

Safety Data Sheet

One-Step UniversalBond

SDS DATE : 04/15/13

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: **One-Step UniversalBond**

Other Names: **DE UniversalBond**, S-CHEM -508, L/C Quick-Cure HZ Bonding Resin

Product Use: For composite restorative materials; component for priming/bonding/adhesion of surfaces.

Supplier:

Company: Henry Schein, Inc.
135 Duryea Road
Melville, NY 11747 USA
Henry Schein U.K. Holdings Ltd.
Gillingham ME8 0SB U.K.
Telephone: (800) 472-4346

Emergency Information Chemtec:
(800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Routes of Entry:

Inhalation, Skin contact, Eye contact, Ingestion

Potential Health Acute Effects:

Eyes:

Irritation to the eyes including but not limited to blurred vision, watering and discomfort.

Skin:

Repeated contact with skin may cause irritation and/or sensitization. Repeated or prolonged use can lead to more severe symptoms.

Inhalation:

Irritation may occur. Repeated and/or prolonged exposure can cause dizziness, headache and anesthetic effects.

Ingestion:

Possible irritation and/or pain with ingestion includes but is not limited to the mouth, esophagus, respiratory and digestive tracts, vomiting and/or diarrhea. Seek medical attention immediately and report the amount ingested.

Potential Chronic Health Effects:

May cause headache, fatigue, redness or dryness of the skin.

For PMGDM: When ingested in large amounts, PMGDM can cause unconsciousness and central nervous depression.

When inhaled for prolonged or repeated courses, or in high concentrations severe episodes can happen including unconsciousness, death and/or organ damage and/or failure.

Carcinogenicity:

NE

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>COMPONENT:</u>	<u>CAS NO :</u>	<u>WT % :</u>
BHT	128-37-0	<1.0
Acetone	67-64-1	20.0 - 30.0
2-Hydroxy Ethyl Methacrylate	868-77-9	5.0 - 15.0
PMGDM (50%)	148019-46-9	50.0 - 75.0

Safety Data Sheet

One-Step UniversalBond

SDS DATE : 04/15/13

SECTION 4: FIRST AID MEASURES

Eyes:

Flush with copious amounts of water. Seek medical attention immediately.

Skin:

If irritation occurs and product is on the skin, rinse thoroughly with water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

Ingestion:

If ingested, induce vomiting; Use syrup of ipecac if available and activated charcoal.

Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Seek medical attention immediately.

Inhalation:

Immediately seek fresh air. Open windows and/or doors to increase ventilation. Seek immediate medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable/Explosive Limits:

No Data

Flash Point:

-18°C

Extinguishing Media:

Chemical Foam, CO₂, Dry Chemical Powder, Water Spray. NOTE: Water may be ineffective in extinguishing the fire.

Special Fire Fighting Measures:

Do not enter fire area without proper protection. Fight fire from a safe location. Wear SCBAs and full protective equipment.

Unusual Fire and Explosion Hazards:

Material may burn if exposed to flame. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Process for cleaning and take-up:

Evacuate the spill area. Maximize ventilation by opening doors and windows. Eliminate all sources of ignition. Use self-contained breathing apparatus and protective clothing, (e.g. goggles and gloves). Use non-sparking tools ONLY and dispose of the material in the proper closed container(s).

Wash all affected areas of the skin with warm water and soap. Remove clothing that has been contaminated and wash thoroughly.

Environmental Precautions:

Keep spills and cleaning runoff out of sewers and open bodies of water. Spills on porous surfaces can contaminate the ground water. Dispose of in accordance with Federal, State and Local regulations, or appropriate governing standards.

SECTION 7: HANDLING AND STORAGE

Handling:

Handling advice:

To be handled by qualified dental professionals.

Follow instructions for use.

After each use, wash hands or exposed skin thoroughly. Do not smoke, eat or drink while using this product.

Fire and explosion protection:

Store in a dry, at room temperature, place away from heat, sparks, flame and direct sunlight. Close container after each use.

Safety Data Sheet

One-Step UniversalBond

SDS DATE : 04/15/13

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Chemical Name:	CAS NUMBER:	Exposure Limits in Air:	
		OSHA-PELs	ACGIH-TLVs
BHT	128-37-0	NE	NE
Acetone	109-16-0	NE	NE
2-Hydroxy Ethyl Methacrylate	868-77-9	NE	NE
PM GDM (50%)	148019-46-9	NE	NE

Engineering Controls:

Ventilation:

Professional: Follow precautions and directions on label.

Personal Protection:

Respiratory Protection:

A respirator should be worn whenever workplace conditions warrant its use. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR § 1910.134 or other appropriate governing standard.

Hand Protection:

Chemical resistant gloves should be worn when prolonged or repeated skin contact is expected. If necessary, refer to U.S. OSHA 29 CFR § 1910.138, or other appropriate governing standard. Eye wash stations, safety showers or sink basins are recommended.

Eye Protection:

Safety glasses or chemical splash goggles may be worn, if necessary refer to U.S. OSHA 29 CFR § 1910.133 or other appropriate governing standard. Eye wash stations, safety showers or sink basins are recommended.

