

SAFETY DATA SHEET

99% VINEGAR

99% ACETIC ACID

DOCUMENT HL-SDS-AA99-001
TECHNICAL SOURCE REVISION December 19, 2025

GHS AT A GLANCE



FLAMMABLE / CORROSIVE

HARDLINE
CHEMICALSNOT FOR AMATEURS.
RESPECT THE LABEL.

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IDENTIFICATION

DISTRIBUTED BY JACKSON CHEMICALS
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734-385-7394 / support@jacksonchemicals.com
jacksonchemicals.com

24-HOUR EMERGENCY*

800-424-9300

CHEMTREC - UNITED STATES

H PRODUCT IDENTITY**PRODUCT NAME**

Hardline Chemicals 99% Vinegar

CHEMICAL IDENTITY

99% Acetic Acid / Glacial Acetic Acid

H CHEMICAL IDENTIFIERS**CAS NUMBER**

64-19-7

SYNONYMS

Ethanoic acid; Glacial acetic acid; Methanecarboxylic acid

H RECOMMENDED USE AND RESTRICTIONS**RECOMMENDED USE**

Concentrated acetic acid for qualified industrial, commercial, laboratory, or technical applications consistent with the product label.

USES ADVISED AGAINST

Food, drug, pesticide, or biocidal use; household use; or handling by untrained persons without appropriate controls and protective equipment.

TECHNICAL REFERENCE Thermo Fisher Scientific / Acros Organics, Acetic acid SDS, Revision 7, December 19, 2025 (99.7% minimum).

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HAZARD(S) IDENTIFICATION

GHS CLASSIFICATION

**FLAMMABLE LIQUIDS****Category 3**

GHS CLASSIFICATION

**SKIN CORROSION****Category 1A**

SERIOUS EYE DAMAGE

CATEGORY 1

**DANGER**H226 Flammable liquid and vapor.
H314 Causes severe skin burns and eye damage.**H PREVENTION**

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P243	Take action to prevent static discharges.
P260	Do not breathe mist, vapors, or spray.
P264	Wash face, hands, and exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection, and face protection.

H EMERGENCY RESPONSE

P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove contaminated clothing immediately. 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 easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P370 + P378	In case of fire: Use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam.

H STORAGE AND DISPOSAL

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents and container through an approved waste-disposal facility.

H HAZARDS NOT OTHERWISE CLASSIFIED

None identified by the technical source.

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COMPOSITION / INFORMATION ON INGREDIENTS

H SUBSTANCE COMPOSITION

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Acetic acid	64-19-7	99% minimum
Water	7732-18-5	1% maximum

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FIRST-AID MEASURES

H GENERAL ADVICE

Show this safety data sheet to attending medical personnel. Immediate medical attention is required.

H EYE CONTACT

Immediately rinse with plenty of water, including beneath the eyelids, for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain immediate medical attention.

H SKIN CONTACT

Immediately wash with plenty of water for at least 15 minutes. Remove contaminated clothing and gloves, including contaminated material inside them. Wash before reuse. Call a physician immediately.

H INHALATION

Remove from exposure and place at rest in fresh air. If not breathing, give artificial respiration using a one-way mask or proper respiratory medical device; do not use mouth-to-mouth if material was inhaled or ingested. Call a physician immediately.

H INGESTION

Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

H MOST IMPORTANT SYMPTOMS AND EFFECTS

Causes burns by all routes of exposure. Ingestion may cause severe swelling, tissue damage, and risk of perforation. Overexposure symptoms may include headache, dizziness, tiredness, nausea, and vomiting.

H INDICATION OF IMMEDIATE CARE

Treat symptomatically. Immediate medical attention is required.

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FIRE-FIGHTING MEASURES

FLASH POINT

40 C / 104 F

AUTOIGNITION

427 C / 800.6 F

LFL

4.0 vol%

UFL

19.9 vol%

H SUITABLE EXTINGUISHING MEDIA

Carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam.

H UNSUITABLE EXTINGUISHING MEDIA

No information available from the technical source.

H SPECIFIC HAZARDS

Thermal decomposition may release irritating gases and vapors. Product causes burns of eyes, skin, and mucous membranes. Vapor-air mixtures may be explosive.

H HAZARDOUS COMBUSTION PRODUCTS

Carbon monoxide, carbon dioxide, and irritating gases or vapors.

H FIREFIGHTER PROTECTION

Wear pressure-demand self-contained breathing apparatus approved by NIOSH/MSHA or equivalent and full protective gear.

