SAFETY DATA SHEET

1. Identification

Product identifier: Chockfast Versaflow Hardener
Other means of identification:
SKU#: GP140H
Recommended use: Not available.
Recommended restrictions: None known.
Manufacturer/Importer/Supplier/Distributor information:
Manufacturer:
  Company name: ITW Performance Polymers
  Address: 130 Commerce Drive
          Montgomeryville, PA 18936
  United States
  Telephone: Customer Service 215-855-8450
  Website: Not available.
  E-mail: www.itwperformancepolymers.com
  Contact person: EHS Department
  Emergency phone number:
          CHEMTREC 800-424-9300
          International 703-527-3887

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards:
  Acute toxicity, oral: Category 4
  Acute toxicity, dermal: Category 4
  Skin corrosion/irritation: Category 1
  Serious eye damage/eye irritation: Category 1
  Sensitization, skin: Category 1
Environmental hazards:
  Hazardous to the aquatic environment, long-term hazard: Category 3
OSHA defined hazards: Not classified.
Label elements:
  Signal word: Danger
  Hazard statement: Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.
  Precautionary statement:
    Prevention: Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
    Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. If skin irritation or rash occurs: Get medical advice/attention.
    Storage: Store locked up.
    Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 18.7% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY(OXYPROPYLENE)DIAMINE</td>
<td>9046-10-0</td>
<td></td>
<td></td>
<td>40 - 70</td>
</tr>
<tr>
<td>2,4,6-tris-(dimethylaminomethyl)-phenol</td>
<td>90-72-2</td>
<td></td>
<td></td>
<td>10 - 30</td>
</tr>
<tr>
<td>TRIETHYLENETETRAMINE</td>
<td>TETA</td>
<td>112-24-3</td>
<td></td>
<td>7 - 13</td>
</tr>
<tr>
<td>Triethyolamine</td>
<td></td>
<td>102-71-6</td>
<td></td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion**
Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach contents don't get into the lungs.

**Most important symptoms/effects, acute and delayed**

**Indication of immediate medical attention and special treatment needed**

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

**Suitable extinguishing media**
Alcohol resistant foam. Powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
No unusual fire or explosion hazards noted.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Material name: Chockfast Versaflow Hardener
GP140H    Version #: 03    Revision date: 12-11-2019    Issue date: 10-14-2019    SDS US

2 / 8
Methods and materials for containment and cleaning up

- Use water spray to reduce vapors or divert vapor cloud drift. Prevent product from entering drains.
- Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
- Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

- Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
- Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

- Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Do not taste or swallow.
- Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation.
- Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

- Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triethylolamine (CAS 102-71-6)</td>
<td>TWA</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. Workplace Environmental Exposure Level (WEEL) Guides</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRIETHYLENETETRAMINE (CAS 112-24-3)</td>
<td>TWA</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

- No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US WEEL Guides: Skin designation

- TRIETHYLENETETRAMINE (CAS 112-24-3) Can be absorbed through the skin.

Appropriate engineering controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

<table>
<thead>
<tr>
<th>Eye/face protection</th>
<th>Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin protection</td>
<td>Wear appropriate chemical resistant gloves.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.</td>
</tr>
<tr>
<td>Other</td>
<td>In case of insufficient ventilation, wear suitable respiratory equipment.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Wear appropriate thermal protective clothing, when necessary.</td>
</tr>
<tr>
<td>Thermal hazards</td>
<td>Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.</td>
</tr>
</tbody>
</table>
### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Colorless to light yellow.</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Ammoniacal.</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>212 °F (100 °C) estimated</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>249.8 °F (121.0 °C) estimated</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>1 % estimated</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>9.5 % estimated</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>0.01 hPa estimated</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td></td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>561.2 °F (294 °C) estimated</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>0.95 g/cm³</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>Not explosive.</td>
</tr>
<tr>
<td><strong>Flammability class</strong></td>
<td>Combustible III B estimated</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>Not oxidizing.</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>0.95</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

- **Reactivity**: The product is stable and non-reactive under normal conditions of use, storage and transport.
- **Chemical stability**: Material is stable under normal conditions.
- **Possibility of hazardous reactions**: Hazardous polymerization does not occur.
- **Conditions to avoid**: Contact with incompatible materials.
- **Incompatible materials**: Peroxides. Phenols.
- **Hazardous decomposition products**: No hazardous decomposition products are known.

