

**EPIBOND® 420 A US**

Version 2.0

Revision Date: 04/06/2022

SDS Number: 400001009160

Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

**SECTION 1. IDENTIFICATION**

Product name : EPIBOND® 420 A US

**Manufacturer or supplier's details**

Company name of supplier : Huntsman Advanced Materials Americas LLC

Address : P.O. Box 4980  
The Woodlands,  
TX 77387

Telephone : Non-Emergency: (800) 257-5547

E-mail address of person responsible for the SDS : Global\_Product\_EHS\_AdMat@huntsman.com

Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

**Recommended use of the chemical and restrictions on use**

Recommended use : Epoxy constituents

Restrictions on use : For industrial use only.

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitisation : Category 1

Short-term (acute) aquatic hazard : Category 2

Chronic aquatic toxicity : Category 2

**GHS label elements**Hazard pictograms : 

Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

## EPIBOND® 420 A US

Version  
2.0Revision Date:  
04/06/2022SDS Number:  
400001009160Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements

: **Prevention:**

P261 Avoid breathing mist or vapours.  
 P264 Wash skin thoroughly after handling.  
 P272 Contaminated work clothing must not be allowed out of the workplace.

P273 Avoid release to the environment.  
 P280 Wear protective gloves/ eye protection/ face protection.

**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.

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

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

**Storage:**

Not available

**Disposal:**

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3	90 - 100
Glass, oxide, chemicals	65997-17-3	0.1 - 1

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

Both 25068-38-6 and 1675-54-3 can be used to describe the epoxy resin which is produced through the reaction of bisphenol A and epichlorohydrin

**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

## EPIBOND® 420 A US

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
Print Date 04/12/2025			
Show this safety data sheet to the doctor in attendance.			
Treat symptomatically.			
Get medical attention if symptoms occur.			
If inhaled	<ul style="list-style-type: none"> <li>: If inhaled, remove to fresh air.</li> <li>Get medical attention if symptoms occur.</li> </ul>		
In case of skin contact	<ul style="list-style-type: none"> <li>: If skin irritation persists, call a physician.</li> <li>If on skin, rinse well with water.</li> <li>If on clothes, remove clothes.</li> </ul>		
In case of eye contact	<ul style="list-style-type: none"> <li>: Immediately flush eye(s) with plenty of water.</li> <li>Remove contact lenses.</li> <li>Keep eye wide open while rinsing.</li> <li>If eye irritation persists, consult a specialist.</li> </ul>		
If swallowed	<ul style="list-style-type: none"> <li>: Keep respiratory tract clear.</li> <li>Never give anything by mouth to an unconscious person.</li> <li>If symptoms persist, call a physician.</li> </ul>		
Most important symptoms and effects, both acute and delayed	<ul style="list-style-type: none"> <li>: None known.</li> </ul>		
Protection of first-aiders	<ul style="list-style-type: none"> <li>: First Aid responders should pay attention to self-protection and use the recommended protective clothing</li> <li>If potential for exposure exists refer to Section 8 for specific personal protective equipment.</li> <li>Avoid inhalation, ingestion and contact with skin and eyes.</li> <li>No action shall be taken involving any personal risk or without suitable training.</li> <li>It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.</li> </ul>		
Notes to physician	<ul style="list-style-type: none"> <li>: Treat symptomatically.</li> </ul>		

## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: <ul style="list-style-type: none"> <li>Water spray</li> <li>Alcohol-resistant foam</li> <li>Carbon dioxide (CO<sub>2</sub>)</li> <li>Dry chemical</li> </ul>
Unsuitable extinguishing media	: <ul style="list-style-type: none"> <li>Exercise caution when using a high volume water jet as it may scatter and spread fire</li> </ul>
Specific hazards during firefighting	: <ul style="list-style-type: none"> <li>Do not allow run-off from fire fighting to enter drains or water courses.</li> </ul>
Hazardous combustion products	: <ul style="list-style-type: none"> <li>Carbon oxides</li> <li>Halogenated compounds</li> </ul>
Specific extinguishing	: <ul style="list-style-type: none"> <li>Use extinguishing measures that are appropriate to local</li> </ul>

## EPIBOND® 420 A US

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
methods	Print Date 04/12/2025		
Further information	<p>: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</p> <p>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.</p>		
Special protective equipment for firefighters	<p>: Wear self-contained breathing apparatus for firefighting if necessary.</p>		

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation of susceptible persons. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers.
Materials to avoid	: For incompatible materials please refer to Section 10 of this SDS.