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ACCIDENTAL RELEASE MEASURES

H PERSONAL PRECAUTIONS

Use required personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away and upwind of spill or leak. Remove ignition sources.

H ENVIRONMENTAL PRECAUTIONS

Do not release into the environment or empty into drains.

H CONTAINMENT AND CLEANUP

Soak up with inert absorbent material. Use non-sparking tools and compatible equipment. Place material in suitable, closed containers for disposal.

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HANDLING AND STORAGE

H SAFE HANDLING

Do not get in eyes, on skin, or on clothing. Do not breathe mist, vapors, or spray. Use with appropriate local exhaust ventilation. Wear personal protective equipment and face protection. Do not ingest.

H IGNITION CONTROL

Keep away from heat, sparks, open flame, and hot surfaces. No smoking. Prevent static discharge and use compatible, non-sparking equipment.

H STORAGE

Store locked in a designated corrosives area. Keep containers tightly closed in a dry, cool, well-ventilated place away from heat and ignition sources.

H INCOMPATIBLE MATERIALS

Strong oxidizing agents, strong bases, and metals.

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EXPOSURE CONTROLS / PERSONAL PROTECTION

H OCCUPATIONAL EXPOSURE LIMITS - ACETIC ACID

AUTHORITY	TWA	STEL / OTHER
ACGIH	10 ppm	15 ppm STEL
OSHA PEL (vacated)	10 ppm / 25 mg/m ³	Not established
NIOSH	10 ppm / 25 mg/m ³	15 ppm / 37 mg/m ³ ; IDLH 50 ppm
Mexico OEL	10 ppm	15 ppm STEL

H ENGINEERING CONTROLS

Use only with effective chemical-fume ventilation or equivalent local exhaust. Use explosion-proof electrical, ventilation, and lighting equipment. Keep eyewash stations and safety showers near the work area.

H HYGIENE MEASURES

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

H EYE AND FACE PROTECTION

Tight-sealing chemical goggles plus a face shield compliant with applicable OSHA eye and face protection requirements.

H SKIN AND BODY PROTECTION

Chemical-resistant gloves and protective clothing selected for acetic-acid permeation and the work task.

H RESPIRATORY PROTECTION

If exposure limits may be exceeded or irritation occurs, use a properly selected NIOSH-approved respirator under a compliant respiratory-protection program. Acid-gas and particulate filtration may be required based on the assessment.

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PHYSICAL AND CHEMICAL PROPERTIES

H PHYSICAL AND CHEMICAL PROFILE

PROPERTY	VALUE
Physical state	Liquid
Appearance / color	Clear, colorless
Odor	Vinegar-like
Melting / freezing point	16-16.5 C / 60.8-61.7 F
Boiling range	117-118 C / 242.6-244.4 F
Flash point	40 C / 104 F
Flammability	Flammable liquid
Lower / upper explosive limit	4.0 / 19.9 vol%
Autoignition temperature	427 C / 800.6 F
pH	<2.5 (10 g/L aqueous solution)
Viscosity	1.53 mPa.s at 25 C
Water solubility	Miscible
Vapor pressure	1.52 kPa at 20 C
Density / specific gravity	1.048
Vapor density	2.10 (air = 1)
Evaporation rate	0.97 (butyl acetate = 1.0)
Partition coefficient	log Pow -0.2
Molecular formula / weight	C2H4O2 / 60.05 g/mol
Particle characteristics	Not applicable - liquid

10**STABILITY AND REACTIVITY****H REACTIVITY**

No specific reactive hazard is known based on available information.

H CHEMICAL STABILITY

Stable under normal recommended conditions of storage and use.

H POSSIBILITY OF HAZARDOUS REACTIONS

Hazardous polymerization does not occur. No hazardous reactions are expected under normal processing.

H CONDITIONS TO AVOID

Incompatible materials, excess heat, open flames, hot surfaces, sparks, and other ignition sources.

H INCOMPATIBLE MATERIALS

Strong oxidizing agents, strong bases, and metals.

H HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide, and irritating gases or vapors may form during thermal decomposition.

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TOXICOLOGICAL INFORMATION

H INHALATION

Causes severe burns and may be harmful if inhaled.

H INGESTION

Causes severe burns of the mouth, throat, upper digestive tract, and respiratory tract. May be harmful if swallowed.

H EYE CONTACT

Corrosive; risk of serious eye damage, blindness, or permanent injury.

