

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Toluene

**Synonyms:** Toluene

**CAS Number:** 108-88-3

**Grade/Purity:** Technical Grade

**Product Type:** Solvents

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

## 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

|       |                                                                   |
|-------|-------------------------------------------------------------------|
| H225  | Highly flammable liquid and vapour                                |
| H304  | May be fatal if swallowed and enters airways                      |
| H315  | Causes skin irritation                                            |
| H336  | May cause drowsiness or dizziness                                 |
| H361d | Suspected of damaging the unborn child                            |
| H373  | May cause damage to organs through prolonged or repeated exposure |
| H412  | Harmful to aquatic life with long lasting effects                 |

**Precautionary Statements:**

|      |                                                                                                |
|------|------------------------------------------------------------------------------------------------|
| P201 | Obtain special instructions before use.                                                        |
| P202 | Do not handle until all safety precautions have been read and understood.                      |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed.                                                                 |
| P240 | Ground and bond container and receiving equipment.                                             |
| P241 | Use explosion-proof electrical, ventilating, and lighting equipment.                           |
| P242 | Use non-sparking tools.                                                                        |
| P243 | Take precautionary measures against static discharge.                                          |
| P260 | Do not breathe dust, fume, gas, mist, vapours or spray.                                        |
| P261 | Avoid breathing dust, fume, gas, mist, vapours or spray.                                       |
| P264 | Wash hands and face thoroughly after handling.                                                 |
| P270 | Do not eat, drink or smoke when using this product.                                            |
| P271 | Use only outdoors or in a well-ventilated area.                                                |

|                |                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------|
| P273           | Avoid release to the environment.                                                                      |
| P280           | Wear protective gloves, protective clothing, and eye/face protection.                                  |
| P301+P310      | IF SWALLOWED: Immediately call a POISON CENTER or doctor.                                              |
| P302+P352      | IF ON SKIN: Wash with plenty of water and soap.                                                        |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                             |
| P308+P313      | IF exposed or concerned: Get medical advice or attention.                                              |
| P312           | Call a POISON CENTER or doctor if you feel unwell.                                                     |
| P314           | Get medical advice or attention if you feel unwell.                                                    |
| P321           | Specific treatment (see first-aid information on this label).                                          |
| P331           | Do NOT induce vomiting.                                                                                |

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT | % MIN | % MAX | CAS #    | EINECS# / ELINCS# | FORMULA                       | MOLECULAR WEIGHT |
|-----------|-------|-------|----------|-------------------|-------------------------------|------------------|
| Toluene   | 99.5  | 100   | 108-88-3 | 203-625-9         | C <sub>7</sub> H <sub>8</sub> | 92.14 g/mol      |

### 4. FIRST-AID MEASURES

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.                                                                                  |
| <b>Skin</b>       | First rinse with plenty of water for at least 15 minutes, then remove contaminated clothes and rinse again. Rinse and then wash skin with water and soap. Refer for medical attention .                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Inhalation</b> | INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing. |
| <b>Ingestion</b>  | INGESTION: DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital. (NTP, 1992)  |

### 5. FIRE-FIGHTING MEASURES

|                             |                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Media</b>       | Alcohol-resistant foam, CO <sub>2</sub> , dry chemical powder. Water spray may be used to cool fire-exposed containers. |
| <b>Unsuitable Media</b>     | Do not use a solid water stream — may scatter and spread fire.                                                          |
| <b>Protective Equipment</b> | Wear self-contained breathing apparatus and full protective clothing.                                                   |
| <b>Combustion Products</b>  | May include carbon oxides and other toxic fumes. See Section 10.                                                        |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.       |
| <b>Environmental</b>             | Prevent leakage or spillage from entering drains, sewers, or waterways.                                 |
| <b>Containment &amp; Cleanup</b> | Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations. |

