ZEST DENTAL

SAFETY DATA SHEET

1. Identification

Product identifier Accolade™ PV

Other means of identification

Document number SDS-025-ZD REV A Recommended use Dental composite. **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company name **Danville Materials**

2875 Loker Avenue East **Address**

Carlsbad, CA 92010

Telephone 1-800-827-7940 Contact Customer Service

E-mail danvillecs@zestdent.com

Website www.zestdent.com

Emergency telephone

number

800-451-8346 / 760-602-8703

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

> Serious eye damage/eye irritation Category 2 Sensitization, skin Category 1A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May

cause respiratory irritation. Harmful to aquatic life.

Precautionary statement

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a

well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear

protective gloves/eye protection/face protection. Avoid release to the environment.

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Response

Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep

comfortable for breathing. Call a poison center/doctor if you feel unwell.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Storage

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

Hazard(s) not otherwise

classified (HNOC)

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None known.

Supplemental information None.

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3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	% 50 - 70	
Barium glass	Unknown		
Ethoxylated bisphenol A dimethacrylate	24448-20-2	10 - 25	
Triethylene glycol dimethacrylate	109-16-0	5 - 15	
Bisphenol A glycidyl methacrylate	1565-94-2	1 - 10	

Composition comments

The manufacturer has claimed one or more hazardous ingredients as trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on

All concentrations are in percent by weight.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delaved

vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

contaminated clothing before reuse.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

Will burn if involved in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air	r Contaminants (29 CFR 1910.1000)
A	-

Components	Туре	Value	Form
Pigment	PEL	15 mg/m3	Total dust.
US. OSHA Table Z-3 (29 CFR 19 Components	10.1000) Type	Value	Form
Pigment	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limit Val	ues		
Components	Туре	Value	
Pigment	TWA	10 mg/m3	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if
	noodod

needed.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves.

Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear NIOSH approved respirator

appropriate for airborne exposure at the point of use.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

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General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Liquid. **Physical state Form** Liquid.

Color Not available. Odor Not available. Not available. **Odor threshold** Not applicable. Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Does not flash. Flash point **Evaporation rate** Not available. Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) Vapor pressure Not available. Not available. Vapor density Not available. Relative density

Solubility(ies)

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** > 20.5 mm²/s 104 °F (40 °C) Viscosity temperature

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Strong oxidizing agents. Incompatible materials

Hazardous decomposition Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic products

compounds whose composition have not been characterized.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Ingestion May cause discomfort if swallowed.

Accolade™ PV SDS US Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an

allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Not expected to be acutely toxic. Acute toxicity

Components **Species Test Results**

Pigment (CAS Proprietary)

Acute

Inhalation

LC50 Rat 3.43 mg/l, 4 Hours

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Due to the form of the product, exposure to the potentially carcinogenic components is not Carcinogenicity

expected.

IARC Monographs. Overall Evaluation of Carcinogenicity

Pigment (CAS Proprietary) 2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Not listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity Not classified.

Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Persistence and degradability The major component of the product consists of an inorganic compound which is not

biodegradable. For other components of the product no data are available.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Triethylene glycol dimethacrylate (CAS 109-16-0) 1.88

Mobility in soil If the product enters soil, one or more constituents will or may be mobile and may contaminate

groundwater.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

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Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

Yes

Classified hazard categories

Skin corrosion or irritation Serious eye damage or eye irritation

Respiratory or skin sensitization

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Pigment (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Pigment (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Pigment (CAS Proprietary)

US. Rhode Island RTK

Pigment (CAS Proprietary)

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California Proposition 65



WARNING: This product can expose you to Pigment, which is known to the State of California to cause cancer. and Proprietary component, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Pigment (CAS Proprietary) Listed: September 2, 2011

California Proposition 65 - CRT: Listed date/Developmental toxin

Proprietary component (CAS Proprietary) Listed: March 16, 2012

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Pigment (CAS Proprietary)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No

Europe European List of Notified Chemical Substances (ELINCS) No Japan Inventory of Existing and New Chemical Substances (ENCS) No Korea Existing Chemicals List (ECL) No New Zealand New Zealand Inventory No **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes

(PICCS)

Taiwan Chemical Substance Inventory (TCSI) Taiwan No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

16. Other information, including date of preparation or last revision

19-June-2018 Issue date

Revision date Version # 01

NFPA ratings



Disclaimer

Danville Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

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^{*}A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).