SDS Revision Date:

10/17/2019



1. Identification

1.1. Product identifier	
Product Identity	Ultima Pro Plug Hardener (1/2 Gallon)
Alternate Names	Product Code: 160321UH
1.2. Relevant identified uses of the substance or mixte	ure and uses advised against
Intended use	Epoxy Constituents. Restricted to professional users.
Application Method	See Technical Data Sheet.
1.3. Details of the supplier of the safety data sheet	
Company Name	Brunswick Bowling Products, LLC 525 W. Laketon Ave.
	Muskegon, MI 49441 USA
Emergency	
24 hour Emergency Telephone No. (ChemTel)	US: 800-255-3924 International: +01-813-248-0585
Customer Service: Brunswick Bowling Products, LLC	231-725-4966

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 5;H313	May be harmful in contact with skin. (Not adopted by US OSHA)
Skin Corr. 1B;H314	Causes severe skin burns and eye damage.
Eye Dam. 1;H318	Causes serious eye damage.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Resp. Sens. 1;H334	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Repr. 2;H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
2.2. Label elemente	

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



SDS Revision Date:

10/17/2019



H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H361Fd Suspected of damaging fertility. Suspected of damaging the unborn child.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / eye protection / face protection.

P285 In case of inadequate ventilation wear respiratory protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P321 Specific treatment (see information on this label).

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

SDS Revision Date:

10/17/2019



3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Triethylenetetramine CAS Number: 0000112-24-3	10 - 25	Acute Tox. 3;H311 Skin Corr. 1B;H314 Skin Sens. 1;H317 Aquatic Chronic 3;H412	[1]
Triethanolamine CAS Number: 0000102-71-6	5 - 10	Eye Irrit. 2;H319	[1]
2-piperazin-1-ethylamine CAS Number: 0000140-31-8	5 - 10	Acute Tox. 4;H312 Acute Tox. 4;H302 Skin Corr. 1B;H314 Skin Sens. 1;H317 Aquatic Chronic 3;H412	[1]
Piperazine CAS Number: 0000110-85-0	1 - 5	Repr. 2;H361fd Skin Corr. 1B;H314 Resp. Sens. 1;H334 Skin Sens. 1;H317	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Wash immediately with soap and water, removing contaminated clothes and shoes. Wash contaminated clothing before reuse. In case of skin irritation or allergic reactions, see a physician.
Ingestion	Not an expected route of exposure.
4.2. Most important sy	mptoms and effects, both acute and delayed
Overview	Notes to Physician: Treat Symptomatically. May cause sensitization by inhalation and skin contact.

SDS Revision Date:

10/17/2019



	Protection of First-Responders: Avoid contact with skin, eyes and clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; use artificial respiration with the aid of a pocket mask equipped with a one-way valve or other respiratory medical device.
	See section 2 for further details.
Inhalation	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye damage.
Skin	May be harmful in contact with skin. (Not adopted by US OSHA) May cause an allergic skin reaction. Causes severe skin burns and eye damage.

5. Fire-fighting measures

5.1. Extinguishing media

Foam, CO₂, Dry Chemical

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

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

5.3. Advice for fire-fighters

Use self-contained breathing apparatus. Use water for cooling container to prevent pressure buildup, auto-ignition, or explosion. Avoid spreading burning liquid with water.

ERG Guide No. 153

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

SDS Revision Date:

10/17/2019



Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

7. Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: No data available.

Keep containers tightly closed in a dry, cool and well-ventilated place.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000102-71-6	Triethanolamine	OSHA	No Established Limit
		ACGIH	TWA: 5 mg/m ³
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000110-85-0	Piperazine	OSHA	No Established Limit
		ACGIH	TWA: 0.3 mg/m ³ STEL: 1 mg/m ³ S
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000112-24-3	Triethylenetetramine	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	AIHA WEEL 8 h TWA 1ppm
0000140-31-8	2-piperazin-1-ethylamine	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

SDS Revision Date:

