

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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

1.1 Identification of the mixture: **Accura Xtreme**

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

3D Systems Europe Ltd.
200 Maylands Avenue
Hemel Hempstead
Herts, HP2 7TG United Kingdom
Phone: +44 144-2282600
e-mail: moreinfo@3dsystems.com

3D Systems Asia-Pacific
30-32 Ceylon St
Nunawading VIC 3131
Australia
+61 3 9819 4422
e-mail: moreinfo@3dsystems.com

1.4. Emergency telephone number:

U.S.A.:
Chemical Emergency:
800.424.9300 – Chemtrec

Europe:
Chemical Emergency:
+1 703.527.3887 - Chemtrec

Australia:
Chemical Emergency:
+(61) 29037.2994 – Aus Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification

GHS : Regulation (EC) No. 1272/2008, 29 CFR 1910:

Physical Hazard:

None

Health Hazard:

Skin irritation	Category 2	H315
Skin Sensitization	Category 1	H317
Serious eye irritation	Category 2	H319

Environmental Hazard:

Aquatic environment – long-term hazard	Category 3	H412
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2.2 Label Elements

Regulation (EC) No, 1272/2008:

Hazard pictograms and signal word:



GHS07

Signal word: Warning

Hazard determining components of labelling:

3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate, 1,6-bis(2,3-epoxypropoxy)hexane, ether diacrylate, propylene carbonate, Mixed triarylsulfonium salts.

Hazard statements:

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H412: Harmful to aquatic life with long-lasting effects.

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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.
P264: Wash contaminated skin thoroughly after handling.
P273: Avoid release to the environment.

Response:

P321: Specific treatment: Wash contaminated skin with soap and water. Wash eyes with clean water for about 15 minutes.
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.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.

Storage:

None.

Disposal:

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

Supplementary Information:

Safety information:

Do not eat, drink or smoke when using this product.

Storage information:

Protect from sunlight. Store in a well-ventilated place.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization:

Description: Organic mixture

3.2 Dangerous components:

Chemical name	CAS-No	EC-No	%	Classification Regulation (EC) 1272/2008
3,4-Epoxy cyclohexylmethyl 3,4-epoxycyclohexane carboxylate	2386-87-0	219-207-4	30-40	Skin Sensitization Category 1, H 317
1,6-bis(2,3-epoxypropoxy)hexane	16096-31-4	240-260-4	15-25	Eye Irrit. Cat 2, H319 Skin Irrit. Cat 2, H 315 Skin Sens Cat 1, H 317 Aqu. Chro. Cat 3, H 412
Ether di-acrylate	Proprietary	Proprietary	20-30	Skin Sens Cat 1, H 317
Propylene carbonate	108-32-7	219-207-4	1-10	Eye Irrit Cat 2 - H319
Mixed triarylsulfonium salts	71449-78-0 89452-37-9	931-161-3	1-10	Skin Sens Cat 1 - H317 Aqu Acute Cat 1 - H400 Aqu Chro Cat 1 - H410

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.

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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 and smoke.

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 LGK 6.1B

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.

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

Component Analysis:

Component	Component Manufacturer IEL (Internal Exposure Limit)
3,4-Epoxy cyclohexylmethyl 3',4'-epoxy cyclohexane carboxylate	NA
Propylene Carbonate	NA
1,6-bis(2,3-epoxypropoxy)hexane	NA

8.2 Exposure controls

Technical measures to prevent exposure: Use local exhaust ventilation.

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

Appearance	-
Physical state	Liquid
Form	Not available
Color	Dark Gray
Odor	Mild
Odor threshold	Not available
pH	Not available
Melting point/freezing point (°C)	Not available
Initial boiling point and boiling range (°C)	Not available
Flash point (°C)	239
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Relative density (g/cm ³)	1.1
Upper/lower flammability or explosive limits	-
Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Explosive limit - lower (%)	Not available
Explosive limit - upper (%)	Not available
Vapor pressure	Not available
Vapor density	Not available
Solubility(ies)	-
Solubility (water)	slightly soluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature (°C)	Not available
Decomposition temperature (°C)	Not available
Viscosity (cPs)	200-300 (30°C)
Other information	-
Oxidizing properties	Not available
VOC (g/L)	Not available

