

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
 Product name : 1100-B  
 Product code : 1100-B  
 Other means of identification : 1100-B/1

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Protective Industrial Polymers  
 7875 Bliss Parkway  
 North Ridgeville, Ohio 44039 - USA-Ohio  
 T 440-327-0015  
[www.protectpoly.com](http://www.protectpoly.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec: 800-427-9300 (Outside USA) 703-527-3887

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

|   |      |
|---|------|
| Flammable liquids, Category 4                                     | H227 |
| Acute toxicity (oral), Category 4                                 | H302 |
| Acute toxicity (dermal), Category 4                               | H312 |
| Skin corrosion/irritation, Category 1B                            | H314 |
| Sensitisation — Skin, Category 1                                  | H317 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 2 | H411 |

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Contains :

Tetraethylenepentamine; Fatty acids, tall-oil, reaction products with tetraethylenepentamine; 3-(Dimethylamino)-1-propylamine

Hazard statements (GHS-US) :

H227 - Combustible liquid  
 H302+H312 - Harmful if swallowed or in contact with skin  
 H314 - Causes severe skin burns and eye damage  
 H317 - May cause an allergic skin reaction  
 H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 P260 - Do not breathe vapours  
 P261 - Avoid breathing vapours  
 P264 - Wash hands, forearms and face thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P272 - Contaminated work clothing must not be allowed out of the workplace  
 P273 - Avoid release to the environment  
 P280 - Wear protective clothing  
 P301+P312 - If swallowed: Call a doctor if symptoms persist. if you feel unwell  
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
 P302+P352 - If on skin: Wash with plenty of soap  
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a doctor if symptoms persist  
P312 - Call a doctor if symptoms persist. if you feel unwell  
P321 - Specific treatment (see a doctor if symptoms do not go away. on this label)  
P330 - Rinse mouth  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse  
P363 - Wash contaminated clothing before reuse  
P370+P378 - In case of fire: Use ... to extinguish  
P391 - Collect spillage  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to in accordance with local regulations

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name   | Product identifier  | %       | GHS-US classification  |
|--|---------------------|---------|--|
| Fatty acids, tall-oil, reaction products with tetraethylenepentamine | (CAS No) 68953-36-6 | 80 - 90 | Skin Sens. 1, H317   |
| Tetraethylenepentamine   | (CAS No) 112-57-2   | 5 - 15  | Acute Tox. 3 (Dermal), H311<br>Skin Corr. 1A, H314                     |
| 3-(Dimethylamino)-1-propylamine                                      | (CAS No) 109-55-7   | 0 - 5   | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Skin Corr. 1A, H314 |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.  
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.  
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Burns. May cause an allergic skin reaction.  
Symptoms/injuries after eye contact : Serious damage to eyes.  
Symptoms/injuries after ingestion : Burns.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin, eyes and clothing. Do not breathe vapours.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Do not breathe vapours.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Tetraethylenepentamine (112-57-2)

Not applicable

##### Fatty acids, tall-oil, reaction products with tetraethylenepentamine (68953-36-6)

Not applicable

##### 3-(Dimethylamino)-1-propylamine (109-55-7)

Not applicable

#### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : amber

Odour : Ammonia odour

Odour threshold : No data available

pH : Alkaline

Melting point : Not applicable

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|  |   |
|--|---|
| Freezing point                             | : No data available   |
| Boiling point                              | : No data available   |
| Flash point                                | : 86 °C   |
| Relative evaporation rate (butylacetate=1) | : No data available   |
| Flammability (solid, gas)                  | : No data available   |
| Explosive limits                           | : No data available   |
| Explosive properties                       | : No data available   |
| Oxidising properties                       | : No data available   |
| Vapour pressure                            | : No data available   |
| Relative density                           | : No data available   |
| Relative vapour density at 20 °C           | : No data available   |
| Solubility                                 | : Water: Solubility in water of component(s) of the mixture :<br>• Tetraethylenepentamine: Complete • 3-(Dimethylamino)-1-propylamine: Complete |
| Log Pow                                    | : No data available   |
| Auto-ignition temperature                  | : No data available   |
| Decomposition temperature                  | : No data available   |
| Viscosity                                  | : No data available   |
| Viscosity, kinematic                       | : No data available   |
| Viscosity, dynamic                         | : No data available   |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.

| 1100-B                                     |  |
|--|--|
| ATE US (oral)                              | 500.000 mg/kg bodyweight   |
| ATE US (dermal)                            | 1100.000 mg/kg bodyweight  |
| Tetraethylenepentamine (112-57-2)          |  |
| LD50 oral rat                              | 3990 mg/kg (Rat; Literature study; 3250 mg/kg bodyweight; Rat; Literature study)               |
| LD50 dermal rabbit                         | 660 mg/kg (Rabbit; Literature study; 660-1260 mg/kg bodyweight; Rabbit; Literature study)      |
| ATE US (oral)                              | 3990.000 mg/kg bodyweight  |
| ATE US (dermal)                            | 660.000 mg/kg bodyweight   |
| 3-(Dimethylamino)-1-propylamine (109-55-7) |  |
| LD50 oral rat                              | 1037 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 410 mg/kg bodyweight; Rat) |
| LD50 dermal rat                            | > 490 mg/kg (Rat)  |

