

Accura® Fidelity

Revision Date: February 25, 2020

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the mixture: Accura Fidelity **1.2 Use of the preparation:** For use in SLA systems

1.3 Company/undertaking identification:

3D Systems, Inc. 333 Three D Systems Circle Rock Hill, South Carolina U.S.A. Phone: 803.326.3900 or Toll-free Phone: 800.793.3669 e-mail: moreinfo@3dsystems.com

Chemical Emergency: 800.424.9300 - Chemtrec

3D Systems Europe Ltd. 200 Maylands Avenue Hemel Hempstead Herts, HP2 7TG United Kingdom

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e-mail: moreinfo@3dsystems.com Chemical Emergency:

+(61) 29037.2994 - Aus Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification

GHS: Regulation (EC) No. 1272/2008, 29 CFR 1910, Australian Dangerous Goods Code:

Physical Hazard:

None

Health Hazard:

Skin Sensitization	Category 1	H317
Environmental Hazard:		
Chronic aquatic toxicity	Category 3	H412

2.2 Label Elements

Regulation (EC) No, 1272/2008:

Hazard pictograms and signal word:



GHS07

Signal word: Warning

Hazard determining components of labelling:

Contains: 3,4 Epoxycyclohexylmethyl 3,4 Epoxycyclohexane carboxylate; Tricyclodecane Dimethanol

Diacrylate; Dipentaerythritol Pentaacrylate esters

Hazard statements:

H317: May cause an allergic skin reaction

Harmful to aquitic life with long lasting effects

Precautionary statements:

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P273: Avoid release to the environment.



Accura® Fidelity

Revision Date: February 25, 2020

Response:

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P391: Collect spillage.

Storage:

P410 + P403: Protect from sunlight. Store in a well-ventilated place.

Disposal:

P501 -Dispose of contents/container in accordance with local/state/regional regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization:

Description: Organic mixture

3.2 Dangerous components:

Chemical name	CAS- number	EC- number	%	Classification Regulation (EC) 1272/2008
7-oxabicyclo[4.1.0]hept-3-ylmethyl 7-oxabicyclo[4.1.0]heptane-3- carboxylate	2386-87-0	219-207-4	55-75	Skin Sensitization Category 1 - H317
Tricyclodecane Dimethanol Diacrylate	42594-17-2	255-901-3	10-20	Skin Sensitization Category 1 - H317 Aquatic Chronic Category 2 - H411
Dipentaerythritol Pentaacrylate esters	1245638-61-2	629-850-6	1-10	Skin Sensitization Category 1 - H317 Serious Eye Damage/Eye Irritation Category 2 - H319 Aquatic Chronic Category 3 - H412

4. FIRST AID MEASURES

- **4.1 General Information**: Ensure that eyewash stations and safety showers are close to the workstation location.
- **4.2 In case of inhalation:** May cause respiratory irritation. Move affected person to fresh air. If respiratory irritation occurs, if breathing becomes difficult seek medical attention immediately.
- **4.3 In case of skin contact:** May cause irritation or sensitization by skin contact, including redness and/or swelling. Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.
- **4.4 In case of eye contact:** Irritating to eyes. Causes redness, swelling and pain. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms persist.
- **4.5** In case of ingestion: Irritating to mouth, throat and stomach. If ingested, drink plenty of water and seek immediate medical attention. Do not induce vomiting.
- **4.6 Self-protection of the first aider:** Put on appropriate protective equipment (see section 8). Move exposed person to fresh air. Remove contaminated clothing and shoes.

5. FIRE-FIGHTING MEASURES

- **5.1 Suitable extinguishing media:** Water mist, dry chemical, carbon dioxide, or appropriate foam.
- 5.2 Extinguishing media which must not be used for safety reasons: High volume water jet.
- **5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:** Thermal decomposition products can include CO2, CO, NOx and smoke.



