Safety Data Sheet

# AV-101 Catalyst T+

## SECTION 1. IDENTIFICATION

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|---|---|
| **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 |
| **Date of Last Revision** | April 12, 2024 |

## SECTION 2. HAZARD IDENTIFICATION

**Classification:** Not classified under any hazard class.

**Label Elements**

Hazard pictogram: None
Signal word: Not applicable
Hazard statements: None

**Other Hazards**

Other hazards: None known

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Other Identifiers |
|---|---|---|---|
| Triethanolamine | 102-71-6 | 70-79 | TEA |
| Diethanolamine | 111-42-2 | 0.1-0.3 | DEA |

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

## SECTION 4. FIRST AID MEASURES

**First Aid Measures**

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| 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**

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| Medical Conditions Aggravated by Exposure | None known. |
| Specific treatments | Not applicable. |

## SECTION 5. FIRE FIGHTING MEASURES

**Extinguishing Media**

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

**Specific Hazards Arising from the Product**

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| 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**

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| 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**

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| 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**

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| Spills | Keep tightly covered. Contact emergency services and manufacturer/supplier for advice. |

## SECTION 7. HANDLING AND STORAGE

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| **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**

| | ACGIH TLV® | | OSHA PEL | | AIHA WEEL | |
|---|---|---|---|---|---|---|
| **Chemical Name** | **TWA** | **STEL** | **TWA** | **STEL** | **8-hr TWA** | **TWA** |
| Triethanolamine | 5 mg/m3 | | | | | |
| Diethanolamine | | | 3 ppm/15 mg/m3 | | | |

**Appropriate engineering controls:**

The hazard potential of this product is relatively low. General ventilation is usually adequate.

**Individual Protection Measures**

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| 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**

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| **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:** | 23ºF (-5ºC) (freezing) |
| **Initial boiling point and boiling range:** | 635ºF (335ºC) |
| **Flash point:** | 354ºF (179ºC) (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 77ºF (25ºC) |
| **Vapor density: (air=1)** | 2.5 |
| **Relative density: (water=1)** | 1.108 at 72ºF (22ºC) |
| **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 68ºF (20ºC) |
| **Auto-ignition temperature:** | 662ºF (350ºC) |
| **Decomposition temperature:** | 392ºF (200ºC) |
| **Viscosity:** | Not available (kinematic); 45 centipoises at 77ºF (25ºC) (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. |

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|---|---|
| **Saturated Vapour Concentration** | 0.005 ppm at 77ºF (25ºC) |

## SECTION 10. STABILITY AND REACTIVITY

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| 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. carbolic 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

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|---|---|
| **Likely Routes of Exposure:** | Skin contact |
| **Acute Toxicity** | 111-42-2: Acute oral toxicity<br>LD50 (Rat): Calculated 1,600 mg/kg<br>Assessment: The component/mixture is moderately toxic after single ingestion<br>Oral ATEmix = 12000 mg/kg |
| **Skin corrosion or irritation:** | 111-42-2: Species: Rabbit<br>Result: Irritating to skin. |
| **Serious eye damage or irritation:** | 111-42-2: Species: Rabbit<br>Result: Risk of serious damage to eyes |
| **Respiratory and/or skin sensitization:** | No information was located. |
| **Skin sensitization:** | No information was located. |
| **Aspiration hazard:** | Not known to be an aspiration hazard. |

**Specific Target Organ Toxicity (STOT)**

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|---|---|
| **Single exposure:** | Exposure Inhalation: No information was located.<br>Skin Absorption: No information was located.<br>Ingestion: No information was located |
| **Repeated exposure:** | 111-42-2: Target Organs: Kidney, Blood, Liver<br>Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category |

**Carcinogenicity**

| Chemical Name | IARC | ACGIH® | NTP | OSHA |
|---|---|---|---|---|
| Diethanolamine | Group 2 | Not designated | Not Listed | Not Listed |

| | |
|---|---|
| **Reproductive Toxicity** | Development of Offspring: No information was located.<br>Sexual Function and Fertility: No information was located.<br>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**
Toxicity to daphnia and other aquatic invertebrates

**Component 111-42-2:**
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 (Chron-ic 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**

| | UN No. | Proper Shipping Name | Transport Class | Packing Group |
|---|---|---|---|---|
| DOT | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE) | 9 | III |
| IMDG | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE) | 9 | III |
| IATA | UN3082 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIETHANOLAMINE) | 9 | III |

## SECTION 15. REGULATORY INFORMATION

**United States**
**CERCLA Reportable Quantity**

| Chemical Name | CAS No. | Component RQ (lbs.) | Calculated Product RQ (lbs.) |
|---|---|---|---|
| **Diethanolamine** | 111-42-2 | 100 | 33,336 |

**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

**NFPA Rating:** Health - 0 Flammability - 1 Instability - 0
**SDS Prepared By:** Avanti International
**Date of Preparation:** December 1, 2020
**Date of Last Revision:** April 12, 2024
**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). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA (“BIOVIA”). Available from Canadian Centre for Occupational Health and Safety (CCOHS).