## 7. HANDLING AND STORAGE

|               |                                                                                                                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe Handling | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.                                                                                |
| Safe Storage  | Store in a cool, dry, well-ventilated area away from heat, sparks, and open flame. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. Ground and bond containers when transferring material. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

| AGENCY    | EXPOSURE LIMIT                                                 |
|-----------|----------------------------------------------------------------|
| OSHA PEL  | 200 ppm TWA / 300 ppm acceptable ceiling / 500 ppm 10-min peak |
| NIOSH REL | 100 ppm TWA / 150 ppm STEL                                     |
| IDLH      | 500 ppm                                                        |

|            |                                                                                                                                                         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes       | Wear chemical safety goggles or face shield.                                                                                                            |
| Skin       | Wear chemical-resistant gloves and protective clothing.                                                                                                 |
| Inhalation | Use a NIOSH-approved respirator with organic vapor cartridges. For confined spaces or exposures above the OEL, use supplied-air respiratory protection. |

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                          |                                                                         |
|--------------------------|-------------------------------------------------------------------------|
| Appearance               | Clear, mobile liquid                                                    |
| Odor                     | Sweet, pungent, benzene-like odor                                       |
| Particle Characteristics | Not Applicable                                                          |
| pH                       | Not Available                                                           |
| Melting Point            | -139 °F (NTP, 1992)                                                     |
| Boiling Point            | 231.1 °F at 760 mmHg (NTP, 1992)                                        |
| Flash Point              | 40 °F (NTP, 1992)                                                       |
| Vapor Pressure           | 10 mmHg at 43.5 °F ; 20 mmHg at 65.1 °F; 40 mmHg at 89.2 °F (NTP, 1992) |
| Specific Gravity         | 0.867                                                                   |
| Solubility               | Low water solubility, excellent organic solvent                         |
| Molecular Formula        | C <sub>7</sub> H <sub>8</sub>                                           |
| Molecular Weight         | 92.14 g/mol                                                             |

## 10. STABILITY AND REACTIVITY

|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| Chemical Stability     | Stable under recommended storage conditions.                                  |
| Hazardous Reactions    | None under normal processing conditions.                                      |
| Conditions to Avoid    | Heat, sparks, open flame, and incompatible materials.                         |
| Incompatible Materials | Strong oxidizing agents, sources of ignition, heat.                           |
| Decomposition Products | May produce carbon oxides and other toxic fumes when heated to decomposition. |

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

|      |                           |
|------|---------------------------|
| IARC | Not listed as carcinogen. |
|------|---------------------------|

|             |                           |
|-------------|---------------------------|
| <b>NTP</b>  | Not listed as carcinogen. |
| <b>OSHA</b> | Not listed as carcinogen. |

## 12. ECOLOGICAL INFORMATION

|                         |                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>      | Algae ErC50: 12.5 mg/L (72 h, <i>Pseudokirchneriella subcapitata</i> ; cf. <i>Scenedesmus subspicatus</i> 48-h 125–160 mg/L) |
| <b>Persistence</b>      | Aerobic water half-life ~4 d                                                                                                 |
| <b>Bioaccumulation</b>  | BCF 13 and 90 (measured in fish; low–moderate)                                                                               |
| <b>Mobility in Soil</b> | Moderate–high mobility (Koc 37–178)                                                                                          |

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

|                         |                           |
|-------------------------|---------------------------|
| <b>US DOT</b>           | UN1294, Toluene, 3, PG II |
| <b>IMDG</b>             | UN1294, Toluene, 3, PG II |
| <b>IATA/ICAO</b>        | UN1294, Toluene, 3, PG II |
| <b>Marine Pollutant</b> | No                        |

## 15. REGULATORY INFORMATION

|                           |                                           |
|---------------------------|-------------------------------------------|
| <b>TSCA Inventory</b>     | Listed.                                   |
| <b>SARA 313 (TRI)</b>     | Listed (de minimis 1.0%).                 |
| <b>California Prop 65</b> | Listed (developmental, male).             |
| <b>SARA 311/312</b>       | See Section 2 for hazard classifications. |

Data retrieved as of — TSCA Inventory: 2026-08-02; SARA 313 (TRI): 2026-08-02; California Prop 65: 2026-08-02

## 16. OTHER INFORMATION

**Revision Date:** 08/11/2026

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