Accura® Fidelity

Revision Date: February 25, 2020

- **5.4 Special protective equipment for fire-fighters:** Wear full protective clothing, including helmet, self-contained positive-pressure or pressure demand breathing apparatus, protective clothing and facemask.
- **5.5 Additional information:** Move container from area if it can be done without risk. Cool containers with water spray. Avoid inhalation of material or combustion by-products.

6. ACCIDENTAL RELEASE MEASURES

- **6.1 Personal precautions:** Keep unnecessary personnel away. Wear appropriate protective equipment and clothing. Consult expert immediately.
- **6.2 Environmental precautions:** Stop the flow of material, if this is without risk. Ventilate contaminated area. Eliminate sources of ignition. In case of contamination of aquatic environment inform local authorities.
- **6.3 Methods for cleaning up:** Wear appropriate protective equipment and clothing. Absorb spillage with suitable absorbent materials. Place all waste in an appropriate container for disposal. The material and its container must be disposed of as hazardous waste. Keep away from sources of ignition.

7. HANDLING AND STORAGE

- **7.1 Handling** Provide adequate ventilation. Use suitable protective equipment. Avoid contact with skin and eyes. Do not breathe vapors or mist. Avoid ignition sources. Do not allow to enter drains or watercourses.
- **7.2 Storage:** Store sealed in the original container at room temperature. Keep this material indoors in a cool, dry, well ventilated place. Store out of direct sunlight or UV light sources. Storage Temperature: below 35 °C / 95 °F. Storage class 10, environmentally hazardous liquids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values:

General Product Information: No occupational exposure limits (PEL/TWA) have been established for this product.

8.2 Exposure controls

Technical measures to prevent exposure: Take precautions to minimize skin and inhalation exposure **Instructual measures to prevent exposure:** When using, do not eat, drink or smoke. Wash hands after handling and before eating, smoking and using the lavatory and at the end of the day.

Personal protection equipment:

Respiratory protection: If ventilation cannot effectively keep vapor concentrations below established limits, appropriate certified respiratory protection must be provided (e.g. 3M 6000 with organic vapor cartridge A2 or half mask 3M 4251).

Hand protection: Use impervious nitrile gloves.

Eye protection: Wear safety glasses or chemical goggles.

Body protection: Use apron and closed shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance: Physical state: liquid Colour: slightly blue

Odour: mild



Accura® Fidelity

Revision Date: February 25, 2020

9.2 Important health, safety and environmental information

pH (20 °C):

Melting point/range (°C):

NA

Boiling point/range (°C):

NA

Flash point (°C): No flash observed, solidifying at 165 °C (Pensky-Martens closed cup)

Ignition temperature (°C): NA
Vapour pressure (°C): NA
Density (g/cm3): NA
Bulk density (kg/m3): NA
Water solubility (20°C in g/l): NA
Partition coefficient: NA
n-Octanol/Water (log Po/w): NA

Viscosity, dynamic (mPa s): ~130 (@ 30 °C)

Dust explosion hazard: NA Explosion limits: NA

10. STABILITY AND REACTIVITY

- **10.1 Conditions to avoid:** Avoid exposure to heat and light. Take necessary actions to avoid static electricity discharge.
- 10.2 Materials to avoid: Oxidizing materials, strong acids and strong bases.
- **10.3 Hazardous decomposition products:** Carbon dioxide, carbon monoxide and other toxic fumes can be released at high temperatures or upon burning.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution: NA

11.2 Acute effects (toxicity tests) - Formulation has not been tested

Acute toxicity of the components:

Irritation to skin and eye Causes sensitisation Corrosive to skin

- **11.3 Experiences made in practice:** Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- **11.4 General remarks:** Carcinogenicity: None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

12. Ecological information

- **12.1 Ecotoxicity:** The aquatic toxicity of the product is unknown; however based on components, it is predicted that this material may be harmful to aquatic organisms or cause long-term adverse effects in the aquatic environment. Prevent contamination of soil, drains and surface waters.
- **12.2 Mobility:** No information available for product.
- **12.3 Persistence and degradability:** No information available for product.
- 12.4 Results of PBT assessment: No information available for product
- 12.5 Other adverse effects: No information available for product

13. DISPOSAL CONSIDERATIONS

13.1 Appropriate disposal / Product: Do not contaminate drains, soil or surface waters with this material or its container. Reduce waste by attempting to utilize product completely. Dispose of this container and its contents in accordance with all local, state, and federal regulations. Do not reuse or refill.



