# SAFETY DATA SHEET

**APPLE CIDER VINEGAR (FOOD GRADE)**

**Product Code:** B-ACVFG
**Revision Date:** Jul 28, 2026
**Version:** 2.0

## 1. PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|---|---|---|---|
| **Product Name** | **Apple Cider Vinegar** | **Grade** | Food Grade Vinegar |
| **Synonyms** | Dilute Acetic Acid Solution, Cider Vinegar | **Product Code** | BACV-FG |
| **Supplier Details** | **Blendmagic Products, LLC** \| PO Box 220, East Islip, NY 11730 \| Tel: (631) 572-3381 / (888) 605-4332 \| blendmagicproducts.com | | |
| **Recommended Use** | Food product ingredient, processing aid, and household culinary use. | | |
| **Emergency Numbers** | **24/7 CHEMTREC (USA):** (800) 424-9300 \| **International:** +1 (703) 527-3887 | | |

## 2. HAZARDS IDENTIFICATION

| | |
|---|---|
| **Signal Word** | **WARNING** |
| **GHS Classification** | • Serious Eye Damage / Eye Irritation – Category 2A (H319) |
| **Hazard Statements** | Causes serious eye irritation (H319). |
| **Other Hazards** | Prolonged or excessive inhalation of vapors may cause respiratory tract irritation. |

**GHS PICTOGRAM**



**Precautionary Statements:**

**Prevention & Handling:**

- P264: Wash exposed skin thoroughly after handling.
- P280: Wear eye and face protection.
- Avoid breathing concentrated vinegar vapors.

**Response & Storage:**

- **IF IN EYES (P305+P351+P338):** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P337+P313:** If eye irritation persists: Get medical advice/attention.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Weight % | GHS-US Classification |
|---|---|---|---|
| **Water** | 7732-18-5 | 90.0% – 96.0% | Not classified |
| **Acetic Acid** | 64-19-7 | 4.0% – 10.0% | Flam. Liq. 3 (H226); Skin Corr. 1A (H314); Eye Dam. 1 (H318) |

## 4. FIRST AID MEASURES

- **Inhalation:** If odor or vapors cause irritation, remove person to fresh air. Seek medical attention if respiratory irritation persists.
- **Skin Contact:** Contact may cause slight irritation. Wash skin with plenty of water. Get medical attention if irritation persists.
- **Eye Contact:** Immediately flush eyes with plenty of water for several minutes while holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice/attention.
- **Ingestion:** Intended for food consumption. If ingested in large commercial quantities, consume water to dilute. Do NOT induce vomiting. Do NOT administer emetics or baking soda.
- **Most Important Symptoms:** Eye irritation (stinging, redness, tearing). Vapor inhalation may cause nasal or upper respiratory tract discomfort.

## 5. FIRE-FIGHTING MEASURES

- **Extinguishing Media:** Non-flammable aqueous solution. Use extinguishing media appropriate for surrounding fire conditions (water spray, $CO_2$, dry chemical, foam).
- **Specific Fire Hazards:** Material will not burn. Under thermal decomposition at high temperatures, minor acidic vapors (acetic acid, carbon oxides) may be released.
- **Special Protective Equipment:** Wear standard turnout gear and self-contained breathing apparatus (SCBA) if fighting surrounding fires.

## 6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Protect eyes from exposure. Avoid prolonged breathing of vapor and skin contact. Wear protective gloves and safety goggles.
- **Environmental Precautions:** Prevent entry of bulk concentrated releases into public sewers or waterways. Notify local water authorities if large quantities enter water courses.
- **Clean-Up Methods:**
  • *Small Spills:* Dilute with water and mop up or absorb with inert material. Treat or dispose of waste as weak organic acid.
  • *Large Spills:* Neutralize cautiously with dilute basic material (e.g., lime or soda ash) if necessary, flush with large amounts of water, and contain for disposal according to local/national regulations.

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:**
Avoid contact with eyes. Avoid prolonged inhalation of vapors. Handle in well-ventilated areas. Maintain good industrial food hygiene practices.

**Storage Conditions:**
Keep container tightly closed when not in use. Store in a cool, well-ventilated area away from strong oxidizers, metals, and strong bases.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Component | OSHA PEL | ACGIH TLV / STEL | NIOSH REL / IDLH | Ontario TWA | Quebec OEL |
|---|---|---|---|---|---|
| **Acetic Acid (64-19-7)** | 25 mg/m³ (10 ppm) | 25 mg/m³ / 37 mg/m³ | 25 mg/m³ / 125 mg/m³ | 25 mg/m³ | 25 mg/m³ |

**Engineering Controls:** Emergency eye wash stations should be available in the immediate handling area. Good general ventilation is sufficient to control airborne vapor levels under normal conditions.