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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)

Component	LD ₅₀ Oral	LD ₅₀ Dermal
3,4- Epoxycyclohexylmethyl 3',4'-epoxycyclohexane carboxylate	5000 mg/kg (rats)	>23400 mg/kg (rabbits)
1,6-bis(2,3-epoxypropoxy)hexane	> 8,500 mg/Kg (rats)	> 4,900 mg/Kg(rabbits)
Propylene Carbonate	20700 mg/kg (mouse)	>20 ml/kg (rabbit)

Irritant and corrosive effects: Irritating

Irritation to respiratory tract: NA

Sensitisation: Causes sensitisation

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 toxic to aquatic organisms or cause long-term adverse effects in the aquatic environment. Prevent contamination of soil, drains and surface waters.

Component	Data
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	EC50/48h – 40 mg/l (daphnia magna) LC50/96h – 24 mg/l (onkorynchus mykiss)
1,6-bis(2,3-epoxypropoxy)hexane	EC50/48h – 47 mg/l (daphnia) LC50/96h – 30 mg/l (leuciscus idus)

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.

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

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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 DOT:

UN-No.: Not Regulated
UN Proper Shipping Name:
Transport hazard class(es)
 Class: Not Available
 Subsidiary risk: -
Packing group: Not available
Environmental Hazard:
 Marine pollutant: no
Special Precautions for user: NA

14.3 IATA:

UN-No.: Not Regulated
UN Proper Shipping Name:
Transport hazard class(es)
 Class: Not Available
 Subsidiary risk: -
Packing group: Not available
Environmental Hazard: No
Special Precautions for user: Not Available

14.2 IMDG:

UN-No.: Not Regulated
UN Proper Shipping Name:
Transport hazard class(es)
 Class: Not Available
 Subsidiary risk: -
Packing group: Not available
Environmental Hazard:
 Marine pollutant: No
EmS: Not Available

14.1 ADR:

UN-No.: Not Regulated
UN Proper Shipping Name:
Transport hazard class(es)
 Class: Not Available
 Subsidiary risk: -
 Hazard No (ADR): Not available
 Tunnel restriction code : Not available
Packing group: Not available
Environmental Hazard: No
Special Precautions for user: Not available

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

15. REGULATORY INFORMATION

15.1. European Union Regulation:

Safety, health and environmental regulations/legislation specific for the substance or mixture

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended.

Not listed

National regulations:

German Water Hazard Class (WGK): WGK2 (hazard to waters)

15.2. Chemical safety assessment

Chemical Safety Report - No information available

15.3 US FEDERAL

TSCA: All components listed on Active TSCA Inventory 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

California Prop. 65 Components: No listed ingredients

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

15.5 Japanese regulations

Chemical Risk Information platform (CHRIP)
Industrial Health and Safety Law

Listed

Article 57-2 (Cabinet Order 38, antimony and its compounds, excludes materials containing ≤1%)

Hazardous material

not applicable

Organic solvent poison prevention rule

not applicable

Ordinance on prevention of hazard due to specified chemical substances

not applicable

Lead Poisoning Prevention Rule

not applicable

Poison and Deleterious Substance Control law

antimony compounds: hazardous substance

PRTR and Promotion of Chemical Management law (PRTR Law)

Class 1 designated substances (Cabinet Order 25, antimony and its compounds, excludes materials containing ≤1%)

Fire Services Act

Category 4, Class 4, oil

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.

Safety Data Sheet

Accura[®] Xtreme[™]

Revision Date: August 23, 2021

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):

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H319: Causes serious eye irritation

H400: Very toxic to aquatic life

H410: Very toxic to aquatic life with long-lasting effects

H412: Harmful to aquatic life with long-lasting effects

16.2 Further information:

SDS Creation Date: July 3, 2007

SDS Revision #: 10-A

SDS Revision Date: August 23, 2021

Reason for Revision: Update header, section 1, 2, 3, 7, 9, 14, 15.

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