### 11. Toxicological information

- **Information on likely routes of exposure**
  - **Inhalation**: May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact: Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction. Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Eye contact: Causes serious eye damage.

Ingestion: Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects:

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHYLENETETRAMINE (CAS 112-24-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal Liquid LD50</td>
<td>Rat</td>
<td>1465 mg/kg</td>
</tr>
<tr>
<td>Acute Oral Liquid LD50</td>
<td>Rat</td>
<td>1716 mg/kg</td>
</tr>
<tr>
<td>Triethylolamine (CAS 102-71-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal LD50</td>
<td>Rabbit</td>
<td>&gt; 20000 mg/kg</td>
</tr>
<tr>
<td>Acute Oral LD50</td>
<td>Rat</td>
<td>8 g/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

Respiratory or skin sensitization:

- Respiratory sensitization: Due to partial or complete lack of data the classification is not possible.
- Skin sensitization: May cause an allergic skin reaction.
- Germ cell mutagenicity: Due to partial or complete lack of data the classification is not possible.
- Carcinogenicity: Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity: Triethylolamine (CAS 102-71-6) 3 Not classifiable as to carcinogenicity to humans.


US. National Toxicology Program (NTP) Report on Carcinogens: Not listed.

Reproductive toxicity: Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure: Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure: Due to partial or complete lack of data the classification is not possible.

Aspiration hazard: Due to partial or complete lack of data the classification is not possible.

Chronic effects: Prolonged inhalation may be harmful. May be harmful if absorbed through skin. Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity: Harmful to aquatic life with long lasting effects.
Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Triethylolamine -1

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN1760
UN proper shipping name Corrosive liquids, n.o.s. (TRIETHYLENETETRAMINE)
Transport hazard class(es) 8
Class 8
Subsidiary risk -
Label(s) 8
Packing group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T7, TP1, TP28
Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN1760
UN proper shipping name Corrosive liquid, n.o.s. (TRIETHYLENETETRAMINE)
Transport hazard class(es) 8
Class 8
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 8L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE)
Transport hazard class(es) 8
Class 8
Subsidiary risk -
Packing group III
### Environmental hazards
- **Marine pollutant**: No.
- **EmS**: F-A, S-B

### Special precautions for user
- Read safety instructions, SDS and emergency procedures before handling.

### Transport in bulk according to
- Annex II of MARPOL 73/78 and the IBC Code
- DOT

---

#### 15. Regulatory information

- **US federal regulations**
  - This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
  - **Toxic Substances Control Act (TSCA)**
    - TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
      - Not regulated.
  - **CERCLA Hazardous Substance List (40 CFR 302.4)**
    - Not listed.
  - **SARA 304 Emergency release notification**
    - Not regulated.
    - Not listed.
  - **Superfund Amendments and Reauthorization Act of 1986 (SARA)**
    - **SARA 302 Extremely hazardous substance**
      - Not listed.
    - **SARA 311/312 Hazardous chemical**
      - Yes
        - **Classified hazard categories**
          - Acute toxicity (any route of exposure)
          - Skin corrosion or irritation
          - Serious eye damage or eye irritation
          - Respiratory or skin sensitization
    - **SARA 313 (TRI reporting)**
      - Not regulated.

- **Other federal regulations**
  - **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
    - Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act
(SDWA)
Not regulated.

US state regulations
California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s) and a “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 10-14-2019
Revision date: 12-11-2019
Version #: 03

HMIS® ratings
Health: 3
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 1
Instability: 0

Disclaimer
ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Revision information
Transport Information: Material Transportation Information