



## Safety Data Sheet

Copyright,2021, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

<b>Document Group:</b>	28-9581-1	<b>Version Number:</b>	9.00
<b>Issue Date:</b>	05/10/21	<b>Supersedes Date:</b>	12/06/19

### SECTION 1: Identification

#### 1.1. Product identifier

APC™ Flash Free Adhesive Coated Appliance 4007-XXX; 4006-XXX (Clarity Advanced); 4066-xxxx, 4067-XXX, 4068-XXX, 4069-XXX (Buccal Tubes); 4004-XXX (SL3); 4024-XXX (Victory Series™ Low Profile); 4058-XXX (2ND Bicuspid Tubes); 4017-XXX (Victory Series)

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

##### Recommended use

Orthodontic Adhesive, Orthodontic use

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Oral Care Solutions Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 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.

### SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	24448-20-2	35 - 45 Trade Secret *
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	1565-94-2	30 - 45 Trade Secret *
SILANE TREATED CERAMIC	444758-98-9	5 - 15 Trade Secret *
POLYPROPYLENE	9003-07-0	1 - 10 Trade Secret *
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	58109-40-3	< 1 Trade Secret *
TRIPHENYLANTIMONY	603-36-1	< 1 Trade Secret *
Hydroquinone	123-31-9	< 0.1 Trade Secret *

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**Inhalation:**

No need for first aid is anticipated.

**Skin Contact:**

No need for first aid is anticipated.

**Eye Contact:**

No need for first aid is anticipated.

**If Swallowed:**

No need for first aid is anticipated.

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

No critical symptoms or effects. 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.

#### Hazardous Decomposition or By-Products

**Substance**

Carbon monoxide  
Carbon dioxide

**Condition**

During Combustion  
During Combustion

#### 5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

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

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 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. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Avoid release to the environment.

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

Store away from heat.

## 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	Additional Comments
Hydroquinone	123-31-9	ACGIH	TWA:1 mg/m3	A3: Confirmed animal carcin., Dermal Sensitizer
Hydroquinone	123-31-9	OSHA	TWA:2 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

#### 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**

None required.

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

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

#### **Appearance**

Physical state

Solid

Color

Tooth

**Specific Physical Form:**

Paste

**Odor**

Slight Acrylate

**Odor threshold**

*No Data Available*

**pH**

*Not Applicable*

**Melting point**

*No Data Available*

**Boiling Point**

*Not Applicable*

**Flash Point**

No flash point

**Evaporation rate**

*No Data Available*

**Flammability (solid, gas)**

Not Classified

**Flammable Limits(LEL)**

*Not Applicable*

**Flammable Limits(UEL)**

*Not Applicable*

**Vapor Pressure**

*Not Applicable*

**Vapor Density**

*Not Applicable*

**Density**

*No Data Available*

**Specific Gravity**

2.1 [Ref Std:WATER=1]

**Solubility in Water**

Nil

**Solubility- non-water**

*No Data Available*

**Partition coefficient: n-octanol/ water**

*No Data Available*

**Autoignition temperature**

*No Data Available*

**Decomposition temperature**

*No Data Available*

**Viscosity**

10,000 - 15,000 centipoise

**Molecular weight**

*No Data Available*

**Volatile Organic Compounds**

*No Data Available*

**Percent volatile**

*No Data Available*

**VOC Less H2O & Exempt Solvents**

*No Data Available*

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### **10.2. Chemical stability**

Stable.

### **10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Heat

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

<u>Substance</u>	<u>Condition</u>
None known.	

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.

**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:

**Inhalation:**

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.

**Eye Contact:**

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

**Ingestion:**

No known health effects.

