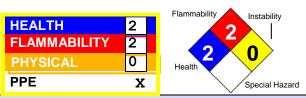
Epoxy.com Product #461 High Solids Urethane

Topcoat - Satin







Printed: 11/03/2015 Revision: 11/03/2015

Page: 1

1. Product and Company Identification

Product Code: 461-SATIN-B

Product Name: 461-SATIN High Solids Urethane Topcoat - Satin Part B

Trade Name: 461-SATIN High Solids Urethane Topcoat - Satin Part B

Manufacturer Information

Company Name: Epoxy Systems, Inc.

20774 W Pennsylvania Ave Dunnellon, Florida 34431

Phone Number: +1 (352) 489-1666

Emergency Contact: PERS (USA) (800) 633-8253

Alternate Emergency Contact: PERS (International) +1 (801) 629-0667

Industrial Maintenance Coatings

2. Hazards Identification

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GHS Classification		Placard	Key word	GHS hazard phrase
	Flammable Liquids, Category 4	none	Warning	Combustible liquid
	Skin Corrosion/Irritation, Category 2	Exclamation point	Warning	Causes skin irritation
	Serious Eye Damage/Eye Irritation, Category 2A	Exclamation point	Warning	Causes serious eye irritation
	Target Organ Systemic Toxicity (single exposure), Category 3	Exclamation point	Warning	May cause respiratory irritation, or may cause drowsiness and dizziness

GHS Hazard Phrases

H227 - Combustible liquid.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H303 - May be harmful if swallowed.

GHS Precaution Phrases

P281 - Use personal protective equipment as required.

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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P264 - Wash hands thoroughly after handling.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P362+364 - Take off contaminated clothing and wash it before reuse.

P271 - Use only outdoors or in a well-ventilated area.

GHS Response Phrases

P370+378 - In case of fire, use CO2, Dry Chemical, Water Spray, Foam to extinguish.

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P333+313 - If skin irritation or rash occurs, seek medical advice/attention. P362 - Take off contaminated clothing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P314 - Get medical attention/advice if you feel unwell.

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P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases

P403+235 - Store in cool/well-ventilated place.

P501 - Dispose of contents/container to local, state, and federal authority requirements.

P405 - Store locked up.

Potential Health Effects (Acute and Chronic)

Causes eye irritation. May cause skin irritation. May cause respiratory tract irritation.

Inhalation

May cause respiratory irritation.

Skin Contact

May cause skin irritation.

Eye Contact

Causes eye irritation.

Ingestion

May be harmful if swallowed.

Medical Conditions Generally Aggravated By Exposure

Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients

на	zardous Components (Chemicai Name)	CAS#	Concentration	
1.	Propanol, 1(or 2)-(2-methoxymethylethoxy)-,	88917-22-0	75 - 95 %	
	acetate			
2.	Xylene	1330-20-7	<4.0 %	
3.	Butyl acetate	123-86-4	<2.5 %	
4.	Dibutyltin dilaurate	77-58-7	1.0 - 2.0 %	
5.	Zinc Compound	NA	<1.5 %	
6.	Ethyl Benzene	100-41-4	<1.5 %	

4. First Aid Measures

Emergency and First Aid Procedures

Use first aid treatment according to the nature of the injury.

In Case of Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

In Case of Skin Contact

In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

In Case of Eye Contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. For further assistance, contact your local Poison Control Center.

Signs and Symptoms Of Exposure

May cause rash on skin, and redness in eyes. May cause coughing by inhalation of a mist or spray.

Epoxy.com Product #461 High Solids Urethane Topcoat – Satin Part B Printed: 11/03/2015 Revision: 11/03/2015

5. Fire Fighting Measures

Flash Pt: > 160.00 F Method Used: Closed Cup

LEL: NE UEL: NE **Explosive Limits:**

Autoignition Pt: > 500.00 F

Fire Fighting Instructions

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use water spray to cool unopened containers.