**EPIBOND® 420 A US**

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
			Print Date 04/12/2025

Recommended storage temperature : 36 - 104 °F / 2 - 40 °C

Further information on storage stability : Stable under normal conditions.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters****Personal protective equipment**

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : paste

Colour : yellow

Odour : odourless

**EPIBOND® 420 A US**

Version 2.0

Revision Date: 04/06/2022

SDS Number: 400001009160

Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

Odour Threshold	: No data is available on the product itself.
pH	: substance/mixture is non-soluble (in water)
Melting point/freezing point	: No data is available on the product itself.
Boiling point	: No data is available on the product itself.
Flash point	: 360 °F / 182 °C Method: closed cup
Evaporation rate	: No data is available on the product itself.
Flammability (solid, gas)	: No data is available on the product itself.
Flammability (liquids)	: No data is available on the product itself.
Upper explosion limit / Upper flammability limit	: No data is available on the product itself.
Lower explosion limit / Lower flammability limit	: No data is available on the product itself.
Vapour pressure	: > 1.3 hPa (68 °F / 20 °C)
Relative vapour density	: No data is available on the product itself.
Relative density	: 1.1 (77 °F / 25 °C)
Density	: 1.1 g/cm3 (77 °F / 25 °C)
Solubility(ies)	
Water solubility	: practically insoluble (68 °F / 20 °C)
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/water	: No data is available on the product itself.
Auto-ignition temperature	: No data is available on the product itself.
Decomposition temperature	: > 302 °F / > 150 °C Method: estimated
Self-Accelerating decomposition temperature (SADT)	: No data is available on the product itself.
Viscosity	
Viscosity, dynamic	: ca. 180,000 mPa.s (77 °F / 25 °C)
Explosive properties	: No data is available on the product itself.
Oxidizing properties	: No data is available on the product itself.

## EPIBOND® 420 A US

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
			Print Date 04/12/2025

Particle size : No data is available on the product itself.

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: None known.
Incompatible materials	: Strong acids Strong bases Strong oxidizing agents
Hazardous decomposition products	: carbon dioxide carbon monoxide Halogenated compounds

## SECTION 11. TOXICOLOGICAL INFORMATION

## Acute toxicity

Product:

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Components:**2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Acute oral toxicity	: LD50 (Rat, female): > 2,000 mg/kg Method: OECD Test Guideline 420 Assessment: The substance or mixture has no acute oral toxicity Remarks: No mortality observed at this dose.
Acute dermal toxicity	: LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

## Skin corrosion/irritation

Components:**2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Species	: Rabbit
Exposure time	: 4 h
Assessment	: Irritating to skin.
Method	: OECD Test Guideline 404
Result	: Irritating to skin.

**EPIBOND® 420 A US**

Version 2.0

Revision Date: 04/06/2022

SDS Number: 400001009160

Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

**Glass, oxide, chemicals:**

Species : Rabbit  
 Assessment : No skin irritation  
 Method : OECD Test Guideline 404  
 Result : Normally reversible injuries

**Serious eye damage/eye irritation****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Species : Rabbit  
 Result : Irritating to eyes.  
 Assessment : Irritating to eyes.  
 Method : OECD Test Guideline 405

**Respiratory or skin sensitisation****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Test Type : Local lymph node assay (LLNA)  
 Exposure routes : Skin  
 Species : Mouse  
 Method : OECD Test Guideline 429  
 Result : The product is a skin sensitiser, sub-category 1B.

**Glass, oxide, chemicals:**

Exposure routes : Skin  
 Species : Other  
 Result : Does not cause skin sensitisation.

**Germ cell mutagenicity****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
 Test system: mouse lymphoma cells  
 Metabolic activation: without metabolic activation  
 Result: positive

Test Type: reverse mutation assay  
 Test system: Salmonella typhimurium  
 Metabolic activation: with and without metabolic activation  
 Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
 Result: negative

Genotoxicity in vivo : Test Type: in vivo assay  
 Species: Mouse (male)  
 Cell type: Germ  
 Application Route: Oral  
 Dose: 3333, 10000 mg/kg

## EPIBOND® 420 A US

Version 2.0

Revision Date: 04/06/2022

SDS Number: 400001009160

Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

Result: negative

Test Type: gene mutation test  
 Species: Rat (male)  
 Cell type: Somatic  
 Application Route: Oral  
 Dose: 50,250,500,1000 mg/kg bw/day  
 Method: OECD Test Guideline 488  
 Result: negative

## Carcinogenicity

Components:**2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Species : Rat, male  
 Application Route : Oral  
 Exposure time : 24 month(s)  
 Dose : 0, 2, 15, or 100 mg/kg bw/day  
 Frequency of Treatment : 7 days/week  
 NOAEL : 15 mg/kg bw/day  
 Method : OECD Test Guideline 453  
 Result : negative  
 Target Organs : Digestive organs