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| <b>3-(Dimethylamino)-1-propylamine (109-55-7)</b> |   |
|---|---|
| LD50 dermal rabbit                                | 2396 mg/kg bodyweight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity) |
| ATE US (oral)                                     | 1037.000 mg/kg bodyweight   |
| ATE US (dermal)                                   | 2396.000 mg/kg bodyweight   |

|  |  |
|--|--|
| Skin corrosion/irritation                          | : Causes severe skin burns and eye damage.<br>pH: Alkaline |
| Serious eye damage/irritation                      | : Not classified<br>pH: Alkaline                           |
| Respiratory or skin sensitisation                  | : May cause an allergic skin reaction.                     |
| Germ cell mutagenicity                             | : Not classified   |
| Carcinogenicity                                    | : Not classified   |
| Reproductive toxicity                              | : Not classified   |
| Specific target organ toxicity (single exposure)   | : Not classified   |
| Specific target organ toxicity (repeated exposure) | : Not classified   |
| Aspiration hazard                                  | : Not classified   |
| Symptoms/injuries after skin contact               | : Burns. May cause an allergic skin reaction.              |
| Symptoms/injuries after eye contact                | : Serious damage to eyes.                                  |
| Symptoms/injuries after ingestion                  | : Burns.   |

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

| <b>Tetraethylenepentamine (112-57-2)</b> |  |
|--|--|
| EC50 Daphnia 1                           | 24.1 mg/l (EC50; EU Method C.2; 48 h; Daphnia magna; Static system)  |
| LC50 fish 2                              | 420 mg/l (LC50; EU Method C.1; 96 h; Poecilia reticulata; Semi-static system; Fresh water; Experimental value) |
| Threshold limit algae 1                  | 0.5 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)                       |
| Threshold limit algae 2                  | 6.8 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum)                       |

| <b>3-(Dimethylamino)-1-propylamine (109-55-7)</b> |  |
|---|--|
| EC50 other aquatic organisms 1                    | 56.2 mg/l (72 h; Scenedesmus subspicatus; Growth rate)   |
| LC50 fish 2                                       | 122 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Leuciscus idus; Static system; Fresh water; Experimental value) |
| EC50 Daphnia 2                                    | 59.5 mg/l (EC50; EU Method C.2; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)                       |
| Threshold limit algae 2                           | 56.2 mg/l (EC50; DIN 38412-9; 72 h; Chlorophyta; Static system; Fresh water; Experimental value)                           |

### 12.2. Persistence and degradability

| <b>Tetraethylenepentamine (112-57-2)</b> |  |
|--|--|
| Persistence and degradability            | Not readily biodegradable in water. Low potential for mobility in soil. Adsorbs into the soil. |

| <b>3-(Dimethylamino)-1-propylamine (109-55-7)</b> |  |
|---|--|
| Persistence and degradability                     | Readily biodegradable in water. Photodegradation in the air. |

### 12.3. Bioaccumulative potential

| <b>Tetraethylenepentamine (112-57-2)</b> |  |
|--|--|
| BCF other aquatic organisms 1            | 4.2 (BCF)                                      |
| Log Pow                                  | -3.16 (Calculated; EPIWIN)                     |
| Bioaccumulative potential                | Low potential for bioaccumulation (BCF < 500). |

| <b>3-(Dimethylamino)-1-propylamine (109-55-7)</b> |   |
|---|---|
| Log Pow   | -0.352 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C) |

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### 3-(Dimethylamino)-1-propylamine (109-55-7)

Bioaccumulative potential : Not bioaccumulative.

#### 12.4. Mobility in soil

### 3-(Dimethylamino)-1-propylamine (109-55-7)

Log Koc : Koc,73.36; Calculated value; log Koc; 1.866; Calculated value

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3066 Paint, 8, III

UN-No.(DOT) : UN3066

Proper Shipping Name (DOT) : Paint

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : III - Minor Danger

Dangerous for the environment : Yes

Marine pollutant : Yes



DOT Packaging Non Bulk (49 CFR 173.xxx) : 173

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Special Provisions (49 CFR 172.102) : B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks  
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling

TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

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DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel  
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"  
Emergency Response Guide (ERG) Number : 153  
Other information : No supplementary information available.

### TDG

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### Tetraethylenepentamine (112-57-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

#### 3-(Dimethylamino)-1-propylamine (109-55-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

Full text of H-statements:

|      |   |
|------|---|
| H226 | Flammable liquid and vapour                     |
| H227 | Combustible liquid                              |
| 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             |
| H411 | Toxic to aquatic life with long lasting effects |

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### HMIS III Rating

- Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
- Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*