

# **Safety Data Sheet**

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# **SECTION 1: Identification**

#### 1.1. Product identifier

PARADIGM<sup>TM</sup> LIGHT BODY BASE VPS IMPRESSION MATERIAL

#### **Product Identification Numbers**

LE-F100-0930-0

#### 1.2. Recommended use and restrictions on use

#### Recommended use

Dental Product, Impression material

#### Restrictions on use

For use only by dental professionals

# 1.3. Supplier's details

**MANUFACTURER:** 3M

**DIVISION:** 3M ESPE Dental Products

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA 1-888-3M HELPS (1-888-364-3577) **Telephone:** 

## 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

# Signal word

Not applicable.

#### **Symbols**

Not applicable.

#### **Pictograms**

Not applicable.

#### 2.3. Hazards not otherwise classified

None.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
VINYL POLYDIMETHYLSILOXANE	68083-19-2	35 - 45 Trade Secret *
QUARTZ SILICA	14808-60-7	35 - 45 Trade Secret *
SILANE TREATED SILICA	67762-90-7	5 - 10 Trade Secret *
CROSSLINKER (NJTSRN 26175-23140)	Trade Secret*	5 - 10 Trade Secret *
POLYETHYLENE GLYCOL, SILOXANE-	27306-78-1	< 1 Trade Secret *
TERMINATED		
GLYCOLS, POLYETHYLENE, ALLYL METHYL	27252-80-8	< 0.5 Trade Secret *
ETHER		

NJTS or NJTSRN: New Jersey Trade Secret Registry Number.

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

## **Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Wash with soap and water. If signs/symptoms develop, get medical attention.

### **Eve Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

## If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

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

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

#### PARADIGM™ LIGHT BODY BASE VPS IMPRESSION MATERIAL 10/20/14

#### **Hazardous Decomposition or By-Products**

**Substance** 

Carbon monoxide Carbon dioxide

#### Condition

During Combustion
During Combustion

## 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

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

Ventilate the area with fresh air. Observe precautions from other sections.

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

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

No special storage requirements.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
QUARTZ SILICA	14808-60-7	OSHA	TWA concentration(as total	
			dust):0.3 mg/m3;TWA	
			concentration(respirable):0.1	
			mg/m3(2.4 millions of	
			particles/cu. ft.)	
QUARTZ SILICA	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
SILANE TREATED SILICA	67762-90-7	CMRG	CEIL:5 mg/m3	

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

# 8.2. Exposure controls

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#### 8.2.1. Engineering controls

Use in a well-ventilated area.

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

#### Skin/hand protection

See Section 7.1 for additional information on skin protection.

#### Respiratory protection

Respiratory protection is not required.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

**General Physical Form:** Solid **Specific Physical Form:** Paste

Odor, Color, Grade: Slight characteristic odor, yellow

**Odor threshold** No Data Available pН No Data Available **Melting point** No Data Available **Boiling Point** Not Applicable **Flash Point** No flash point **Evaporation rate** Not Applicable Not Classified Flammability (solid, gas) Flammable Limits(LEL) Not Applicable Flammable Limits(UEL) Not Applicable Not Applicable **Vapor Pressure Vapor Density** Not Applicable **Density** No Data Available **Specific Gravity** No Data Available

Solubility in Water

Solubility- non-water No Data Available Partition coefficient: n-octanol/ water Not Applicable **Autoignition temperature** No Data Available **Decomposition temperature** No Data Available No Data Available Viscosity Percent volatile No Data Available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

## 10.2. Chemical stability

Stable.

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#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

None known.

## 10.5. Incompatible materials

None known.

# 10.6. Hazardous decomposition products

**Substance** 

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

#### 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

This product may have a characteristic odor; however, no adverse health effects are anticipated.

#### **Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation.

Contact with the eyes during product use is not expected to result in significant irritation.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	C.A.S. No.	Class Description	Regulation
SILICA, CRYS AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

## **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
VINYL POLYDIMETHYLSILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL POLYDIMETHYLSILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
QUARTZ SILICA	Dermal		LD50 estimated to be > 5,000 mg/kg
QUARTZ SILICA	Ingestion		LD50 estimated to be > 5,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Dermal	Rabbit	LD50 > 2,000 mg/kg
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Inhalation-	Rat	LC50 2 mg/l
	Dust/Mist		
	(4 hours)		
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

# **Skin Corrosion/Irritation**

Name	Species	Value
VINYL POLYDIMETHYLSILOXANE	Rabbit	No significant irritation
QUARTZ SILICA		No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Rabbit	No significant irritation

**Serious Eye Damage/Irritation** 

Name	Species	Value
VINYL POLYDIMETHYLSILOXANE	Rabbit	Mild irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Rabbit	Severe irritant

#### **Skin Sensitization**

Skin Schsitzation		
Name	Species	Value
SILANE TREATED SILICA	Human	Not sensitizing
	and	
	animal	
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Guinea	Not sensitizing
	pig	

**Respiratory Sensitization** 

Name	Species Value
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**Germ Cell Mutagenicity** 

Name	Route	Value
QUARTZ SILICA	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
QUARTZ SILICA	In vivo	Some positive data exist, but the data are not
		sufficient for classification
SILANE TREATED SILICA	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
QUARTZ SILICA	Inhalation	Human	Carcinogenic
		and	
		animal	

SILANE TREATED SILICA	Not Mouse		Some positive data exist, but the data are not
	Specified		sufficient for classification

#### Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s
POLYETHYLENE GLYCOL, SILOXANE-TERMINATED	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 450 mg/kg/day	premating & during gestation

#### Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure
						Duration

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
QUARTZ SILICA	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
SILANE TREATED SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

#### **Aspiration Hazard**

Name	Value		

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

#### **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

# **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial

waste.

EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501

# **SECTION 15: Regulatory information**

#### 15.1. US Federal Regulations

Contact 3M for more information.

## 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

# 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: Other information**

#### NFPA Hazard Classification

Health: 0 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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