Safety Data Sheet  
acc. to OSHA HCS

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**1 Identification**
- **Product identifier**
  - **Trade name:** PANAVIA V5 ; Tooth Primer
  - **Article number:** US214-TP
- **Application of the substance / the mixture** Dental bonding material
- **Details of the supplier of the safety data sheet**
  - **Manufacturer:** Kuraray Noritake Dental Inc.  
    1621 Sakazu, Kurashiki, Okayama 710-0801,  
    Japan
  - **Contact information:** Kuraray America, Inc.  
    33 Maiden Lane, 6th Floor, New York,  
    NY 10038 U.S.A.  
    Tel: 800-879-1676  
    Fax: 888-700-5200  
    Website: www.kuraraydental.com

**2 Composition/information on ingredients**
- **Chemical characterization:** Mixtures
  - **Description:** Mixture of substances listed below with nonhazardous additions.
  - **Dangerous components:**
    - 868-77-9 2-hydroxyethyl methacrylate  
      (Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317)  
      25-50%
  - **Other ingredients:**
    - 10-Methacryloyloxydecyl dihydrogen phosphate
    - Hydrophilic aliphatic dimethacrylate
    - Accelerators
    - Water

**3 Hazard(s) identification**
- **Classification of the substance or mixture**
  - GHS07
    - Skin Irrit. 2  H315  Causes skin irritation.
    - Eye Irrit. 2A  H319  Causes serious eye irritation.
    - Skin Sens. 1  H317  May cause an allergic skin reaction.
- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms** GHS07
  - **Signal word** Warning
- **Hazard-determining components of labeling:**
  - 2-hydroxyethyl methacrylate
- **Hazard statements**
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H317 May cause an allergic skin reaction.
- **Precautionary statements**
  - P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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4 First-aid measures

- **General information:**
  - Avoid contact with eyes.
  - Avoid contact with skin.
- **After inhalation:**
  - Supply fresh air and to be sure call for a doctor.
  - In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
  - Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
  - If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:**
  - No further relevant information available.
- **Protective equipment:**
  - No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
  - Not required.
- **Environmental precautions:**
  - Dilute with plenty of water.
  - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
- **Reference to other sections:**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
7 Handling and storage

- **Precautions for safe handling**: Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires**: No special measures required.
- **Storage**:  
  - **Requirements to be met by storerooms and receptacles**: Store in a refrigerator (2-8 °C).
  - **Information about storage in one common storage facility**: Not required.
- **Further information about storage conditions**:  
  - Keep receptacle tightly sealed.
  - Store in cool, dry conditions in well sealed receptacles.
  - Protect from heat and direct sunlight.
- **Specific end use(s)**: No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems**: No further data; see item 7.
- **Components with limit values that require monitoring at the workplace**:  
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information**: The lists that were valid during the creation were used as basis.
- **Personal protective equipment**:  
  - **General protective and hygienic measures**:  
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
  - **Breathing equipment**:  
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
  - **Protection of hands**:  
    - Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**:  
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**:  
  - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
9 Physical and chemical properties

- **General Information**
  - **Appearance:** Liquid
  - **Color:** Light blue
  - **Odor:** Odorless

- **pH-value:** <2.3

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** 205 °C (2-hydroxyethyl methacrylate)

- **Flash point:** 97 °C (2-hydroxyethyl methacrylate)

- **Ignition temperature:**
  - **Decomposition temperature:** Not determined.
  - **Auto igniting:** Not determined.
  - **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C:** 1.1 g/cm³

- **Relative density:** Not determined.

- **Vapour density:** Not determined.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with**
  - **Water:** Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Organic solvents:** 0.0 %

- **Other information**
  - No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used and stored according to specifications.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
11 Toxicological information

- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**
    | 868-77-9 2-hydroxyethyl methacrylate | Oral LD50 |
    |                                 | 4680 mg/kg (guinea pig) |
    |                                 | 3275 mg/kg (mouse) |
    |                                 | 5050 mg/kg (rat) |

- **Primary irritant effect:**
  - **on the skin:** Irritating effect
  - **on the eye:** Irritating effect.
  - **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**
  The product shows the following dangers according to internally approved calculation methods for preparations:
  - Irritant

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    None of the ingredients is listed.
  - **NTP (National Toxicology Program)**
    None of the ingredients is listed.

12 Ecological information

- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:**
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
  - DOT, ADR, ADN, IMDG, IATA Void

- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA Void
Trade name: PANAVIA V5 ; Tooth Primer

15 Regulatory information

- Sara
  - Section 355 (extremely hazardous substances):
    None of the ingredient is listed.
  - Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients is listed.
  - Cancerogenity categories
    - EPA (Environmental Protection Agency)
      None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Version: 1
- Relevant phrases
  H315 Causes skin irritation.
Trade name: PANAVIA V5 ; Tooth Primer

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

- **Abbreviations and acronyms:**
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  - Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
  - Skin Sens. 1: Sensitisation - Skin, Hazard Category 1