**Personal Protective Equipment (PPE):**
• **Eye/Face:** Safety glasses or chemical splash goggles when handling bulk volumes.
• **Skin:** Protective rubber/nitrile gloves as needed for handling.
• **Respiratory:** None required under normal food processing conditions.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| **Appearance** | Liquid (Clear amber to brownish) |
| **Odor** | Strong Vinegar odor |
| **pH Value** | 2.3 (approximate) |
| **Freezing Point** | Vinegar @ -1.1°C (30°F) |
| **Boiling Point** | 101.1°C (214°F) @ 760 mmHg (10% acid) |
| **Flash Point** | Does not flash |

| | |
|---|---|
| **Relative Density** | 1.01 (Water = 1) |
| **Vapor Pressure** | 0.42 mmHg @ 21.1°C (70°F) |
| **Vapor Density** | 2.1 (Air = 1) |
| **Solubility in Water** | Complete |
| **Viscosity** | 0.894 cP |
| **Flammability Limits** | Not applicable |

## 10. STABILITY AND REACTIVITY

- **Reactivity:** Stable under normal conditions. Non-reactive under standard food handling protocols.
- **Chemical Stability:** Chemically stable under recommended storage conditions.
- **Possibility of Hazardous Reactions:** Contact with strong oxidizing agents or strong bases may release heat or gas.
- **Conditions to Avoid:** Contact with incompatible chemicals or extreme heating.
- **Incompatible Materials:** Strong oxidizing agents, strong bases, water-reactive materials, acetic anhydride, caustics, carbonates, and reactive metals.
- **Hazardous Decomposition Products:** None under normal storage. Carbon monoxide and carbon dioxide may form upon thermal combustion.

## 11. TOXICOLOGICAL INFORMATION

**Routes of Entry & Acute Toxicity:**
• Inhalation, ingestion, and skin/eye contact.
• **Dermal Irritation:** Solutions of 3.3% and 10% acetic acid produced Primary Dermal Irritation Index (PDII) scores of 0.5 and 1.1 in rabbits (slight irritation).
• No acute toxic effects expected other than localized eye/respiratory irritation.

**Chronic & Specific Toxicity Effects:**
• **Carcinogenicity:** No evidence of carcinogenic effect.
• **Mutagenicity / Reproductive:** No evidence of mutagenic, teratogenic, or reproductive toxicity.
• **Sensitization:** Non-sensitizing.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Readily biodegradable under aerobic and anaerobic conditions. Low pH may cause localized toxicity in unbuffered aquatic systems.
• **Bluegill Sunfish 96-h LC50:** 75 mg/L | **Mosquito Fish 96-h LC50:** 0.51 mg/L | **Fathead Minnow 96-h LC50:** 79 mg/L
• **Daphnia magna 24-h LC50:** 47 mg/L | **Daphnia 24-h EC50 (pH 7):** 6,000 mg/L | **Algae 8-day Growth Inhib.:** 4,000 mg/L
**Bioaccumulation & Mobility:** No tendency to bioaccumulate. Highly mobile in aqueous media.

## 13. DISPOSAL CONSIDERATIONS

Treat or dispose of waste material as weak organic acid in compliance with local, state, provincial, and federal environmental regulations.

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **US DOT / TDG** | Not Regulated (< 10% Acetic Acid by weight) |
| **IMDG / IATA** | Not Regulated |
| **UN Number / Class** | None / None |

## 15. REGULATORY INFORMATION

**US Federal & TSCA:** All components listed on TSCA Inventory. FDA GRAS (Generally Recognized as Safe) food ingredient.
**SARA 304 / CERCLA:** Acetic acid (CAS 64-19-7) Reportable Quantity (RQ) is 5,000 lbs for 100% acid (equivalent to 50,000 lbs of 10% vinegar solution).
**Canadian Disclosure List:** Acetic Acid (CAS 64-19-7) is listed on the Canadian Ingredient Disclosure List.

## 16. OTHER INFORMATION

**NFPA 704 Rating:** Health: 1 | Flammability: 0 | Instability: 0
**HMIS Rating:** Health: 1 | Flammability: 0 | Physical Hazard: 0

**Effective Date:** November 12, 2026 (Version 2.0)
**Prepared By:** Blendmagic Products, LLC Technical Dept.