Flammable Properties and Hazards

Combustible material: may burn but does not ignite readily.

Hazardous Combustion Products

In a fire, product may produce the following: Carbon monoxide, Carbon dioxide.

Suitable Extinguishing Media

Use water spray, foam, dry chemical, or carbon dioxide.

Unsuitable Extinguishing Media

Do not use a direct water stream, which may spread fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Use personal protective equipment. Evacuate area. Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

Protective Precautions, Protective Equipment and Emergency Procedures

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Hazard Label Information:

Avoid contact with skin and eyes. Do not get on skin and clothing. Avoid inhalation of vapor or mist. Store in cool/well-ventilated place.

Precautions To Be Taken in Handling

Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing.

Precautions To Be Taken in Storing

Keep container tightly closed in a dry and well-ventilated place.

Other Precautions

Wash thoroughly after handling. Keep away from sources of ignition.

8. Exposure Controls/Personal Protection						
Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TWA	Other Limits		
 Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate 	88917-22-0	No data.	No data.	No data.		
2. Xylene	1330-20-7	PEL: 100 ppm	TLV: 100 ppm STEL: 150 ppm	No data.		
3. Butyl acetate	123-86-4	PEL: 150 ppm	TLV: 150 ppm STEL: 200 ppm	No data.		
4. Dibutyltin dilaurate	77-58-7	No data.	No data.	No data.		
5. Zinc Compound	NA	No data.	No data.	No data.		
6. Ethyl Benzene	100-41-4	PEL: 100 ppm	TLV: 100 ppm STEL: 125 ppm	No data.		

Page:

Epoxy.com Product #461 High Solids Urethane Topcoat – Satin Part B Revision: 11/03/2015

Protective Equipment Summary - Hazard Label Information:

Neoprene gloves Safety glasses, or goggles. Impervious clothing.

Respiratory Equipment (Specify Type)

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection

Safety glasses, or goggles.

Protective Gloves

Nitrile rubber and Neoprene are recommended.

Other Protective Clothing

Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

Work/Hygienic/Maintenance Practices

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Environmental Exposure Controls

Avoid release to the environment. Avoid runoff into storm sewers and ditches which lead to waterways.

9. Physical and Chemical Properties

[X]Liquid **Physical States:** []Gas [] Solid

Melting Point: No data.

Explosive Properties

Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

> 400.00 F **Boiling Point: Autoignition Pt:** > 500.00 F

> 160.00 F Method Used: Closed Cup Flash Pt:

UEL: NE LEL: NE **Explosive Limits:**

~ .971 - .995 **Specific Gravity (Water = 1):** ~ 8.1 - 8.3 **Density:**

Vapor Pressure (vs. Air or mm Hg): NE **Vapor Density (vs. Air = 1):** NE **Evaporation Rate:** NE **Solubility in Water:** NE

Percent Volatile: ~ 95 % by volume. ~ 0.5000 LB/GL **HAP / Volume:**

Saturated Vapor Concentration: NE

Appearance and Odor

Clear to light yellow. sweetish odor.

Epoxy.com Product #461 High Solids Urethane Topcoat – Satin Part B Printed: 11/03/2015 Revision: 11/03/2015

10. Stability and Reactivity

Stability:

Unstable []

Stable [X]

Reactivity

Stable under normal conditions.

Conditions To Avoid - Instability

Avoid: Heat, flames and sparks.

Incompatibility - Materials To Avoid

Avoid strong acids, bases, and oxidizing agents.

Hazardous Decomposition Or Byproducts

Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide.

Possibility of Hazardous

Will occur []

Will not occur [X]

Polymerization:

Conditions To Avoid - Hazardous Reactions

None known.

11. Toxicological Information

Toxicological Information

CAS# 1330-20-7:

Acute toxicity, LD50, Oral, Rat, 4300. MG/KG.

Results:

Liver: Other changes.

