SECTION 1. IDENTIFICATION

Product Identifier: AV-101 Catalyst T+
Other Means of Identification: TRIETHANOLAMINE (TEA) / ACTIVATOR, CAT T+
Recommended Use: Industrial Use Only.
Restrictions on Use: None known.
Manufacturer/Supplier: Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600, avantigrout.com
Emergency Phone No.: ChemTrec 800.424.9300
Date of Preparation: December 1, 2020

SECTION 2. HAZARD IDENTIFICATION

Classification: Not classified under any hazard class.

Label Elements: None
Hazard pictogram: None
Signal word: Not applicable
Hazard statements: None
Other Hazards: None known

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>%</th>
<th>Other Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>70-90</td>
<td>TEA</td>
</tr>
<tr>
<td>Diethanolamine</td>
<td>111-42-2</td>
<td>0.1-0.3</td>
<td>DEA</td>
</tr>
</tbody>
</table>

Occupational exposure limits, if available, are listed in section 8.

SECTION 4. FIRST AID MEASURES

First Aid Measures:
General advice: Get medical advice or attention if you feel unwell or are concerned.
Eye contact: Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open.
Skin contact: Rinse with lukewarm, gently flowing water for 5 minutes.
Inhalation: Get medical advice or attention if you feel unwell or are concerned.
Ingestion: Rinse mouth with water.

Most Important Symptoms and Effects, Acute and Delayed:
None known.
Immediate Medical Attention and Special Treatment
Medical Conditions
Aggravated by Exposure
Specific treatments

None known.

Not applicable.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media
Suitable: Use water to keep non-leaking, fire-exposed containers cool.
Unsuitable: None known.

Specific Hazards Arising from the Product
Special hazards: Closed containers may rupture violently when heated releasing contents.
In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; extremely hazardous hydrogen cyanide; corrosive, oxidizing nitrogen oxides

Special Protective Equipment and Precautions for Firefighters
Protective equipment: Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures
Emergency/Non-emergency personnel: No special precautions are necessary.
Environmental precautions: It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up
Spills Keep tightly covered. Contact emergency services and manufacturer/supplier for advice.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:
General hygiene considerations: it is good practice to avoid breathing product; avoid skin and eye contact and wash hands after handling.

Conditions for safe storage:
Separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV®</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>5 mg/m3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diethanolamine</td>
<td></td>
<td>3 ppm/15 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
The hazard potential of this product is relatively low. General ventilation is usually adequate.

Individual Protection Measures
Eyes/face protection: Not required but it is good practice to wear safety glasses or chemical safety goggles.
Skin/hand protection: Wear chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are butyl rubber, neoprene rubber, nitrile rubber, Viton®, Viton®/butyl rubber.

Body protection: Wear chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are butyl rubber, neoprene rubber, nitrile rubber, Viton®, Viton®/butyl rubber.

Respiratory protection: Not required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance: Clear liquid. Turns clear yellow on exposure to air. Absorbs moisture from the air. Color darkens on exposure to air. Particle Size: Not available.

Odor: Ammonia-like

Odor threshold: Not available

pH: 10.8

Melting/freezing point: 23 °F (-5 °C) (freezing)

Initial boiling point and boiling range: 635 °F (335 °C)

Flash point: 354 °F (179 °C) (closed cup)

Evaporation rate: Not applicable

Flammability (solid, gas): Not applicable (liquid)

Upper/lower flammability or explosive limits: Not applicable (upper); Not applicable (lower)

Vapor pressure: 0.0000005 kPa (0.0000038 mm Hg) at 77 °F (25 °C)

Vapor density: (air=1) 2.5

Relative density: (water=1) 1.108 at 72 °F (22 ºC)

Solubility: Soluble in all proportions in water; Soluble in all proportions in alcohols (e.g. ethanol).

Partition Coefficient, n-Octanol/Water (Log Know) -1 at 68 °F (20 ºC)

Auto-ignition temperature: 662 °F (350 ºC)

Decomposition temperature: 392 °F (200 ºC)

Viscosity: Not available (kinematic); 45 centipoises at 25 ºC (77 ºF) (dynamic)

Other Information

Physical State Liquid

Molecular Formula C6H15NO3

Molecular Weight 149.19

Bulk Density Not available.

Surface Tension Not available.

Critical Temperature Not available.

Electrical Conductivity Not available.