Other:

No special body protection is required, refer to appropriate governing standard(s).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

General description:

State: Liquid
 Odor: Sweet and pungent
 Color(s): Colorless

Chemical Properties:

Designation:	Value:
Vapor Pressure	ND
Boiling Point Freezing Point	56.1 °C —
Solubility in Water	NE
Viscosity	ND
Specific Gravity (H ₂ O = 1)	0.788 g/cc at 25°C / 77°F
Percent Volatile W/W %	ND

Safety Data Sheet

One-Step UniversalBond

SDS DATE: 04/15/13

Vapor Density (AR = 1)	ND
Evaporation Rate (BuAc = 1)	ND

SECTION 10: STABILITY AND REACTIVITY

Stability:

This material is stable

Reactivity:

Hazardous decomposition products:

Oxides of carbon when burned.

Incompatibility:

Extreme temperatures, visible light sources. Keep away from strong oxidizing agents, acids, bases, bromines, chloroform, hydrogen peroxide, plastics, rayon, ketones, and acetate/ethydes.

Hazardous polymerization:

NE

SECTION 11: TOXICOLOGICAL INFORMATION

Target Organs:

Acetone: Skin

2-Hydroxy Ethyl Methacrylate: Skin, Central Nervous System

PMGDM in acetone solution: Liver, Kidneys, Central Nervous System, Skin

Toxicity Data:

BHT:		
Oral (Rat)	LD ₅₀ :	890 mg/kg
Dermal (Rabbit)		Irritating

Acetone:		
Oral (Rat)	LD ₅₀ :	5800 mg/kg
Inhalation (Rat)	LD ₅₀ :	50100 mg/m ³ /8h
Dermal (guinea pig)	LD ₅₀ :	7426 mg/kg

2-Hydroxy Ethyl Methacrylate:		
Oral (Mouse)	LD ₅₀ :	3275 mg/kg
Oral (Rat)	LD ₅₀ :	5050 mg/kg
Oral (Guinea Pig)	LD ₅₀ :	4680 mg/kg
Intraperitoneal (Mouse)	LD ₅₀ :	497 mg/kg
Intraperitoneal (Rat)	LD ₅₀ :	1250 mg/kg

PMGDM (50%):		
Oral (Rabbit)	LD ₅₀ :	5340 mg/kg
Oral (Rat)	LD ₅₀ :	5800 mg/kg
Oral (Mouse)	LD ₅₀ :	3000 mg/kg

Safety Data Sheet

One-Step UniversalBond

SDS DATE : 04/15/13

Intraperitoneal (Mouse)	LD ₅₀ :	1297 mg/kg
Intravenous (Rat)	LD ₅₀ :	5500 mg/kg
Inhalation (Mouse)	LD ₅₀ :	44000 mg/m ³
Inhalation (Rat)	LD ₅₀ :	50100 mg/m ³

SECTION 12: ECOLOGICAL INFORMATION

General ecological information:

Aquatic toxicity is possible, including physical damage or death to aquatic life; do not discharge into drains or the environment.

Acetone:		
Oncorhynchus mykiss (Rainbow Trout)	LC ₅₀ :	5540 mg/L/96h
Daphnia magna (water flea)	EC ₅₀ :	13500 mg/L/48h

2-Hydroxy Ethyl Methacrylate:		
Daphnia pulex	LC ₅₀ :	227 mg/L/48h
Scenedesmus capricornutus (algae)	EC ₅₀ :	345 mg/L/72h
Pimephales promelas (Fathead minnow)	EC ₅₀ :	227 mg/L/96h

PMGDMA (50%):		
Daphnia magna (water flea)	LC ₅₀ :	12600 mg/L/48h
Oncorhynchus mykiss (Rainbow Trout)	LC ₅₀ :	5540 mg/L/96h
Pimephales promelas (Fathead minnow)	LC ₅₀ :	6210 mg/L/96h

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal of product:

Collect spilled material. Place in closed container. Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

SECTION 14: TRANSPORT INFORMATION

Department of Transportation Ground (49 CFR):

Proper shipping name: Acetone Solution

Hazard class or division: 3

Identification number (UN): 1090

Packing group: II

The transport information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

Safety Data Sheet

One-Step UniversalBond

SDS DATE : 04/15/13

SECTION 15: REGULATORY INFORMATION

Symbols of Danger:

None Required

R-Phrase:

R36/38 - Irritating to eyes and skin.

R21/22 - Harmful contact with skin and if swallowed.

S-Phrase:

S20/21 - When using do not eat, drink or smoke.

S24/25 - Avoid contact with skin and eyes.

S29 - Do not empty into drains.

S37/39 - Wear suitable gloves and eye/face protection.

SECTION 16: OTHER INFORMATION

All information, recommendations, and suggestions appearing herein concerning our product are based upon tests and data **believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity, and suitability for his** own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, express or implied, is being made as to the effects of such use, the results obtained, or the safety and toxicity of the product nor is there any assumed liability arising out of use, by others, of the product referred to herein. The information herein is not to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.