**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
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Dermal	Professional	LD50 estimated to be > 5,000 mg/kg

		judgeme nt	
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Rat	LD50 > 11,700 mg/kg
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	Dermal	Rat	LD50 > 2,000 mg/kg
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	Ingestion	Rat	LD50 > 35,000 mg/kg
SILANE TREATED CERAMIC	Dermal		LD50 estimated to be > 5,000 mg/kg
SILANE TREATED CERAMIC	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
POLYPROPYLENE	Dermal		LD50 estimated to be > 5,000 mg/kg
POLYPROPYLENE	Ingestion	Mouse	LD50 > 8,000 mg/kg
TRIPHENYLANTIMONY	Inhalation-Dust/Mist		LC50 estimated to be 1 - 5 mg/l
TRIPHENYLANTIMONY	Dermal	Rat	LD50 > 2,000 mg/kg
TRIPHENYLANTIMONY	Ingestion	Rat	LD50 82.5 mg/kg
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	Ingestion	Rat	LD50 32 mg/kg
Hydroquinone	Dermal	Rat	LD50 > 4,800 mg/kg
Hydroquinone	Ingestion	Rat	LD50 302 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Rabbit	No significant irritation
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	Rabbit	No significant irritation
SILANE TREATED CERAMIC	similar compounds	No significant irritation
POLYPROPYLENE	Human and animal	No significant irritation
TRIPHENYLANTIMONY	Rabbit	Minimal irritation
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	Rabbit	No significant irritation
Hydroquinone	Human and animal	Minimal irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	In vitro data	No significant irritation
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	Rabbit	No significant irritation
SILANE TREATED CERAMIC	similar compounds	Mild irritant
POLYPROPYLENE	Professional judgement	No significant irritation
TRIPHENYLANTIMONY	Rabbit	Mild irritant
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	Rabbit	Mild irritant
Hydroquinone	Human	Corrosive

#### Skin Sensitization

Name	Species	Value
Overall product	Guinea pig	Not classified
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Mouse	Not classified
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	Human	Sensitizing

SILANE TREATED CERAMIC	similar compounds	Not classified
POLYPROPYLENE	Human and animal	Not classified
Hydroquinone	Guinea pig	Sensitizing

### Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

### Germ Cell Mutagenicity

Name	Route	Value
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	In Vitro	Not mutagenic
BISPHENOL A BIS(2-HYDROXYETHYL ETHER) DIMETHACRYLATE	In Vitro	Not mutagenic
POLYPROPYLENE	In Vitro	Not mutagenic
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydroquinone	In Vitro	Some positive data exist, but the data are not sufficient for classification
Hydroquinone	In vivo	Some positive data exist, but the data are not sufficient for classification

### Carcinogenicity

Name	Route	Species	Value
SILANE TREATED CERAMIC	Inhalation	similar compounds	Some positive data exist, but the data are not sufficient for classification
POLYPROPYLENE	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
Hydroquinone	Dermal	Mouse	Not carcinogenic
Hydroquinone	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Hydroquinone	Ingestion	Not classified for female reproduction	Rat	NOAEL 150 mg/kg/day	2 generation
Hydroquinone	Ingestion	Not classified for male reproduction	Rat	NOAEL 150 mg/kg/day	2 generation
Hydroquinone	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during organogenesis

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
DIPHENYLIODONIUM HEXAFLUOROPHOSPHATE	Inhalation	respiratory irritation	Not classified	Not available	Irritation Equivocal	
Hydroquinone	Ingestion	nervous system	May cause damage to organs	Rat	NOAEL Not	not applicable

					available	
Hydroquinone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg	not applicable

### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
BISPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	Ingestion	endocrine system   hematopoietic system   liver   heart   skin   gastrointestinal tract   bone, teeth, nails, and/or hair   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days
SILANE TREATED CERAMIC	Inhalation	pulmonary fibrosis	Not classified	similar compounds	NOAEL Not available	
Hydroquinone	Ingestion	blood	Not classified	Rat	NOAEL Not available	40 days
Hydroquinone	Ingestion	bone marrow   liver	Not classified	Rat	NOAEL Not available	9 weeks
Hydroquinone	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 50 mg/kg/day	15 months
Hydroquinone	Ocular	eyes	Not classified	Human	NOAEL Not available	occupational exposure

### Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

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.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized 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.

#### EPCRA 311/312 Hazard Classifications:

##### Physical Hazards

Not applicable

##### Health Hazards

Not applicable

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

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.

<b>Document Group:</b>	28-9581-1	<b>Version Number:</b>	9.00
<b>Issue Date:</b>	05/10/21	<b>Supersedes Date:</b>	12/06/19

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product,

some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M.

**3M USA SDSs are available at [www.3M.com](http://www.3M.com)**