

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

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

##### 1.1 Identification of the mixture: Accura Composite PIV

##### 1.2 Use of the preparation: For use with 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, HazCom 2012:

Skin Irritation	Category 2	H315
Skin Sensitization	Category 1	H317
Serious eye irritation	Category 2	H319
Aquatic environment – long-term hazard	Category 2	H411

##### 2.2 Label Elements

##### Regulation (EC) No, 1272/2008:

##### Hazard pictograms and signal word:



GHS07



GHS09

##### Signal word: Warning

##### Hazard determining components of labelling:

3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate, Mixed triarylsulfonium salts, Propylene carbonate; Acrylated resin

##### Hazard statements:

H315: Causes skin irritation  
H317: May cause an allergic skin reaction  
H319: Causes serious eye irritation  
H411: Toxic to aquatic life with long-lasting effects

##### Precautionary statements:

##### Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264: Wash contaminated skin thoroughly after handling.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

**Response:**

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

P321: Specific treatment (Wash contaminated skin with soap and water. Wash eyes with clean water for about 15 minutes).

P333 + P317: If skin irritation or rash occurs: Get medical help

P337 + P317: If eye irritation persists: Get medical help.

P362+P364: Take off contaminated clothing and wash before reuse.

**Storage:**

None

**Disposal:**

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

**Supplemental information**

**Safety:** In case of inadequate ventilation wear respiratory protection.

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

**Storage:** Store away from sunlight and UV radiation

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Chemical characterization:**

**Description:** Organic mixture

**3.2 Mixtures:**

Chemical name	CAS-No	EC-No	%	Classification
				Regulation (EC) 1272/2008
Silicon dioxide	7631-86-9	231-545-4	45-65	Not classified
Acrylated resin	Proprietary	Proprietary	5-15	Eye Dam/Eye Irri Cat 2 - H319 Skin Sens Cat 1 - H317 Skin Cor/Irri Cat 2 - H315
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	2386-87-0	219-207-4	1-15	Skin Sens. Cat 1, H 317
Propylene carbonate	108-32-7	219-207-4	1-10	Eye Dam/Eye Irri Cat 2 - H319
Mixed triarylsulfonium salts	71449-78-0 89452-37-9	931-161-3	1- 10	Skin Sens Cat 1 - H317 Aquatic Acute Cat 1 - H400 Aquatic 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.

**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.

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

---

#### 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 CO<sub>2</sub>, 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:** 6.1D - Non-combustible acutely toxic substances or substances with chronic effects

---

#### 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
Mixture containing triarylsulfonium salts	0.5mg/m <sup>3</sup> MAK (Switzerland, Netherlands, Austria) 0.5 mg/m <sup>3</sup> VME (France) 0.5 mg/m <sup>3</sup> TWA (Portugal, Finland, Norway, Ireland, Denmark) 0.5 mg/m <sup>3</sup> VLA-ED (Spain) 0.5 mg/m <sup>3</sup> NDS (Poland)

##### 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.

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

**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

<b>Appearance</b>	-
<b>Physical state</b>	Liquid
<b>Form</b>	Not available
<b>Color</b>	purple to deep purple
<b>Odor</b>	Mild acrylate
<b>Odor threshold</b>	Not available
<b>pH</b>	Not available
<b>Melting point/freezing point (°C)</b>	Not available
<b>Initial boiling point and boiling range (°C)</b>	Not available
<b>Flash point (°C)</b>	139
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Relative density (g/cm<sup>3</sup>)</b>	1.6 g/cm <sup>3</sup>
<b>Upper/lower flammability or explosive limits</b>	-
<b>Flammability limit - lower (%)</b>	Not available
<b>Flammability limit - upper (%)</b>	Not available
<b>Explosive limit - lower (%)</b>	Not available
<b>Explosive limit - upper (%)</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Solubility(ies)</b>	-
<b>Solubility (water)</b>	slightly soluble
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature (°C)</b>	Not available
<b>Viscosity (cPs)</b>	700-1000 cps (30°C)
<b>Other information</b>	-
<b>Oxidizing properties</b>	Not available
<b>VOC (g/L)</b>	Not available

#### 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.

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

#### 11. TOXICOLOGICAL INFORMATION

**11.1 Toxicokinetics, metabolism and distribution:** NA

**11.2 Acute effects (toxicity tests)**

Component	LD <sub>50</sub> Oral	LD <sub>50</sub> Dermal
3,4- Epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate	5000 mg/kg (rats)	>23400 mg/kg (rabbits)
Mixture containing triarylsulfonium salts	>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:** Use PPE to minimize exposure.