Kidney, Ureter, Bladder:Other changes.

- AMA Archives of Industrial Health., For publisher information, see AEHLAU, Chicago, IL, Vol/p/yr: 14,387, 1956

Acute toxicity, LC50, Inhalation, Rat, 5000. PPM, 4 H.

Behavioral: Convulsions or effect on seizure threshold.

Behavioral: Ataxia.

Lungs, Thorax, or Respiration: Dyspnea.

- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,123,

Chronic Toxicological Effects

No data available.

Irritation or Corrosion

May cause skin irritation. May be moderately irritating to eyes.

Symptoms related to Toxicological Characteristics

Prolonged or repeated contact may cause skin irritation with local redness.

Hazardous Components (Chemical Name)			CAS#	NTP	IARC	ACGIH	OSHA
	1.	Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate	88917-22-0	n.a.	n.a.	n.a.	n.a.
	2.	Xylene	1330-20-7	n.a.	3	A4	n.a.
	3.	Butyl acetate	123-86-4	n.a.	n.a.	n.a.	n.a.
	4.	Dibutyltin dilaurate	77-58-7	n.a.	n.a.	n.a.	n.a.
	5.	Zinc Compound	NA	n.a.	n.a.	n.a.	n.a.
	6.	Ethyl Benzene	100-41-4	n.a.	2B	A3	n.a.

Epoxy.com Product #461 High Solids Urethane Topcoat – Satin Part B Revision: 11/03/2015

12. Ecological Information

General Ecological Information

Avoid release to the environment. May be hazardous to the environment if released in large quantities.

Results of PBT and vPvB assessment

No data available.

Persistence and Degradability

Not determined for mixture.

Bioaccumulative Potential

not reported, unknown.

Mobility in Soil

not reported, unknown.

13. Disposal Considerations

Waste Disposal Method

Dispose of this product, product solutions and its container according to federal, state and local authority requirements. Avoid release to the environment.

14. Transport Information

LAND TRANSPORT (US DOT)

(Non-Bulk) Not Regulated. **DOT Proper Shipping Name**

> Note: The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. Shipment compliance is the responsibility of the person

offering the product for transport.

May cause skin, eye, and respiratory irritation. **Precautionary Label**

Always read Safety Material Data Sheet before use.

AIR TRANSPORT (ICAO/IATA)

(Non-Bulk) Not Regulated. **ICAO/IATA Shipping Name**

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name (Non-Bulk) Not Regulated.

15. Regulatory Information

US EPA SARA Title III

Ha	azardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1.	Propanol, 1(or 2)-(2-methoxymethylethoxy)-,	88917-22-0	No	No	No	No
	acetate					
2.	Xylene	1330-20-7	No	Yes 100 LB	Yes	Yes
3.	Butyl acetate	123-86-4	No	Yes 5000 LB	No	No
4.	Dibutyltin dilaurate	77-58-7	No	No	No	No
5.	Zinc Compound	NA	No	No	No	No
6.	Ethyl Benzene	100-41-4	No	Yes 1000 LB	Yes	Yes

Regulatory Information

SARA Section 311/312: Acute Health Hazard. Fire Hazard.

SARA 313 Toxic Chemicals: Ethylbenzene CAS# 100-41-4 < 1.5%, Xylene CAS# 1330-20-7 < 4% Zinc Compound (CAS# Trade Secret)

CALIFORNIA PROPOSITION 65

Page: 6

Page: 7 Epoxy.com Product #461 High Solids Urethane Topcoat – Satin Part B Revision: 11/03/2015

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Ethylbenzene CAS#100-41-4

16. Other Information

CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

Company Policy or Disclaimer

The information contained in this MSDS is taken from sources believed to be accurate as of the date hereof; however Epoxy Systems, Inc. makes no expressed or implied warranty in respect to the accuracy of the information or the suitability of the recommendations, and assumes no liabilities to any user thereof.

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