Species : Mouse, male  
 Application Route : Dermal  
 Exposure time : 24 month(s)  
 Dose : 0, 0.1, 10, 100 mg/kg bw/day  
 Frequency of Treatment : 3 days/week  
 NOEL : 0.1 mg/kg body weight  
 Method : OECD Test Guideline 453  
 Result : negative  
 Target Organs : Digestive organs

Species : Rat, female  
 Application Route : Dermal  
 Exposure time : 24 month(s)  
 Dose : 0.1, 100, 1000 mg/kg bw/day  
 Frequency of Treatment : 5 days/week  
 NOEL : 100 mg/kg body weight  
 Method : OECD Test Guideline 453  
 Result : negative

Species : Rat, female  
 Application Route : Oral  
 Exposure time : 24 month(s)  
 Dose : 0, 2, 15, or 100 mg/kg bw/day  
 Frequency of Treatment : 7 days/week  
 NOAEL : 100 mg/kg bw/day  
 Method : OECD Test Guideline 453  
 Result : negative  
 Target Organs : Digestive organs

Species : Rat, females  
 Application Route : Oral

## EPIBOND® 420 A US

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
			Print Date 04/12/2025

Exposure time : 24 month(s)  
 Dose : 0, 2, 15, or 100 mg/kg bw/day  
 Frequency of Treatment : 7 days/week  
 NOEL : 2 mg/kg bw/day  
 Method : OECD Test Guideline 453  
 Result : negative  
 Target Organs : Digestive organs

**IARC** Group 2A: Probably carcinogenic to humans  
 Glass, oxide, chemicals  
 (glass) 65997-17-3  
 Group 2B: Possibly carcinogenic to humans  
 Glass, oxide, chemicals  
 (special-purpose fibres) 65997-17-3

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

#### Components:

#### 2,2'-[**(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Effects on fertility : Test Type: Two-generation study  
 Species: Rat, male and female  
 Application Route: Oral  
 Dose: 0, 50, 180, 540 or 750 milligram per kilogram  
 Duration of Single Treatment: 238 d  
 Frequency of Treatment: 1 daily  
 General Toxicity - Parent: NOEL: 540 mg/kg body weight  
 General Toxicity F1: NOEL: 750 mg/kg body weight  
 Symptoms: No adverse effects  
 Method: OECD Test Guideline 416  
 Result: No effects on fertility and early embryonic development were detected.

Effects on foetal development : Species: Rabbit, female  
 Application Route: Dermal  
 Dose: 0, 30, 100 or 300 milligram per kilogram  
 Duration of Single Treatment: 28 d  
 Frequency of Treatment: 1 daily  
 General Toxicity Maternal: NOAEL: 30 mg/kg body weight  
 Developmental Toxicity: NOAEL: 300 mg/kg body weight  
 Method: Other guidelines  
 Result: No teratogenic effects

Test Type: Pre-natal  
 Species: Rabbit, female  
 Application Route: Oral  
 Dose: 0, 20, 60 or 180 milligram per kilogram  
 Duration of Single Treatment: 13 d  
 Frequency of Treatment: 1 daily  
 General Toxicity Maternal: NOAEL: 60 mg/kg body weight

## EPIBOND® 420 A US

Version 2.0

Revision Date: 04/06/2022

SDS Number: 400001009160

Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

Developmental Toxicity: NOAEL: 180 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects

Test Type: Pre-natal  
Species: Rat, female  
Application Route: Oral  
Dose: 0, 60, 180 and 540 milligram per kilogram  
Duration of Single Treatment: 10 d  
Frequency of Treatment: 1 daily  
General Toxicity Maternal: NOAEL: 180 mg/kg body weight  
Developmental Toxicity: NOAEL: > 540 mg/kg body weight  
Method: OECD Test Guideline 414  
Result: No teratogenic effects

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Repeated dose toxicity****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Species	:	Rat, male and female
NOAEL	:	50 mg/kg
Application Route	:	oral (gavage)
Exposure time	:	14 Weeks
Number of exposures	:	7 d
Dose	:	0, 50, 250, 1000 mg/kg/day
Method	:	OECD Test Guideline 408
Species	:	Rat, male and female
NOAEL	:	>= 10 mg/kg
Application Route	:	Skin contact
Exposure time	:	13 Weeks
Number of exposures	:	5 d
Dose	:	0, 10, 100, 1000 mg/kg/day
Method	:	OECD Test Guideline 411
Species	:	Mouse, male
NOAEL	:	100 mg/kg
Application Route	:	Skin contact
Exposure time	:	13 Weeks
Number of exposures	:	3 d
Dose	:	0, 1, 10, 100 mg/kg/day
Method	:	OECD Test Guideline 411

**Glass, oxide, chemicals:**

Species	:	Rat, male
LOEC	:	2.4 mg/m3
Test atmosphere	:	dust/mist
Exposure time	:	2,160 h
Number of exposures	:	6 h