Accura® Fidelity

Revision Date: February 25, 2020

13.2 Waste codes / waste designations according to EWC / AVV: 070208

13.3 Appropriate packaging: NA

13.4 Additional information: Prior to disposal 3D Systems recommends consulting an approved waste disposal firm to ensure regulatory compliance.

14. TRANSPORT INFORMATION

14.1 Land transport (DOT/ADR/RID/GGVSE): Not regulated

14.2 Sea transport (IMDG-Code/GGVSee): Not regulated

14.3 Air transport (ICAO-IATA/DGR): Not regulated

14.4 US Department of Transportation (DOT): Not regulated

15. REGULATORY INFORMATION

15.1 EU regulations

EINEC/ELINCS/NLP and Switzerland REACH Annex XVII: None listed

15.2 EU National regulations

Wassergefährdungsklasse (water hazard class, Germany): WGK 2: Hazard to waters

15.3 US FEDERAL

TSCA: All components listed or exempt from listing

TSCA - 5(a) Significant New Use Rule List of Chemicals: None US. Toxic Substances Control Act (TSCA) Section 12(b): None SARA 302 EHS List (40 CFR 355 Appendix A): None listed

SARA 313 (40 CFR 372.65): None listed CERCLA (40 CFR 302.4): None listed

SARA 302 EHS List (40 CFR 355 Appendix A): None listed

SARA 313 (40 CFR 372.65): None listed CERCLA (40 CFR 302.4): None listed

15.4 International regulations: All components of this product are registered or exempt from registration according to chemical regulations in Australia, Canada China, Japan, South Korea, New Zealand, Philippines and Taiwan.

15.5 Singapore regulations

Safety, health and environmental regulations specific for the product in question:

Controlled Narcotic Drugs (Misuse of Drugs Act, First Schedule, Part I, II & III): Not regulated.

Controlled Specified Drugs (Misuse of Drugs Act, Fourth Schedule): Not regulated.

Prior Informed Consent (PIC) Substances (Environment Protection and Management Act, 2nd Schedule,

Part 1, Jul. 1, 2013): Not regulated. Stockholm Convention: Not applicable Rotterdam Convention: Not applicable Montreal Protocol: Not applicable Kyoto protocol: Not applicable Basel Convention: Not applicable



Accura® Fidelity

Revision Date: February 25, 2020

15.6 Japanese regulations

Chemical Risk Information platform (CHRIP)
Industrial Health and Safety Law
Hazardous material
Organic solvent poison prevention rule
Ordinance on prevention of hazard due to
specified chemical substances

not applicable
not applicable
not applicable

Lead Poisoning Prevention Rule not applicable
Poison and Deleterious Substance Control law
PRTR and Promotion of Chemical Management no listed components

law (PRTR Law)

Fire Services Act not dangerous goods under Fire Services Act

Explosives Law not applicable
High pressure gas safety law not applicable
Export Trade Control Order not applicable

Waste Disposal and Public Cleaning Law applicable. Before disposal, consult an approved waste disposal operative to ensure regulatory compliance.

16. OTHER INFORMATION

16.1 Relevant Hazard Statements (number and full text) referred to in sections 2 and 3 (according to (EC) No. 1272/2008):

H319: Causes serious eye irritation

H317: May cause an allergic skin reaction

H411: Toxic to aquatic life with long-lasting effects H412: Harmful to aquatic life with long-lasting effects

H413: May cause long-lasting harmful effects to aquitic life

16.2 Further information:

SDS Creation Date: September 10, 2019

SDS Revision #:-03-A

SDS Revision Date:......February 25, 2020 Reason for Revision:.....Update section 1, 15.

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