SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product identifier used on the label:
Product Name: ZIP GRIP® TE 2400 1LB BOTTLE
Stock No.: 72261

Other means of identification:

Recommended use of the chemical and restrictions on use:

Chemical manufacturer address and telephone number:
Manufacturer Name: ITW Polymers Adhesives, North America
Address: 30 Endicott Street
Danvers, MA 01923
General Phone Number: (978) 777-1100
Emergency Phone Number: (800) 424-9300
CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:

Signal Word: WARNING.

GHS Class:
Eye Irritation. Category 2.
Skin Irritation. Category 2.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements:
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.

Precautionary Statements:
P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P313 - IF SKIN IRRITATION: Get medical advice/attention.
P315 - IF IN EYES: Take off any不合眼件的 contact lenses. Wash thing with water for several minutes. Remove any remaining material by flushing it away.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash before reuse.
P370+P378 - In case of fire: Use dry chemical, carbon dioxide to extinguish small fires. Use water for large fires.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Emergency Overview:

Route of Exposure:
Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye:
Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Skin:
Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling.

Inhalation:
Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion:
Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic Health Effects:
Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
**Signs/Symptoms:** Overexposure can cause headaches, dizziness, nausea, and vomiting.

**Target Organs:** Eyes, Skin, Respiratory system, Digestive system.

**Aggravation of Pre-Existing Conditions:** Individuals with pre-existing skin disorders, asthma, allergies, or known sensitization may be more susceptible to the effects of this product.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**

**Mixtures:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
<th>EC Num.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl-2-cyanoacrylate</td>
<td>7085-85-0</td>
<td>50 - 100 by weight</td>
<td></td>
</tr>
<tr>
<td>Non-hazardous ingredients.</td>
<td>N/A</td>
<td>0 - 50 by weight</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 4 : FIRST AID MEASURES**

**Description of necessary measures:**

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**SECTION 5 : FIRE FIGHTING MEASURES**

**Suitable and unsuitable extinguishing media:**

**Suitable Extinguishing Media:** Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

**Unsuitable extinguishing media:** Water may cause frothing.

**Unusual Fire Hazards:** Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization.

**Special protective equipment and precautions for fire-fighters:**

**Protective Equipment:** As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

**Fire Fighting Instructions:** Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:**

**Personnel Precautions:** Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

**Environmental precautions:** Avoid runoff into storm sewers, ditches, and waterways.

**Methods and materials for containment and cleaning up:**

**Spill Cleanup Measures:** Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in Section 8.

**Reference to other sections:**

**Other Precautions:** Pump or shovel to storage/salvage vessels. Add inhibitor to prevent polymerization.

**SECTION 7 : HANDLING and STORAGE**

**Precautions for safe handling:** Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

**Handling:**
**Hygiene Practices:**
Wash thoroughly after handling.

**Special Handling Procedures:**
Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.

**Conditions for safe storage, including any incompatibilities:**
Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION**

**EXPOSURE GUIDELINES:**

**Ethyl-2-cyanoacrylate:**

<table>
<thead>
<tr>
<th>Guideline ACGIH</th>
<th>TLV-TWA</th>
<th>0.2 ppm</th>
</tr>
</thead>
</table>

**Appropriate engineering controls:**
Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

**Individual protection measures:**

**Eye/Face Protection:**
Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

**Skin Protection Description:**
Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

**Respiratory Protection:**
A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Other Protective:**
Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

**Notes:**
Only established PEL and TLV values for the ingredients are listed.

**SECTION 9: PHYSICAL and CHEMICAL PROPERTIES**

**PHYSICAL AND CHEMICAL PROPERTIES:**

**Physical State Appearance:** Liquid..

**Color:**
Clear

**Odor:**
Mild

**Boiling Point:**
>300°F (148.8°C)

**Melting Point:**
Not determined.

**Specific Gravity:**
1.05

**Solubility:**
Insoluble. Polymerizes

**Vapor Density:**
>1 (air = 1)

**Vapor Pressure:**
< 0.2 mmHg @68°F

**Percent Volatile:**
Not determined.

**pH:**
Not determined.

**Molecular Formula:**
Mixture

**Molecular Weight:**
Mixture

**Flash Point:**
150-200°F (65.5-93.3°C)

**Flash Point Method:**
Tag closed cup. (TCC)

**Lower Flammable/Explosive Limit:**
Not determined.

**Upper Flammable/Explosive Limit:**
Not determined.

**Auto Ignition Temperature:**
Not determined.

**VOC Content:**
Less than 20 g/L

**Percent Solids by Weight:**
100

**SECTION 10: STABILITY and REACTIVITY**

**Chemical Stability:**
Unstable.

**Possibility of hazardous reactions:**
Hazardous Polymerization: Polymerization may occur under certain conditions.

Conditions To Avoid:
Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Oxygen-free atmospheres or inert gas blanketing. Freezing conditions. Material can soften paint and rubber.

Incompatible Materials:
Oxidizing agents (eg peroxides, nitrates), reducing agents, acids, bases, azo-compounds, catalytic metals (eg copper, iron), halogens. Free radical initiators. Oxygen scavengers.

SECTION 11 : TOXICOLOGICAL INFORMATION

ETHYL-2-CYANOACRYLATE:

RTECS Number: UD3330050

Skin:
Administration onto the skin - Rabbit: >2000 mg/kg [Details of toxic effects not reported other than lethal dose value]
Administration onto the skin - Rabbit: 500 uL/24H
Administration onto the skin - Rabbit: 0.5 gm

Ingestion:
Oral - Rat LD50: >5 mL/kg [Behavioral - Somnolence (general depressed activity) Gastrointestinal - Other changes]

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:
Waste Disposal:
Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

RCRA Number: None.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Non regulated.
DOT UN Number: Not applicable.
DOT Hazard Class: Not applicable.
DOT Packing Group: Not applicable.
DOT Exemption: Over 450 Litres - Combustible liquid, n.o.s. NA1993, III

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

ETHYL-2-CYANOACRYLATE:

TSCA Inventory Status: Listed
Canada DSL: Listed

Non-hazardous ingredients:

TSCA Inventory Status: Listed
Canada DSL: Listed

Canadian Regulations: WHMIS Hazard Class(es): D2B; B3
All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms:
### HMIS Ratings:

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<tr>
<th>Category</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Health Hazard</td>
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<tr>
<td>Fire Hazard</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>2</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
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</table>

**Chronic Health Effects**

<table>
<thead>
<tr>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS Creation Date:</td>
</tr>
<tr>
<td>SDS Revision Date:</td>
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<tr>
<td>MSDS Revision Notes:</td>
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</table>

**Disclaimer:**

This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.

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