

1. Product and Company Identification

Product Code: 0233B
Product Name: 0233B
Company Name: Appli-Tec, Inc
 7 Industrial Way Unit 1
 Salem, NH 03079
Phone Number: (603)685-0500

Web site address: www.appli-tec.com

Emergency Contact: Contact medical emergency services
Information: Call Chemtrec for Transport Info. (800)424-9300

Intended Use: Hardener for two part adhesive

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Acute Toxicity: Skin, Category 3
Skin Corrosion/Irritation, Category 1C
Serious Eye Damage/Eye Irritation, Category 1
Skin Sensitization, Category 1



GHS Signal Word: Danger

GHS Hazard Phrases: H302 - Harmful if swallowed.
 H311 - Toxic in contact with skin.
 H314 - Causes severe skin burns and eye damage.
 H317 - May cause an allergic skin reaction.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P280 - Wear protective gloves, eye and face protection.
 P260 - Do not breathe vapors, mist, or spray.
 P272 - Contaminated work clothing should not be allowed out of the workplace.

GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P363 - Wash contaminated clothing before reuse.
 P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P310 - Immediately call a poison control center or physician.
 P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

GHS Storage and Disposal Phrases: P501 - Dispose of contents/container according to national and local regulations.
 P405 - Store locked up.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

**Potential Health Effects
(Acute and Chronic):**

Inhalation: Vapors are extremely irritating.
Skin Contact: Toxic in contact with skin. Corrosive, causes skin burning. May cause an allergic skin reaction.
Eye Contact: Corrosive to the eyes and may cause severe damage including blindness.
Ingestion: Harmful if swallowed. Corrosive to mouth, throat and stomach.
Additional Information No data available.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
112-57-2	Tetraethylenepentamine	90.0 -100.0 %
112-24-3	1,2-Ethanediamine, N,N'-Bis(2-aminoethyl)-	1.0 -5.0 %

Additional Information Exact percentages have been withheld as a trade secret.

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
In Case of Skin Contact: Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash contaminated clothing before reuse.
In Case of Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention/advice.
In Case of Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice/attention.

5. Fire Fighting Measures

Flash Pt: 160.00 C
Explosive Limits: LEL: N.A. UEL: N.A.
Autoignition Pt: No data.
Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Flammable Properties and Hazards: No data available.
Hazardous Combustion Products: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Ensure adequate ventilation. Isolate area and deny entry. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Use proper personal protective equipment as indicated in Section 8. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. Handling and Storage

Precautions To Be Taken in Handling: Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not breathe vapor. Wash thoroughly after handling.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
112-57-2	Tetraethylenepentamine	No data.	No data.	No data.
112-24-3	1,2-Ethanediamine, N,N'-Bis(2-aminoethyl)-	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Eye Protection: Safety glasses.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. Physical and Chemical Properties

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

Appearance and Odor: Appearance: amber. Liquid.
Odor: amine-like.

Melting Point: No data.

Boiling Point: No data.

Flash Pt: 160.00 C

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: N.A. UEL: N.A.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): ~1.0

Solubility in Water: No data.

Percent Volatile: No data.
Autoignition Pt: No data.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: Heat, Incompatible materials.
Incompatibility - Materials To Avoid: nitrites.
Hazardous Decomposition or Byproducts: Carbon oxides, Nitrogen oxides.
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

Toxicological Information: No data available.
Irritation or Corrosion: Skin corrosion/irritation. Serious eye damage/irritation.
Sensitization: Skin sensitization.

12. Ecological Information

No data available.

13. Disposal Considerations

Waste Disposal Method: Observe all federal, state, and local environmental regulations.
Waste Disposal Method: D002

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: (Tetraethylenepentamine)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN2320 **Packing Group:** III



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: (Tetraethylenepentamine)

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: (Tetraethylenepentamine)

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
112-57-2	Tetraethylenepentamine	No	No	No
112-24-3	1,2-Ethanediamine, N,N'-Bis(2-aminoethyl)-	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
112-57-2	Tetraethylenepentamine	TSCA: Yes - Inventory
112-24-3	1,2-Ethanediamine, N,N'-Bis(2-aminoethyl)-	TSCA: Yes - Inventory

16. Other Information

Revision Date: 06/15/2017

Additional Information About This Product: No data available.

Company Policy or Disclaimer: The information on this data sheet represents our current and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or the applicable technical bulletin, or which involves using the product in combination with any other product or any other process is the responsibility of the user.