# Safety Data Sheet

*According to 1907/2006/EC, Article 31*

Revision: 24.01.2024 | Revision no. 8 | Reference No. MSDS/CR/07/1023

## Section 1.Product and Company Identification

**Product Identifier**

**Product Name** **D TECH 3D ACCUPRINT Cast (Purple, Red)**

**Recommended Use** Photopolymer intended in use for 3D printed castable framework

**Manufacturer** D Tech Dental Technologies

62, Reality Warehousing, Gat No .1337/1, Pune-Nagar Road,

Wagholi, Pune-412207, India.

**Emergency Contact Number** +91 9370145806

**Website** www.dtechasia.com

**E mail Id** info@dtechasia.com

## Section 2.Hazard(s) Identification

**2.1. Classification of the mixture:**

Classification according to Regulation 1272/2008/EC (CLP):

| | |
|---|---|
| H317 | Sensitization - Skin, hazard category 1 |
| H412 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| H413 | Long-term (chronic) aquatic hazard (Category 4) |

**2.2. Label elements:**

WARNING

**Precautionary Statements**:

| | |
|---|---|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |
| P264 | Wash contaminated skin thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P305+P351+P338 | IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |

**2.3. Other Hazards:**

Not Classified as PBT or vPvHB

## Section 3.Composition/information on ingredients

**3.1 Substance :**This product is a Mixture .

**3.2 Mixtures :**

Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure
limits, are detailed below.
According to Regulation (EG) Nr. 1272/2008 [CLP].

| Ingredient<br>IUPAC Name | C.A.S No and other unique identifiers | % by Wt. |
|---|---|---|
| 2,2'-ethylenedioxydiethyl dimethacrylate | 109-16-0 | 10-70 |
| Methacrylate Oligomer | Proprietary | 10-70 |
| Photoinitiator | Proprietary | <2 |
| Pigments | Proprietary | <1 |

## Section 4.First - Aid measures

**4.1.General information**: Immediately remove stained and soaked clothing. If symptoms are present or in case you are in any doubt, seek medical advice. If the person loses consciousness, put them in the recovery position and seek medical advice immediately.

**After inhalation:** Make sure that there is fresh air. If the product irritates the respiratory tract, consult a doctor immediately.
**After skin contact**: Immediately wash with soap and water, consult a physician if irritation occurs.

**After eye contact:** Immediately flush eyes with eyelids retracted, with plenty of water for 15 minutes. Consult an ophthalmologist if needed.

**After swallowing:** Consult a physician immediately. Rinse oral cavity with water and exude or expectorate. Induce vomiting. Seek fresh air.

**4.2.The most significant acute and delayed occurring symptoms and impact**

**Skin contact:** May cause an allergic skin reaction.

Information about emergency medical aid or special treatment

**Note for the physician:** Treat symptomatically.

## Section 5.Firefighting measures

**5.1. Extinguishing media:**

5.1.1. Suitable extinguishing media:

Foam, dry powder or carbon dioxide.

5.1.2. Unsuitable extinguishing media:

Full water jet.

**5.2. Special hazards arising from the substance or mixture:**

In case of fire, smoke and other combustion products may be formed, the inhalation of such combustion products can have serious adverse effects on health.

**5.3. Advise for firefighters:**

Use breathing apparatus with independent air supply.

Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations.

## Section 6.Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures:**

6.1.1. For non-emergency personnel:

Keep unprotected people away, allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Use personal protective clothing.

Keep away sources of ignition.

**6.2. Environmental precautions:**

Do not discharge into the drains/surface waters/ground waters.

**6.3. Methods and material for containment and cleaning up:**

Take up with absorbent material (e.g. diatomaceous earth).

**6.4. Reference to other sections:**

For further and detailed information see section 8 and 13.Personal precautions, protection equipment and emergency procedures

## Section 7.Handling and Storage

**7.1. Precautions for safe handling:**

Observe conventional hygiene precautions.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Technical measures:

No special precautions.

Precautions against fire and explosion:

Keep away sources of ignition.

**7.2. Conditions for safe storage, including any incompatibilities:**

Technical measures and storage condition:

Keep container tightly closed. Store at 15 to 30 °C (= 59 to 86 °F).

Packaging material: no special prescriptions.

Store at ambient temperature. Store away from direct sunlight, initiators, oxidizing, and/or reducing agents. Over time, spontaneous polymerization may occur.

## Section 8.Exposure control / personal protection

**8.1.Protective Equipment**

**8.2.Control parameters:**

Use in an enclosed process area is recommended.

**8.3.Personal protective equipment:**

Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. Eye protection such as chemical splash goggles and/or face shield must be worn when the possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

**8.4.General protective and hygienic measure**:

Wash hands after handling material and before eating. See section 7 for full protective measures.

**8.5. Breathing Equipment**:

None should be needed from normal use. If this material is handled at elevated temperature or under mist forming conditions, approved respiratory protection equipment should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

**8.6.Protection of hands**:

Gloves are recommended. Depending on the conditions of use, lab coat and/or arm shields may be used.