#### 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 – 40 mg/l (daphnia) LC50 – 24 mg/l (oncorhynchus mykiss)
Mixture containing triarylsulfonium salts	EC50/24h – 4.4 mg/l (daphnia) EC50/48h – 0.68 mg/l (daphnia)

**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.

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

---

#### 14. TRANSPORT INFORMATION

##### 14.1 DOT:

UN-No.: 3082  
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Acrylic polymers-other)  
Transport hazard class(es):  
Class: 9  
Subsidiary risk: -  
Packing group: III  
Environmental Hazard:  
Marine pollutant: Yes  
Special Precautions for user: Not Available

##### 14.3 IATA:

UN-No.: 3082  
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Acrylic polymers-other)  
Transport hazard class(es): 9  
Class: Not Available  
Subsidiary risk: -  
Packing group: III  
Environmental Hazard: Yes  
Special Precautions for user: Not Available

##### 14.2 IMDG:

UN-No.: 3082  
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Acrylic polymers-other)  
Transport hazard class(es)  
Class: 9  
Subsidiary risk: -  
Packing group: III  
Environmental Hazard:  
Marine pollutant: Yes  
EmS: Not Available

##### 14.1 ADR:

UN-No.: 3082  
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Acrylic polymers-other)  
Transport hazard class(es)  
Class: 9  
Subsidiary risk: -  
Hazard No (ADR): Not available  
Tunnel restriction code : Not available  
Packing group: III  
Environmental Hazard: Yes  
Special Precautions for user: Not available

Further information: Inner packages/containers <5kg are exempt from class 9 regulations.  
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

---

#### 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

## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

---

**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: **WARNING:** This product can expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

<b>Chemical Name</b>	<b>CAS Number</b>
Toluene	108-88-3
C.I.Basic Red 9 monohydrochloride	569-61-9

**15.4 International regulations:** All components of this product are registered or exempt from registration according to chemical regulations in Canada, China, European Union, Switzerland and United States.

There may chemical ingredients not listed in Australia, Japan, New Zealand, Philippines, South Korea and Taiwan.

---

**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

H411: Toxic to aquatic life with long-lasting effects.

**16.2 Further information:**

SDS Creation Date:..... December 12, 2019

SDS Revision #:..... -03-A

SDS Revision Date:..... April 06, 2021

Reason for Revision: ..... Update header, product name, section 2, 3, 7, 14, 16.

[www.3dsystems.com](http://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)



## Safety Data Sheet

### Accura® Composite PIV

Revision Date: April 6, 2021

---

DISCLAIMER OF LIABILITY: The following supersedes any related provision in your company's forms, letters, and agreements from, by or with 3D Systems Corporation. 3D Systems, Inc. makes no warranty whether expressed or implied, including warranties of merchantability or of fitness for a particular purpose for this product. No statements or recommendations contained in the product literature are to be construed as inducements to infringe any relevant patent now or hereafter in existence. Under no circumstances shall 3D Systems, Inc. be liable for incidental, consequential, or other damages from alleged negligence, breach of warranty, strict liability or any other theory, arising out of the use or handling of this product. The sole liability of 3D Systems, Inc. for any claims arising out of the manufacture, use or sale of its products shall be for the buyer's purchase price.

The contents of this safety data sheet are subject to change without notice. 3D Systems, Inc. recommends that you periodically check [www.3dsystems.com](http://www.3dsystems.com) to make sure you are using the most current safety data sheet.

© Copyright 2019 - 2021 by 3D Systems, Inc. All rights reserved. 3D Systems, the 3D logo, and Accura are registered trademarks of 3D Systems, Inc.