

SECTION 1: PRODUCT IDENTIFICATION

Product Name: E-100 Plus, Part B
Synonyms:
Product Number: One Quart: 50-E100P-1QB
 One Gallon: 50-E100P-1GB
 Five Gallon: 50-E100P-5GB
Company: Durável
Address: P.O. Box 1141, Davidson NC 28036
Business Phone: (704) 837-7991
Emergency Phone: Chemtrec US (800) 424-9300 CNN 874540
Date of Current Revision: August 10, 2020

SECTION 2: HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity – Oral	Category 4
Acute toxicity - Dermal	Category 2
Acute toxicity – Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Hazardous to the Aquatic Environment – Short Term (Acute)	Category 2
Hazardous to the Aquatic Environment – Long Term (Chronic)	Category 2

EMERGENCY OVERVIEW: This product is a colorless to yellowish liquid.

DANGER!

Hazard Statements

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H361 Suspected of damaging fertility or the unborn child.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.



Appearance: Colorless to yellowish



Physical State: Liquid



Odor: Slight

Precautionary Statements – Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- 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.
- P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
- P302+P352 If on skin: Wash with soap and water.
- P303+P361+P353+P310 IF ON SKIN (or hair): Remove (Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
- P305+P351 +P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.
- P405 Store locked up.
- P501 Dispose of contents and container as instructed in Section 13.

Precautionary Statements - Response

- Call a POISON CENTER or doctor/physician if you feel unwell
- IF IN EYES Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- IF ON SKIN: Immediately call a POISON CENTER or doctor/physician. If skin irritation occurs: Get medical advice/attention

IF ON CLOTHING Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse
 IF INHALED: Immediately call a POISON CENTER or doctor/physician
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED Rinse mouth
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Absorb spillage to prevent material damage
 Collect spillage

Precautionary Statements – Storage

Store in well-ventilated place. Keep Cool. Keep container tightly closed. Store locked up.
 Store in corrosive resistant container with a resistant inner liner

Precautionary Statements – Disposal

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

Hazards not otherwise classified (HNOC)

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight - %	Trade Secret
(propylene glycol) bis (2-aminopropyl ether)	9046-10-0	70 – 90	*
1,3-Cyclohexanedimethanamine	2579-20-6	7 – 15	*
Benzyl alcohol	100-51-6	7 – 15	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST-AID MEASURES

Description of First Aid Measures

General Advice

Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance. First responders should wear gloves and protection.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL CENTER or seek medical attention.

Skin Contact

Immediately call a POISON CONTROL CENTER or seek medical attention.
Avoid direct contact and wear chemical protective clothing, if necessary. Immediately take off all contaminated clothing.
Wash with plenty of water/ soap and rinse thoroughly until medical aid is available. Gently blot or brush away excess product.
Wash contaminated clothing before re-use or discard.

Inhalation

Immediately call a POISON CONTROL CENTER or seek medical attention.
Take precautions to ensure your own safety.
Remove source of exposure or move person to fresh air and keep comfortable for breathing. If breathing has stopped, trained personnel should begin rescue breathing.
Avoid mouth-to-mouth contact by using a barrier device.
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

Ingestion

Immediately call a POISON CONTROL CENTER or seek medical attention.
Rinse mouth and do not induce vomiting.
If breathing has stopped, trained personnel should begin rescue breathing. Avoid mouth-to-mouth contact by using supplied air/ barrier device.
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

Most important symptoms and effects, both acute and delayed**Symptoms**

Eye, Skin, and Respiratory Irritation.

Indication of any immediate medical attention and special treatment needed**Note to Physicians**

Treat symptomatically. For additional information, see Safety Data Sheet.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media

Do not use water stream, as this may spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products

Carbon dioxide (CO₂). Carbon monoxide.

Explosion Data

Sensitivity to Mechanical Impact

Not available

Sensitivity to Static Discharge

May be ignited by friction, heat, sparks or flames.

Protective equipment and precautions for firefighters

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Wear recommended personal protective equipment. Ensure adequate ventilation.
Ensure air handling systems are operational.

Environmental Precautions

Environmental precautions

Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up

Methods for containment and clean up

Wear protective eye wear, gloves and clothing.
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).
Dispose of contents/ container in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice for safe handling

Use appropriate personal protective equipment (see Section 8).
Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances. Wash thoroughly after handling.
Do not swallow.
Do not get in eyes, on skin, or on clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store in a cool, well-ventilated area. Protect from freezing and physical damage. Keep container tightly sealed. Hold bulk storage under a nitrogen blanket.
Incompatible Materials	Keep away from strong oxidizing agents, heat or flames. Store in steel or poly containers. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: EXPOSURE CONTROLS – PERSONAL PROTECTION**Control parameters**

Exposure Guidelines	Benzyl Alcohol, CAS Number 100-51-6, TWA 10.00 ppm, USA. Workplace Environmental Exposure Levels (WEEL).
----------------------------	---

Appropriate engineering controls

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
-----------------------------	---

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.
Skin and body protection	Select glove material impermeable and resistant to the substance. Suitable gloves can be recommended by supplier.
Respiratory protection	Respiratory protection should be worn when there is a potential to exceed the exposure limit, applicable exposure limit requirements or guidelines, use a NIOSH-approved respirator.

General Hygiene Considerations

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reusing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State	Liquid	Odor	Slight
Appearance	Colorless to yellowish	Odor Threshold	No data available
Color	Transparent Liquid – May have slight color due to performance additives		

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
pH	Not Relevant	
Melting point/freezing point	Not Applicable	
Boiling point/Boiling range	Not Applicable	
Flash point	212° F	CC (closed cup)
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	No Data	
Lower flammability limit:	No Data	
Vapor pressure	Not Available	
Vapor density	Not Available	
Relative density	.99 @ 70° F	
Water solubility	Insoluble in water	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	
 <u>Other Information</u>		
Softening point	Not Relevant	
Molecular weight	Not Available	
VOC Content (%)	< 50 g/L (Mixed A&B)	
Density	Not Available	
Bulk Density	Not Available	

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Does not react under normal conditions of use and storage.

