



Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)

Accura® 60

Revision Date: January 28, 2012

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

1.1 Identification of the substance or preparation: Accura® 60

1.2 Use of the substance / preparation: For use with SLA® systems

1.3 Company/undertaking identification:

3D Systems Europe Ltd.
Mark House, Mark Road
Hemel Hempstead
Herts HP2 7
United Kingdom
Phone: +44 144-2282600
703.527.3887 - Chemtrec (U.S.)
e-mail: info@3dsystems-europe.com

2. HAZARDS IDENTIFICATION

2.1 Classification: Xi, R36/38, R43, R52/53

2.2 Information pertaining to special dangers for human and environment:

Adverse physicochemical effects: Combustible

Adverse human health effects and symptoms: Irritating to eyes and skin. May cause sensitization by skin contact.

Adverse environmental effects: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Preparation related information

Description: Organic mixture

3.2 Hazard ingredients:

Chemical name	CAS-No	EC-No	%	Classification	
				Symbol	R-Phrases
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	2386-87-0	219-207-4	30-50	Xi	R36/38, R 43, R 52/53
Ethoxylated pentaerytritol tetraacrylate	51728-26-8	500-111-9 (NLP)	15-30	Xi;	R36
Propylene Carbonate	108-32-7	203-572-1	2.4	Xi	R 36
Antimonate mixture	89452-37-9, 71449-78-0	403-500-0	2-4	Xi, N	R36, R43, R50/53



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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 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 vapours 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.



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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.
Component Analysis:

Component	Component Manufacturer IEL (Internal Exposure Limit)
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	NA
Propylene Carbonate	NA
Ethoxylated pentaerytritol tetraacrylate	NA
Antimonate mixture	0.5mg/m ³ MAK (Switzerland, Netherlands, Austria) 0.5 mg/m ³ VME (France) 0.5 mg/m ³ TWA (Portugal, Finland, Norway, Ireland, Denmark) 0.5 mg/m ³ VLA-ED (Spain) 0.5 mg/m ³ NDS (Poland)

8.2 Exposure controls

Technical measures to prevent exposure: Use explosion-proof 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 vapour concentrations below established limits, appropriate certified respiratory protection must be provided.

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

9.2 Important health, safety and environmental information

pH (20 °C):	NA
Melting point/range (°C):	NA
Boiling point/range (°C):	NA
Flash point (°C):	140 °C (DIN 51758)
Ignition temperature (°C):	NA
Vapour pressure (°C):	NA
Density (g/cm³):	1.1 g/cm ³
Bulk density (kg/m³):	NA
Water solubility (20 °C in g/l):	slightly soluble
Viscosity, dynamic (cps):	170 (30 °C)
Dust explosion hazard:	NA
Explosion limits:	NA



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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)
Ethoxylated pentaerytritol tetraacrylate	> 5000 mg/kg (rat)	Non skin irritant
Propylene Carbonate	20700 mg/kg (mouse)	>20 ml/kg (rabbit)
Antimonate mixture	>2000 mg/Kg (rats)	>2000 mg/Kg (rabbits)

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 harmful to aquatic organisms or cause long-term adverse effects in the aquatic environment. Prevent contamination of soil, drains and surface waters. No ecotoxicity data are available for this product's components.

Component	Data
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	EC50/48h – 40 mg/l (daphnia magna) LC50/96h – 24 mg/l (onkorynchus mykiss)
Antimonate mixture	EC50/24h – 4.4 mg/l (daphnia) EC50/48h – 0.68 mg/l (daphnia)



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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

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 (ADR/RID/GGVSE): Not regulated

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

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

15. REGULATORY INFORMATION

15.1 EU regulations

Chemical Safety Assessment:

Labelling

Hazard symbols and hazard statements:



Xi: Irritant

R-Phrases:

R36/38: Irritating to eyes and skin

R43: May cause sensitisation by skin contact

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-Phrases:

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28: After contact with skin, wash immediately with plenty of water.

S 37/39: Wear suitable gloves and eye/face protection

S61: Avoid release to the environment. Refer to special instruction/Safety Data Sheets.

Contains: Epoxy Resins



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15.2 National regulations

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

Other regulations, restrictions and prohibition regulations: All components are listed on the TSCA and EINECS inventories or are exempt from listing requirements

16. OTHER INFORMATION

16.1 Relevant R-Phrases (Number and full text) referred to in sections 2 and 3:

R36: Irritating to eyes.

R36/38- Irritating to eyes and skin

R43: May cause sensitisation by skin contact

R50/53: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Xi: Irritant

N: Dangerous for the environment

16.2 Further information:

SDS Creation Date: March 6, 2008

SDS Revision #: 03-A

SDS Revision Date: January 28, 2012

Reason for Revision: New company logo, updated flash point

www.3dsystems.com

800.793.3669 (Toll-free in the US GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)

803.326.3900 (Outside the U.S. GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)

+44 144-2282600 (Europe GMT+01:00; Mon – Fri, 08:00 a.m. - 17:00 p.m. MEZ)

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