10/17/2019



Sup	•••	No Established Limit
Carainagan Data		

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000102-71-6	Triethanolamine	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000110-85-0	Piperazine	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000112-24-3	00112-24-3 Triethylenetetramine		Select Carcinogen: No
			Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000140-31-8	2-piperazin-1-ethylamine	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
IARC			Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

•.=. =	
Respiratory	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Eyes	Safety glasses with side shields
Skin	Chemical resistant gloves/gauntlets, boots and apron (where risk of splashing)
Engineering Controls	Local exhaust ventilation is recommended. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Light Yellow Liquid
Odor	Mild Solvent
Odor threshold	Not determined
рН	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	293°F - 635°F
Flash Point	> 200°F TCC
Evaporation rate (Ether = 1)	Not Measured

SDS Revision Date:

10/17/2019



Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 4%
	Upper Explosive Limit: 14%
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	Not Measured
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Relative Density	1.02 (H ₂ O = 1); 8.49 lb/gal
9.2. Other information	
No other relevant information.	

10. Stability and reactivity

10.1. Reactivity No data available. 10.2. Chemical stability Stable under normal circumstances. 10.3. Possibility of hazardous reactions No data available. 10.4. Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. 10.5. Incompatible materials No data available. 10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Triethylenetetramine - (112-24-3)	2,780.00, Rat -	550.00, Rabbit -	No data	No data	No data
	Category: 5	Category: 3	available	available	available

SDS Revision Date:

10/17/2019



Triethanolamine - (102-71-6)	No data	No data	No data	No data	No data
	available	available	available	available	available
2-piperazin-1-ethylamine - (140-31-8)	2,107.50, Rat -	866.80, Rabbit -	No data	No data	No data
	Category: 5	Category: 3	available	available	available
Piperazine - (110-85-0)	No data	No data	No data	No data	No data
	available	available	available	available	available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)	5	May be harmful in contact with skin. (Not adopted by US OSHA)
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	1	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT-single exposure		Not Applicable
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

SDS Revision Date:

10/17/2019



Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Triethylenetetramine - (112-24-3)	495.00, Pimephales promelas	33.90, Daphnia magna	20.00 (72 hr), Selenastrum capricornutum
Triethanolamine - (102-71-6)	Not Available	Not Available	Not Available
2-piperazin-1-ethylamine - (140-31-8)	100.00, Oncorhynchus mykiss	32.00, Daphnia magna	495.00 (72 hr), Pseudokirchneriella subcapitata
Piperazine - (110-85-0)	10,000 Lepomis macrochirus	Not Available 210.00 (72 hr),Desmodes subspicatus	

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

SDS Revision Date:

10/17/2019



14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA		
14.1. UN number	UN3267	UN3267	UN3267		
14.2. UN proper shipping name	UN3267, Corrosive liquid, basic, organic, n.o.s., (contains Triethylenetetramine and Piperazine), 8, III, LTD QTY	UN3267, Corrosive liquid, basic, organic, n.o.s., (containsTriethylenetetramine and Piperazine), 8, III, LTD QTY	UN3267, Corrosive liquid, basic, organic, n.o.s., (contains Triethylenetetramine and Piperazine), 8, III		
14.3. Transport hazard class(es)	DOT Hazard Class: 8	IMDG: 8Sub Class: Not Applicable	Air Class: 8		
14.4. Packing group	111	III	III		
14.5. Environmental hazards					
IMDG 14.6. Specia	Marine Pollutant: No al precautions for user				

No further information

EMS CODE: F-A S-B

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.	
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.	
WHMIS Classification	D2A E	
US EPA Tier II Hazards	Fire: No	

Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

SDS Revision Date:

10/17/2019



To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%): To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

2-piperazin-1-ethylamine

Piperazine

Triethanolamine

Triethylenetetramine

Pennsylvania RTK Substances (>1%):

2-piperazin-1-ethylamine

Piperazine

Triethanolamine

Triethylenetetramine

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

SDS Revision Date:

10/17/2019



H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H412 Harmful to aquatic life with long lasting effects.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material in any process, unless specified in the text.

End of Document