

Accella Polyurethane Systems

Safety Data Sheet

1. Identification of Substance:

Product Name: Bullet Liner 1 Resin Black

Supplier Identification:

Accella Polyurethane Systems

Telephone:

314-872-8700

Address:

2500 Adie Road
Maryland Heights, MO 63043

24-Hr. Emergency Phone Number:

CHEMTREC (800) 424-9300

Product Use: Polyurea amine component

2. Hazards Identification:

GHS Ratings:

Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Skin sensitizer	1	Skin sensitizer
Reproductive toxin	2	Human or animal evidence possibly with other information
Aquatic toxicity	C2	Acute toxicity > 1.00 but <= 10.0 mg/l and lack of rapid degradability and log Kow >= 4 unless BCF < 500 and unless chronic toxicity > 1 mg/l

GHS Hazards

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child
H411	Toxic to aquatic life with long lasting effects

GHS Precautions

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 hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
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
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER in case of overexposure.
P321	Specific treatment is urgent (see Section 4 First Aid measures)

P330	Rinse mouth
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P391	Collect spillage
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352	IF ON SKIN: Wash with soap and water
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container in accordance with existing federal, state, and local environmental control laws.

Signal Word: Danger



Acute Toxicity:

Eyes: Irritating to eyes.

Skin: Harmful in contact with skin.

Inhalation: Harmful if inhaled.

Ingestion: Not expected to be a route of exposure. Consult physician.

Chronic Effects: Possible harmful target organ effects.

3. Composition/Data on Components:

Chemical Name	CAS number	Weight Concentration %
Propylene glycol diamine, 2-amino-, diether with Propylene	9046-10-0	30.00% - 40.00%
Diethylene glycol	111-46-6	5.00% - 10.00%
Diethyltoluenediamine	68479-98-1	5.00% - 10.00%
1,2-Ethanediamine, polymer with methyloxirane and oxirane	26316-40-5	5.00% - 10.00%
Dipropylene glycol	25265-71-8	1.00% - 5.00%
Carbon black	1333-86-4	1.00% - 5.00%
DL-Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester	136210-30-5	1.00% - 5.00%
1,4-Diazabicyclo[2.2.2]octane	280-57-9	0.10% - 1.00%

4. First Aid Measures:

Inhalation: If inhaled and symptoms ensue, move to fresh air. If breathing is difficult, give oxygen.

After Eye Contact: Rinse opened eye for at least 15 minutes under running water. Remove contact lenses if present and easy to do so, and continue rinsing. If irritation persists contact physician

After Skin Contact: Clean affected area with soap and plenty of water.

After Swallowing: Consult physician.

Notes to Physician: Treat symptomatically.

5. Fire Fighting Measures:

Flash Point: 120 C (248 F)

LEL: N/A

UEL: N/A

Upper and Lower Explosive Limits listed if known.

Suitable Extinguishing Agents: Water spray, CO₂, Foam, Dry chemical.

Information about Protection against Explosions and Fires: Keep away from flames and sources of heat. Closed containers may rupture when exposed to extreme heat.

Dangerous Products of Decomposition: Oxides of carbon, oxides of nitrogen, hydrocarbons

Protective Equipment: Firefighters should wear a pressure demand self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures:

Person-Related Safety Precautions: Use appropriate personal protective equipment during clean up. Evacuate and keep unnecessary people out of spill area. Avoid contact with skin and eyes.

Measures for Environmental Protection: Cover and contain spill with absorbent material. Collect for proper disposal according to local, state, and federal regulations.

7. Handling and Storage:

Information for Safe Handling: Avoid contact with eyes, skin, or inhalation.

Storage Requirements: Store in dry, well ventilated area. Keep containers tightly closed. Store between 60°F-100°F. Material may settle.

Regulatory Requirements: Obey all local, state, and federal requirements.

8. Exposure Controls and Personal Protection:

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propylene glycol diamine, 2-amino-, diether with Propylene 9046-10-0	Not Established	Not Established	Not Established
Diethylene glycol 111-46-6	Not Established	Not Established	Not Established

Diethyltoluenediamine 68479-98-1	Not Established	Not Established	Not Established
1,2-Ethanediamine, polymer with methyloxirane and oxirane 26316-40-5	Not Established	Not Established	Not Established
Dipropylene glycol 25265-71-8	Not Established	Not Established	Not Established
Carbon black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)
DL-Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediy)bis-, tetraethyl ester 136210-30-5	Not Established	Not Established	Not Established
1,4-Diazabicyclo[2.2.2]octane 280-57-9	Not Established	Not Established	Not Established

Engineering Controls: No specific measures required.

General Protective and Hygienic Measures: Usual precautionary measures should be adhered to when handling chemicals.

Respiratory protection: None required if work area is properly ventilated.

Hand Protection: Protective chemical resistant gloves.

Eye Protection: Safety glasses.

Body Protection: Protective work clothing. Launder separately.

9. Physical and Chemical Properties:

Physical properties listed where known.

