. **Decomposition temperature (°C) Odour Threshold, Lower** Not available. **Odour Threshold, Upper** Not available. Flash point Not available. Not available. **Auto Ignition Temperature (°C)** Flammability Limit - Lower(%) Not available. Flammability Limit - Upper(%) Not available. **Partition Coefficient** Not available.

(N-Octanol/Water)

Explosive propertiesNot available.Other FlammabilityNot available.Oxidising propertiesNot available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity

May polymerise.

Stability

Stable under normal temperature conditions and recommended use.

Hazardous reactions

Not available.

Conditions To Avoid

Keep away from heat, sparks and open flame. Protect against direct sunlight.

Materials To Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Toxic gases are generated when heated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Not available.

Systemic toxicity test:

No biological harm (tested with mice)

Oral mucous irritant test:

Redness, edema have not been detected (tested with hamsters)

Skin Corrosion/Irritation:

Slightly irritating.

<u>Serious eye damage/irritation:</u> Slightly Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation

May cause sensitization by skin contact.

Germ cell mutagenicity:

Not available.

Carcinogenicity:

IARC Carcinogenicity

Not listed

NTP - Carcinogenicity

Not listed.

OSHA - Carcinogenicity

Not listed.

Reproductive Toxicity:

Not available.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not available.

Specific target organ toxicity - repeated exposure: STOT - Repeated exposure

Not available.

Aspiration hazard:

Viscosity

Not available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No data available.

Degradability

No data available.

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

Mobility:

No information available.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Other adverse effects

Not known.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14. TRANSPORT INFORMATION

UN No. (DOT/TDG)

UN No. (IMDG Code)

V/A

UN No. (ICAO TI/IATA DGR)

N/A

Proper Shipping Name Not applicable.

Hazard Class

No classification noted.

Hazard Label No DOT label requirement noted

IMDG ClassNot applicable.ICAO ClassNot applicable.

Transport Labels No transport warning sign required.

Packing GroupNot applicable.Environmentally Hazardous SubstanceNot applicable

/Marine Pollutant

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes Not applicable.

SECTION 15. REGULATORY INFORMATION

Follow the regulations of the KFDA

(Korea food & Drug Administration)

Follow the regulations of the CE

(Communaute Europeenne)

SECTION 16. OTHER INFORMATION

Date

2016/10/24(Rev.1) 2018/3/22 (Rev.2)

Issued Date

2020/10/24

SAFETY DATA SHEET VioSeal Paste B

SECTION 1. IDENTIFICATION

Contact Person

Product Name VioSeal Paste B

Identified uses Temporary cement. For dental professionals only.

Supplier

SPIDENT Co.,Ltd. www.spident.co.kr

Manufacturer 203&312, Korea Industrial Complex, 722, Gojan-Dong, Namdong-Gu, Incheon,

Korea 405-821

Tel: +82) 32-821-0071 Fax: +82) 32-821-0074

SECTION 2. HAZARD(S) IDENTIFICATION

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GHS Classification	Skin Sensitization		1	
	Eye Irritation 2A		2A	
	Respiration-Sensitization 1		1	
GHS Pictogram	()			
Signal Word	Warning			
Hazard Statements	H315	May cause skin irritation		
	H317	May cause an allergic skin reaction.		
	H319	May cause serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
	H334			
Precautionary Statements	Prevention			
	P261	Avoid breathing vapor.		
	P264	Avoid breathing dust/fume/gas/mist/vapours/spray.		
	P272			
	P280	Wear protective gloves and eye protection		
	P284	Wear respiratory protection.		
	Response	1 7 1		
	P302+P352	If on skin, wash with plenty of soap and water. 4+P340 IF INHALED: Remove victim to fresh air and Kee in a position comfortable for breathing.		
	P304+P340			
	P305+P351+P338			
		minutes. Remove contact lenses, if present and ea		
		Continue	-	
		rinsing.		
	P333+P313 IF SKIN irritation or rash occurs: Get medical		et medical	

	advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P321	Specific treatment reference to supplemental first aid	
	instruction. Manufacturer/ supplier or the competent	
	authority may specify a cleansing agent if appropriate.	
P337+P313	IF eye irritation persists: Get medical advice/attention.	
P342+P311	IF experiencing respiratory symptoms: call a POISON	
	CENTER or doctor/physician.	
Storage		
P403-P233	Store in a well-ventilated place. Keep container tightly	
	closed.	
Disposal		
P501	Dispose of contents/container to in accordance with	
	local/regional/national/international regulations to be	
	specified. Manufacturer/supplier or the competent authority	
	to specify whether disposal requirements apply to contents,	
	container or both.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS			
Ingredient	CAS No.	EC No.	% by Wt
Poly(Bisphenol A-co-epichlorohydrin) Glycidyl end capped	25036-25-3	670-500-3	30~40
Zirconium Oxide	1314-23-4	215-227-2	20~30

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

General Information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once.