Chemical stability

Stable under normal conditions of use and storage.

Possibility of Hazardous Reactions

None under normal conditions of use and storage.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong alkali. Strong acids. Peroxides and other radical forming substances.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eyes	Acute – Severe irritant. May cause burns. Vapor may cause lacrimation and reversible corneal edema. Chronic – Conjunctivitis or corneal damage.
Skin Contact	Acute – Undiluted product quickly causes irritation. May cause chemical burns. Chronic – May cause allergic reaction/sensitization. Defatting of skin, rash and irritation.
Skin Absorption	Acute – Not Determined Chronic – Not Determined
Inhalation	Acute – Vapors may cause damage to contacted tissue and produce scarring. Chronic – Repeated and/or prolonged exposures can cause tightness of chest, shortness of breath and cough.
Ingestion	Acute – May cause irritation and bleeding of the gastrointestinal tract Chronic – Scarring of the affected tissues may occur
Acute Toxicity	No data on the product itself

Acute Oral Toxicity Components

(propyl glycol) bis(2-aminopropyl ether) LD50: 2885 mg/kg - Species: Rat

1,3 Cyclohexanamine LD50: 700 mg/kg - Species: Rat
 Benzyl Alcohol LD50: 1230 mg/kg - Species: Rat

Acute Dermal Toxicity Components

(propyl glycol) bis(2-aminopropyl ether) LD50: 2980 mg/kg - Species: Rabbit
 1,3 Cyclohexanamine LD50: 1700 mg/kg - Species: Rabbit
 Benzyl Alcohol LD50: 2000 mg/kg - Species: Rabbit

Acute Inhalation Toxicity Components

(propyl glycol) bis(2-aminopropyl ether) LC50: (4 HR): > 0.74 mg/l - Species: Rat
 Benzyl Alcohol LC50: (4 HR): > 4.178 mg/l - Species: Rat
 OECD TEST GUIDELINE 403

Skin Corrosion/Irritation DOT Skin Corrosion Study: Corrosive in all rabbits at 3 minutes exposure

Serious Eye Damage/Eye Irritation Severe eye irritation

Sensitization Buehler skin sensitization (Guinea pigs): No evidence of sensitization at 5%

For Respiratory Sensitization Not determined

Specific Target Organ Systemic Toxicity (Single Exposure) Not determined

Specific Target Organ Systemic Toxicity (Repeated Exposure) Not determined

Carcinogenic Data NTP: None
 OSHA: None
 IARC: None
 Teratogenicity: No
 Mutagenicity: No
 Embryotoxicity: No
 Synergistic Material: No

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Toxicity No data on the product itself

Acute Toxicity to Fish – Components

(propyl glycol) bis(2-aminopropyl ether) LC50: (96 HRS) 772 mg/l - Species: Fish
 1,3 Cyclohexanamine LC50: (96 HRS) 130 mg/l - Species: Golden Orfe
 Benzyl Alcohol LC50: (96 HRS) 460 mg/l - Species: Fathead Minnow

Toxicity to Bacteria – Components

(propyl glycol) bis(2-aminopropyl ether) EC50: 310 mg/l - Species: Activated Sludge
 1,3 Cyclohexanamine EC50: > 1000 mg/l - Species: Activated Sludge

Chronic Aquatic Toxicity

Chronic Toxicity to Aquatic Invertebrates Long lasting adverse effects to aquatic organisms

Persistence and Degradability

Biodegradability Not Biodegradable
Biodegradation 0%
Exposure Time 28 days
Method OECD Test guideline 301B or equivalent

Bioaccumulative Potential Bioaccumulation

Partition Coefficient: N-Octanol/Water (LOG Pow) 1.34

Mobility in Soil Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Relevant Information It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies.

SECTION 14: TRANSPORTATION INFORMATION

DOT

UN/ID no. 2735
 Proper shipping name Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
 Hazard Class 8
 Packing Group III

IATA

UN/ID no. 2735
 Proper shipping name Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
 Hazard Class 8
 Packing Group III

IMDG

UN/ID no. 2735
 Proper shipping name Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
 Hazard Class 8
 Packing Group III

SECTION 15: REGULATORY INFORMATION

Proposition 65 (California)

Chemicals known to cause cancer: None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.
Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Canada

Canadian Domestic Substance List (DSL) One or more ingredients are not listed

Australia

Australian Inventory of Chemical Substances (AICS) One or more ingredients are not listed

China

Inventory of Existing Chemical Substances in China (IECSC) All ingredients are listed

Japan

Inventory of Existing and New Chemical Substances (ENCS) One or more ingredients are not listed

Korea Existing Chemicals List (ECL)	All ingredients are listed
New Zealand New Zealand Inventory of Chemicals (NZOIC)	One or more ingredients are not listed
Philippines Philippine Inventory of Chemicals and Chemical Substances (PICCS)	One or more ingredients are not listed
Taiwan Taiwan Chemical Substance Inventory (TSCI)	All ingredients are listed

SECTION 16: OTHER INFORMATION

<u>NFPA</u>	Health hazards 3	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 3	Flammability 1	Physical hazards 0	Personal Protection X
Issue Date	August 3, 2020			
Revision Date	Not applicable			
Revision Note	None			

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. Durável assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Durável assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety precautions are followed.

END OF SAFETY DATA SHEET