<p>Appearance: Black Liquid</p> <p>Vapor Pressure: N/A</p> <p>Vapor Density: N/A</p> <p>Specific Gravity: 1.03</p> <p>Freezing point: N/A</p> <p>Boiling range: 132 - 313°C</p> <p>Evaporation rate: N/A</p> <p>Explosive Limits: N/A</p> <p>Autoignition temperature: 229°C</p>	<p>Odor: Amine odor</p> <p>Odor threshold: N/A</p> <p>pH: N/A</p> <p>Melting point: N/A</p> <p>Solubility: N/A</p> <p>Flash point: 248°F, 120°C</p> <p>Flammability: N/A</p> <p>Partition coefficient (n-octanol/water): N/A</p> <p>Decomposition temperature: N/A</p>
---	---

10. Stability and Reactivity:

Chemical Incompatible Materials: Avoid contact with isocyanates and strong oxidizing agents.

Hazardous Polymerization: Not expected to occur.

Dangerous Products of Decomposition: Oxides of carbon, oxides of nitrogen, hydrocarbons

11. Toxicological Information:

Mixture Toxicity

Oral Toxicity LD50: 1,129mg/kg
Dermal Toxicity LD50: 3,337mg/kg
Inhalation Toxicity LC50: 160mg/L

Component Toxicity

9046-10-0	Propylene glycol diamine, 2-amino-, diether with Propylene	Oral LD50: 480 mg/kg (Rat)	Dermal LD50: 2,090 mg/kg (Rabbit)
68479-98-1	Diethyltoluenediamine	Oral LD50: 485 mg/kg (Rat)	Dermal LD50: 700 mg/kg (Rabbit)
280-57-9	1,4-Diazabicyclo[2.2.2]octane	Oral LD50: 1,700 mg/kg (Rat)	Dermal LD50: 3,200 mg/kg (Rabbit)

Individual Toxicity Values Listed if Known

Acute Toxicity:

Eyes: Irritating to eyes

Skin: Harmful in contact with skin

Inhalation: Not expected to be a route of exposure

Ingestion: Harmful if swallowed. Consult physician

Chronic Effects: Possible harmful target organ effects

Routes of Entry: Ingestion, skin contact, eye contact.

Target Organs: Skin, eyes, digestive tract.

Chemicals with Known or Possible Carcinogenic Effects:

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
1333-86-4	Carbon black	1 to 5%	Carbon black: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

12. Ecological Information:

General Information: Based on experience, no adverse effects are to be expected if correct disposal procedures have been followed as indicated in section 13. Individual component ecotoxicity listed if known.

Component Ecotoxicity

Propylene glycol diamine, 2-amino-, diether with Propylene	Fish 96 hr LC50 estimated >10-100 ppm, based on available data and comparison to similar compounds
Diethylene glycol	96 Hr LC50 Pimephales promelas: 75200 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 84000 mg/L
Diethyltoluenediamine	48 Hr LC50 Leuciscus idus: 194 mg/L 48 Hr EC50 Daphnia magna: < 1 mg/L 16 Hr EC50 Pseudomonas putida: 170 mg/L
1,4-Diazabicyclo[2.2.2]octane	96 Hr LC50 Pimephales promelas: 1510 - 1980 mg/L [flow-through]

13. Disposal Considerations:

Recommendation: Observe local requirements. Dispose of in accordance with local/state/federal regulations.

Empty Container Precautions: Recondition or dispose of empty container in accordance with governmental regulations. If container is to be disposed, ensure all product residues are removed and container is empty prior to disposal.

14. Transport Information:

Not considered a dangerous good according to transport regulations unless specifically cited below:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
ICAO/IAT	Environmentally Hazardous Substance, N.O.S. (Contains Diethyltoluenediamine)	3082	III	9
IMDG	Environmentally Hazardous Substance, N.O.S. (Contains Diethyltoluenediamine)	3082	III	9

15. Regulatory Information:

OSHA HAZARD COMMUNICATION STANDARD: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

SARA 311/312 Hazard Categories: Acute health hazard, chronic health hazard

**California Proposition 65
(Safe Drinking Water and Toxic Enforcement Act of 1986)**

This product contains no substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute unless otherwise listed:

Warning: This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm:

Carbon black 1333-86-4 1 to 5 % CARC

Massachusetts Right To Know List:

Carbon black 1333-86-4 1 to 5 %

New Jersey Right To Know List:

Carbon black 1333-86-4 1 to 5 %

Pennsylvania Right To Know List:

Carbon black 1333-86-4 1 to 5 %
Dipropylene glycol 25265-71-8 1 to 5 %
Diethylene glycol 111-46-6 5 to 10 %

SARA 302 Extremely Hazardous Substances:

- None

Chemicals subject to SARA 313 Reporting:

- None

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
Canada	Canada DSL	Yes
US	Toxic Substances Control Act	Yes

16. Other Information:

Safety Data Sheet issued by Product Safety Department

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Accella Polyurethane Systems. The data on these sheets relates only to the specific material designated herein. Accella Polyurethane Systems assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.

Date revised: 2017-07-11
Date Prepared: 7/11/2017

Reviewer Revision 3