

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** 50% Vinegar - Concentrated Industrial Strength

**Synonyms:** acetic acid

**CAS Number:** 64-19-7

**Grade/Purity:** Technical Grade

**Product Type:** Acids

**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:**

|      |                                         |
|------|-----------------------------------------|
| H314 | Causes severe skin burns and eye damage |
|------|-----------------------------------------|

**Precautionary Statements:**

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                                          |
| P264           | Wash hands and face thoroughly after handling.                                                                                   |
| P280           | Wear protective gloves, protective clothing, and eye/face protection.                                                            |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| 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.                                                       |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a POISON CENTER or doctor.                                                                                      |
| P321           | Specific treatment (see first-aid information on this label).                                                                    |
| P363           | Wash contaminated clothing before reuse.                                                                                         |
| P370+P378      | In case of fire: Use appropriate media to extinguish.                                                                            |
| P403+P235      | Store in a well-ventilated place. Keep cool.                                                                                     |
| P405           | Store locked up.                                                                                                                 |

|      |                                                                                                                |
|------|----------------------------------------------------------------------------------------------------------------|
| P501 | Dispose of contents and container in accordance with local, regional, national, and international regulations. |
|------|----------------------------------------------------------------------------------------------------------------|

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT   | % MIN | % MAX | CAS #     | EINECS# / ELINCS# | FORMULA                                      | MOLECULAR WEIGHT |
|-------------|-------|-------|-----------|-------------------|----------------------------------------------|------------------|
| Acetic Acid | 50    | 50    | 64-19-7   | 200-580-7         | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> | 60.05 g/mol      |
| Water       | 50    | 50    | 7732-18-5 | 231-791-2         | H <sub>2</sub> O                             | 18.02 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>       | Remove contaminated clothes. Rinse and then wash skin with water and soap. Rinse skin with plenty of water or shower for at least 15 minutes. Refer immediately 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>  | Rinse mouth. Do NOT induce vomiting. If within a few minutes after ingestion, one small glass of water may be given to drink. Refer immediately for medical attention.                                                                                                                                                                                                                                                                                                                                                                                     |

### 5. FIRE-FIGHTING MEASURES

|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| <b>Suitable Media</b>       | Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers. |
| <b>Unsuitable Media</b>     | Do not use a solid water stream as it 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

|                      |                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Safe Handling</b> | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.                      |
| <b>Safe Storage</b>  | Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. |

### 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  | 10 ppm TWA               |
| NIOSH REL | 10 ppm TWA / 15 ppm STEL |

|      |        |
|------|--------|
| IDLH | 50 ppm |
|------|--------|

|                   |                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Wear chemical safety goggles or face shield.                                                                                                                                                                                                                                              |
| <b>Skin</b>       | Wear chemical-resistant gloves and protective clothing.                                                                                                                                                                                                                                   |
| <b>Inhalation</b> | For mist or aerosol applications (e.g., spray, atomization, pressure washing), use a NIOSH-approved half-face air-purifying respirator with combination acid gas / P100 cartridges. For dust exposure, an N95 or P100 particulate filter is acceptable. Ensure local exhaust ventilation. |

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

|                                 |                                                                                                                                           |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance</b>               | Clear, colorless liquid                                                                                                                   |
| <b>Odor</b>                     | Pungent                                                                                                                                   |
| <b>Particle Characteristics</b> | Not Applicable                                                                                                                            |
| <b>pH</b>                       | Aqueous solution 1.0 molar = 2.4; 0.1 molar = 2.9; 0.01 molar = 3.4                                                                       |
| <b>Melting Point</b>            | not characterized for the solution                                                                                                        |
| <b>Boiling Point</b>            | not characterized for the solution                                                                                                        |
| <b>Flash Point</b>              | No sustained flash; closed cup >100 °C (INEOS 50–79% SDS) — non-combustible solution. (Prior 104 °F was the glacial pure-compound value.) |
| <b>Vapor Pressure</b>           | 11.4 mmHg at 68 °F ; 20 mmHg at 86 °F (NTP, 1992)                                                                                         |
| <b>Specific Gravity</b>         | 1.058 g/mL at 20 °C (50% w/w aqueous acetic acid; CRC)                                                                                    |
| <b>Solubility</b>               | Fully water soluble                                                                                                                       |
| <b>Molecular Formula</b>        | C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>                                                                                              |
| <b>Molecular Weight</b>         | 60.05 g/mol                                                                                                                               |

## 10. STABILITY AND REACTIVITY

|                               |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------|
| <b>Chemical Stability</b>     | Stable under recommended storage conditions.                                      |
| <b>Hazardous Reactions</b>    | None under normal processing conditions.                                          |
| <b>Conditions to Avoid</b>    | Heat, sparks, open flame, and incompatible materials.                             |
| <b>Incompatible Materials</b> | Strong acids, strong bases, reactive metals, water (for some concentrated forms). |
| <b>Decomposition Products</b> | May produce carbon oxides and other toxic fumes when heated to decomposition.     |

## 11. TOXICOLOGICAL INFORMATION

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

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

## 12. ECOLOGICAL INFORMATION

|                         |                                                       |
|-------------------------|-------------------------------------------------------|
| <b>Ecotoxicity</b>      | Data not available. Avoid release to the environment. |
| <b>Persistence</b>      | Not Available                                         |
| <b>Bioaccumulation</b>  | Not Available                                         |
| <b>Mobility in Soil</b> | Not Available                                         |

### 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

|                  |                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------|
| US DOT           | UN2790, Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass, 8, PG II |
| IMDG             | UN2790, Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass, 8, PG II |
| IATA/ICAO        | UN2790, Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass, 8, PG II |
| Marine Pollutant | No                                                                                                          |

### 15. REGULATORY INFORMATION

|                    |                                           |
|--------------------|-------------------------------------------|
| TSCA Inventory     | Listed.                                   |
| SARA 313 (TRI)     | Not listed.                               |
| California Prop 65 | Not listed.                               |
| SARA 311/312       | 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:** 08/09/2026

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