Material of gloves, Penetration time of glove material: N/D

**8.7.Eye protection:**

Use of safety goggles with side shields is recommended.

## Section 9.Physical and Chemical properties

| | |
|---|---|
| **Physical state**: | Liquid, viscous |
| **Color**: | Various. |
| **Odour**: | Ester Like. |
| **$P^H$**: | Not applicable. |
| **Flash point**: | More than 300$^oC$ |
| **Explosive properties** : | Not applicable. |
| **Solubility in water** : | Insoluble |
| **Volatile organic compound** : | None. |
| **Specific gravity(Ref std:Water=1)** : | 1.0-1.1gm/ml |
| **Melting Point** : | Not applicable |
| **Boiling Point** : | Not applicable |
| **Vapour Density**: | Not applicable |
| **Relative Density**: | Not applicable |

## Section 10.Stability and Reactivity

**10.1. Reactivity:** See part 10.2.

**10.2. Chemical Stability :** Stable under normal temperature conditions. Stable if stored and handles as prescribed/indicated.

**10.3. Possibility Of Hazardous reactions :** Hazardous polymerization. May polymerize.

**10.4. Conditions to avoid:** Conditions to avoid: The product is stabilized. However, polymerization may occur when the expiry date and/or storage temperature is considerably exceeded.

**10.5. Materials to avoid:** When heated above the flash point, flammable vapors are emitted which can mix with air and can burn or be explosive. Vapors are heavier than air and may travel to the source of ignition and flash back. Heat can cause polymerization with a rapid release of energy which may rupture the container explosively.

**10.6. Incompatible materials:** Strong oxidizers, strong reducers, inert gas, and oxygen scavengers.

**10.7. Hazardous decomposition products:** Carbon oxides when burned.

## Section 11.Toxicological Information

**11.1.Stable Acute toxicity:**

LD 50 values that are relevant for classification:

LD 50 values: Ingestion (rat) LD50: 250 mg/kg[2]

**Methacrylic oligomer (100%)**

**Skin irritation :** Irritating
**Eye irritation:** Irritating
**Skin sensitization:** May cause sensitization by skin contact.
**Aspiration Hazard:** No aspiration hazard expected.
Possible irritant. See section 2
**11.2. Primary irritant effect**: See Section 2 for possible skin and eye irritation and sensitization.
**11.3. Additional toxicological information**: N/D
**11.4. IARC (International Agency for Research on Cancer)** None of the components are listed.
**11.5.NTP (National Toxicology Program)** None of the components are listed.

## Section 12.Ecological Information

**12.1. Toxicity:**

Harmful to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment. Product is not allowed to be discharged into the ground water or aquatic environment.

**12.2. Persistence and degradability:**

Not readily degradable.

**12.3. Bioaccumulation potential:**

No data available.

**12.4. Mobility in soil:**

No data available.

**12.5. Results of PBT and vPvB assessment:**

No data available.

**12.6. Other adverse effects:**

Obtain approval of the relevant authorities before discharging into sewage treatment plants.

Water contaminating class (D): 1 - slightly water contaminating General information.

## Section 13.Disposal considerations

**Waste Treatment Methods**

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations. Incinerate under approved controlled conditions, using incinerators for the disposal for organic chemicals. Decontaminate empty drums before recycling.

**Recommendation:** Cure material before disposal. Dispose in accordance with all federal, state and local regulations. Consult state and local hazardous waste regulations to ensure complete and accurate classification of waste. US EPA guidelines for the classification of hazardous waste are found in 40 CFR part 261.3.

**Uncleaned packaging**

**Recommendation**: Rinse with alcohol. Contain and dispose of rinse material according to all federal, state and local regulations.

**Recommended cleansing agent**: alcohol

## Section 14.Transport Information

**Land transport (ADR/RID)**

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No dangerous good in sense of this transport regulation

## Section 15.Regulatory Information

**15.1.Safety, health and environmental regulations/legislation specific for the substance or mixture :**
If information other than the information in relation to safety, health and environmental regulations / legislation what is mentioned elsewhere in this Safety Data Sheet is required, please use the information listed in Section 1 to inquire whether that specific information is available .Related information about the separate components in the mixture can be accessed the same way.

**15.2. United States regulations**

**Inventory listing (TSCA):** All the ingredients are listed in TSCA

| Ingredient | C.A.S No and other unique identifiers | % by Wt. |
|---|---|---|
| 2,2'-ethylenedioxydiethyl dimethacrylate | 109-16-0 | 10-70 |
| Methacrylate Oligomer | Proprietary | 10-70 |
| Photoinitiator | Proprietary | <2 |
| Pigments | Proprietary | <1 |

**15.2.1 EC Classification: Irritant, Sensitizing, and Harmful**

Hazard Symbol:- Irritating

H317 Sensitization - Skin, hazard category 1

H412 Hazardous to the aquatic environment – Chronic Hazard, Category 3

H413 Long-term (chronic) aquatic hazard (Category 4)

## Section 16.Other Information

**16.1. Training tips**: None

**16.2. Recommended restriction(s) on use:** No special measures are required.

**16.3. Note:** To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that there are the only hazards that exit.