Ingestion

Try to induce vomiting. Get medical attention if any discomfort continues.

Skin Contact

Wash the skin immediately with soap and water.

Eye Contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

Most important symptoms and effects, both acute and delayed

Ingestion

Slightly irritating. (DIGESTIVE SYSTEM.)

Skin Contact

Slightly irritating. May cause sensitization by skin contact.

Eye Contact

Slightly Irritating.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

CAUTION! First aid personnel must be aware of own risk during rescue! Wear suitable protective clothing.

SECTION 5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Flash point (°C)

Not available.

Extinguishing Media

Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

Specific Hazards

When heated and in case of fire, irritating vapors/gases may be formed.

Special Fire Fighting Procedures

Avoid breathing fire vapors.

Protective Equipment For Fire-Fighters

Wear full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions

Do not allow to enter drains, sewers or watercourses.

Spill Clean Up Methods

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections

For personal protection, see section 8.

SECTION 7. HANDLING AND STORAGE

Handling

All handling to take place in well-ventilated area.

Storage

Store in a cool, dark place (0-25°C, 32-77°F). Keep away from heat, direct sunlight, sparks and open flames.

Storage Class

Chemical storage.

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Provide adequate general and local exhaust ventilation.

Respiratory Equipment

In case of inadequate ventilation use suitable respirator.

Hand Protection

Wear protective gloves.

Eye Protection

Wear approved safety goggles.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash

promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin

cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Paste Paste

Color Yellow White

OdorNo information available.SolubilityNo information available.

Initial boiling point and boiling range

Not available.

Not available.

Relative density 1.9

Vapor density (air=1)Not available.Vapor pressureNot available.Evaporation rateNot available.

pH-Value, Conc. Solution 7

pH-Value, Diluted Solution Not available. Not available. Viscosity Not available. **Decomposition temperature (°C) Odour Threshold, Lower** Not available. **Odour Threshold, Upper** Not available. Not available. Flash point Not available. **Auto Ignition Temperature (°C)** Flammability Limit - Lower(%) Not available. Flammability Limit - Upper(%) Not available. **Partition Coefficient** Not available.

(N-Octanol/Water)

Explosive propertiesNot available.Other FlammabilityNot available.Oxidising propertiesNot available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity

May polymerise.

Stability

Stable under normal temperature conditions and recommended use.

Hazardous reactions

Not available.

Conditions To Avoid

Keep away from heat, sparks and open flame. Protect against direct sunlight.

Materials To Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Toxic gases are generated when heated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Not available.

Systemic toxicity test:

No biological harm (tested with mice)

Oral mucous irritant test:

Redness, edema have not been detected (tested with hamsters)

Skin Corrosion/Irritation:

Slightly irritating.

Serious eye damage/irritation:

Slightly Irritating.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not available.

Skin sensitisation

May cause sensitization by skin contact.

Germ cell mutagenicity:

Not available.

Carcinogenicity:

IARC Carcinogenicity

Not listed

NTP - Carcinogenicity

Not listed.

OSHA - Carcinogenicity

Not listed.

Reproductive Toxicity:

Not available.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not available.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Not available.

Aspiration hazard:

Viscosity

Not available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No data available.

Degradability

No data available.

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

Mobility:

No information available.

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Other adverse effects

Not known.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14. TRANSPORT INFORMATION

UN No. (DOT/TDG)

UN No. (IMDG Code)

N/A

UN No. (ICAO TI/IATA DGR)

N/A

Proper Shipping Name Not applicable.

Hazard Class No classification noted.

Hazard Label No DOT label requirement noted

IMDG ClassNot applicable.ICAO ClassNot applicable.

Transport Labels No transport warning sign required.

Packing GroupNot applicable.Environmentally Hazardous SubstanceNot applicable

/Marine Pollutant

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes Not applicable.

SECTION 15. REGULATORY INFORMATION

Follow the regulations of the KFDA

(Korea food & Drug Administration)

Follow the regulations of the CE

(Communaute Europeenne)

SECTION 16. OTHER INFORMATION

Revision Comments

This is first issue.

Revision Date

2018/3/22

Issued Date

2020/10/24