## EPIBOND® 420 A US

Version 2.0 Revision Date: 04/06/2022 SDS Number: 400001009160 Date of last issue: 10/16/2018 Date of first issue: 02/20/2017

Print Date 04/12/2025

Method : Directive 67/548/EEC, Annex, B.29

**Aspiration toxicity**

No data available

**Experience with human exposure**

No data available

**Toxicology, Metabolism, Distribution**

No data available

**Neurological effects**

No data available

**Further information**

No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.8 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50: 11 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: EPA-660/3-75-009

NOEC: 4.2 mg/l  
Exposure time: 72 h  
Test Type: static test  
Test substance: Fresh water  
Method: EPA-660/3-75-009

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.3 mg/l  
Exposure time: 21 d  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 211

Toxicity to microorganisms : IC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h  
Test Type: static test  
Test substance: Fresh water

## EPIBOND® 420 A US

Version  
2.0Revision Date:  
04/06/2022SDS Number:  
400001009160Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**Glass, oxide, chemicals:**Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 1,000 mg/l  
Exposure time: 96 h  
Test Type: Other guidelines  
Test substance: Fresh water  
Method: OECD Test Guideline 203Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l  
Exposure time: 72 h  
Test Type: semi-static test  
Test substance: Fresh water  
Method: OECD Test Guideline 202Toxicity to algae/aquatic plants : EgC50 (Selenastrum capricornutum (green algae)): > 1,000 mg/l  
Exposure time: 72 h  
Test Type: semi-static test  
Method: OECD Test Guideline 201**Persistence and degradability****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**Biodegradability : aerobic  
Inoculum: activated sludge, non-adapted  
Concentration: 20 mg/l  
Result: Not readily biodegradable.  
Biodegradation: 5 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301FStability in water : Degradation half life (DT50): 4.83 d (25 °C) pH: 4  
Method: OECD Test Guideline 111  
Remarks: Fresh waterDegradation half life (DT50): 7.1 d (25 °C) pH: 9  
Method: OECD Test Guideline 111  
Remarks: Fresh waterDegradation half life (DT50): 3.58 d (25 °C) pH: 7  
Method: OECD Test Guideline 111  
Remarks: Fresh water**Bioaccumulative potential****Components:****2,2'-(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane:**Bioaccumulation : Bioconcentration factor (BCF): 31  
Remarks: Does not bioaccumulate.

Partition coefficient: n- : log Pow: 3.242 (77 °F / 25 °C)



## EPIBOND® 420 A US

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
			Print Date 04/12/2025

(passenger aircraft)  
Environmentally hazardous : yes

**IMDG-Code**

UN number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A EPOXY RESIN)
Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****49 CFR**

UN/ID/NA number	: UN 3082
Proper shipping name	: Environmentally hazardous substance, liquid, n.o.s. (BISPHENOL A EPOXY RESIN)
Class	: 9
Packing group	: III
Labels	: CLASS 9
ERG Code	: 171
Marine pollutant	: yes
Remarks	: Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

**Special precautions for user**

Remarks : 49CFR: no dangerous good in non-bulk packaging

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**SECTION 15. REGULATORY INFORMATION****CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

**SARA 311/312 Hazards** : Respiratory or skin sensitisation  
Skin corrosion or irritation  
Serious eye damage or eye irritation

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

**EPIBOND® 420 A US**

Version 2.0	Revision Date: 04/06/2022	SDS Number: 400001009160	Date of last issue: 10/16/2018 Date of first issue: 02/20/2017
Print Date 04/12/2025			

**California Prop. 65**

**WARNING:** This product can expose you to chemicals including methanol, 4,4'-isopropylidenediphenol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**The components of this product are reported in the following inventories:**

DSL	: All components of this product are on the Canadian DSL
AIIC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory

**Inventories**

AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

**TSCA - 5(a) Significant New Use Rule List of Chemicals**

No substances are subject to a Significant New Use Rule.

**US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)**

No substances are subject to TSCA 12(b) export notification requirements.

## EPIBOND® 420 A US

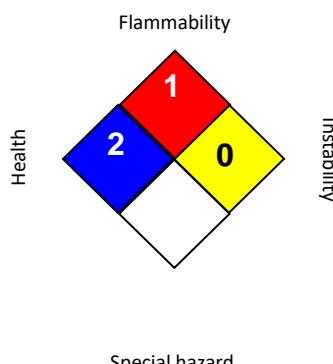
Version  
2.0Revision Date:  
04/06/2022SDS Number:  
400001009160Date of last issue: 10/16/2018  
Date of first issue: 02/20/2017

Print Date 04/12/2025

## SECTION 16. OTHER INFORMATION

## Further information

## NFPA 704:



## HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Revision Date : 04/06/2022

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Huntsman Corporation or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.