Saturated Vapour Concentration 0.005 ppm at 77 °F (25 ºC)
SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.
Chemical stability: Normally stable.
Possibility of hazardous reactions: Reacts violently in the presence of acidic conditions (low pH). Reacts violently in contact with oxidizing materials.
Conditions to avoid: Acidic conditions (low pH).
Incompatible materials: Reacts violently with halogenated compounds (e.g. trichloroethylene), organic acids (e.g. acetic acid), oxidizing agents (e.g. peroxides), metals (e.g. aluminum), strong acids (e.g. hydrochloric acid), strong oxidizing agents (e.g. perchloric acid), phenols (e.g. carboxylic acid). Corrosive to aluminum alloys, copper, copper alloys (e.g. brass and/or bronze).
Hazardous decomposition products: Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin contact
Acute Toxicity
111-42-2: Acute oral toxicity
LD50 (Rat): Calculated 1,600 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion
Oral ATEmix = 12000 mg/kg
Skin corrosion or irritation: 111-42-2: Species: Rabbit
Result: Irritating to skin.
Serious eye damage or irritation: 111-42-2: Species: Rabbit
Result: Risk of serious damage to eyes
Respiratory and/or skin sensitization:
Skin sensitization:
Aspiration hazard:
Specific Target Organ Toxicity (STOT)
Single exposure:
Skin Absorption: No information was located.
Ingestion: No information was located
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category
Carcinogenicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>ACGIH®</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethanolamine</td>
<td>Group 2</td>
<td>Not designated</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Reproductive Toxicity
Development of Offspring: No information was located.
Sexual Function and Fertility: No information was located.
Effects on or via Lactation: No information was located.
Germ Cell Mutagenicity
No information was located.
Interactive Effects
No information was located.
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Component 111-42-2: Toxicity to daphnia and other aquatic invertebrates
EC50 (Ceriodaphnia dubia): 30.1 mg/l
Exposure time: 48 h
Test Type: static test
Toxicity to algae
EC50 (Pseudokirchneriella subcapitata (algae)): 86.96 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Toxicity to fish (Chronic toxicity)
NOEC: Calculated > 1 mg/l
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
NOEC (Daphnia magna (Water flea)): 0.78 mg/l
Exposure time: 21 d

Acute aquatic toxicity-Assessment Harmful to aquatic life.
Chronic aquatic toxicity-Assessment Harmful to aquatic life with long lasting effects.

Persistence and degradability: No information was located.
Bioaccumulative potential: No information was located.
Mobility in soil: Studies are not available.
Other adverse effects: There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of contents and container in accordance with local, regional, national, and international regulations. Empty containers retain product residue. Follow label warnings even if container appears to be empty.
Disposal of empty containers: Do not reuse empty containers. Disposal of empty containers should comply with the requirements of environmental protection, waste disposal legislation and any federal, state, regional and local authority requirements.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information

<table>
<thead>
<tr>
<th>UN No.</th>
<th>Proper Shipping Name</th>
<th>Transport Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT UN3082</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE)</td>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>IMDG UN3082</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE)</td>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>IATA UN3082</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE)</td>
<td>9</td>
<td>III</td>
</tr>
</tbody>
</table>

SECTION 15. REGULATORY INFORMATION

United States CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Component RQ (lbs.)</th>
<th>Calculated Product RQ (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethanolamine</td>
<td>111-42-2</td>
<td>100</td>
<td>33,336</td>
</tr>
</tbody>
</table>
Toxic Substances Control Act (TSCA) Section 8(b)
Listed on the TSCA Inventory.

California Proposition 65
Warning!
This product contains chemicals known to the state of California to cause cancer, at concentration lower 0.1%. This product contains up to 0.5% of a chemical known to the state of California to cause birth defect or other reproductive harm.

Canada
Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)
Listed on the DSL.

SECTION 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Rating:</th>
<th>Health - 0</th>
<th>Flammability - 1</th>
<th>Instability - 0</th>
</tr>
</thead>
</table>
SDS Prepared By: Avanti International
Date of Preparation: March 06, 2018
Date of Last Revision: June 15, 2022
Revision Indicators: Not applicable.
Key to Abbreviations:
ACGIH® American Conference of Governmental Industrial Hygienists
NFPA National Fire Protection Association
NIOSH National Institute for Occupational Safety and Health
OSHA US Occupational Safety and Health Administration
RTECS® Registry of Toxic Effects of Chemical Substances

References
CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).