H SKIN CONTACT

Causes severe burns and may be harmful in contact with skin.

H ACUTE TOXICITY DATA - ACETIC ACID

ROUTE	RESULT
Oral LD50	3310 mg/kg (rat)
Inhalation LC50	>40 mg/L (rat), 4 h
Dermal LD50	No data available

H SENSITIZATION

No adequate respiratory- or skin-sensitization data available.

H MUTAGENICITY

Not mutagenic in the Ames test according to the technical source.

H CARCINOGENICITY

Acetic acid is not listed as a carcinogen by IARC, NTP, ACGIH, OSHA, or Mexico in the source table.

H REPRODUCTIVE TOXICITY

No data available.

H STOT - SINGLE OR REPEATED EXPOSURE

No data available; target organs not identified.

H ASPIRATION HAZARD

Classification criteria are not met based on available data.

H SYMPTOMS

Ingestion may cause severe swelling, tissue damage, and perforation risk. Overexposure may cause headache, dizziness, tiredness, nausea, and vomiting.

H ENDOCRINE DISRUPTION

The technical source identifies no known or suspected endocrine-disrupting component.

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ECOLOGICAL INFORMATION

H ECOTOXICITY

Do not empty into drains. Freshwater fish data: Pimephales promelas LC50 88 mg/L/96 h; Lepomis macrochirus LC50 75 mg/L/96 h. Water flea EC50 95 mg/L/24 h. Microtox Photobacterium phosphoreum EC50 8.8 mg/L.

H PERSISTENCE AND DEGRADABILITY

Miscible with water. Persistence is unlikely based on available information.

H BIOACCUMULATIVE POTENTIAL

No additional bioaccumulation information is available. Log Pow: -0.2.

H MOBILITY IN SOIL

Expected to be mobile in the environment because of high water solubility.

H OTHER ADVERSE EFFECTS

No additional information available.

13**DISPOSAL CONSIDERATIONS****H WASTE TREATMENT**

Chemical waste generators must determine whether discarded material is hazardous waste and must follow applicable federal, state, regional, and local waste regulations.

H CONTAINER DISPOSAL

Do not reuse empty containers unless professionally reconditioned. Residues and vapors may remain. Dispose of contents and container through an approved waste-disposal facility.

14**TRANSPORT INFORMATION****H U.S. DEPARTMENT OF TRANSPORTATION (DOT)****PROPER SHIPPING NAME****ACETIC ACID, GLACIAL****UN NUMBER****UN2789****PRIMARY CLASS****8****SUBSIDIARY****3****PACKING GROUP****II****H INTERNATIONAL TRANSPORT ALIGNMENT**

MODE	UN / NAME	CLASS	PACKING GROUP
TDG	UN2789 / ACETIC ACID, GLACIAL	8 (3)	II
IATA	UN2789 / ACETIC ACID, GLACIAL	8 (3)	II
IMDG / IMO	UN2789 / ACETIC ACID, GLACIAL	8 (3)	II

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REGULATORY INFORMATION

H U.S. FEDERAL REGULATORY SUMMARY

PROGRAM	STATUS
TSCA Inventory	Acetic acid listed; active
SARA 313	Not subject to Section 313 reporting per technical source
CWA hazardous substance	Listed; reportable quantity 5,000 lb
CERCLA	Reportable quantity 5,000 lb / 2,270 kg
California Proposition 65	No listed Proposition 65 chemical identified
DOT reportable quantity	Yes
DOT marine pollutant	No
DHS chemicals	None identified

H U.S. STATE RIGHT-TO-KNOW

Acetic acid is listed by Massachusetts, New Jersey, Pennsylvania, and Rhode Island in the technical source; Illinois is shown as not listed.

H INTERNATIONAL INVENTORIES

INVENTORY	STATUS
Canada DSL	Listed
Europe EINECS	200-580-7
Philippines PICCS	Listed
Japan ENCS / ISHL	Listed
Australia AICS	Listed
China IECSC	Listed
Korea KECL	Listed

H REACH

Acetic acid is subject to the restriction identified as Annex XVII entry 75 in the technical source. It is not listed there as an Annex XIV authorization substance or SVHC candidate.

H PFAS

Not applicable according to the technical source.

H BASEL CONVENTION

Acetic acid is identified under Annex I - Y34 in the technical source.

H MEXICO

Moderate risk, Grade 2.

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OTHER INFORMATION

NFPA HEALTH

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NFPA FLAMMABILITY

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NFPA INSTABILITY

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