

ACETIC ACID, GLACIAL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 07/15/2014 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: ACETIC ACID, GLACIAL
CAS No	: 64-19-7
Product code	: AB00118
Formula	: C2H4O2
Synonyms	: acetic acid / Acetic acid, glacial / Aci-Gel / Aci-Jel / alcohol of vinegar / carboxylic acid C2 / ethanoic acid / ethylic acid / FEMA No 2006 / fema number 2006 / glacial acetic acid / methanecarboxylic acid / pyroligneous acid / vinegar / vinegar acid / vosol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Laboratory use
Use of the substance/mixture	: Chemical intermediate Solvent Food industry: additive Laboratory chemical Photographic chemical

1.3. Details of the supplier of the safety data sheet

AmericanBio, Inc.
 15 Erie Dr.
 Natick, MA 01760 - USA
 T 800.443.0600 - F 508.655.2754
info@americanbio.com - www.americanbio.com

1.4. Emergency telephone number

Emergency number : 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

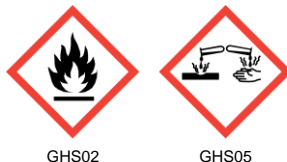
GHS-US classification

Flam. Liq. 3 H226
 Skin Corr. 1A H314

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H226 - Flammable liquid and vapour
 H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P210 - Keep away from open flames, sparks. - No smoking
 P233 - Keep container tightly closed
 P240 - Ground/bond container and receiving equipment
 P241 - Use explosion-proof ventilating equipment
 P242 - Use only non-sparking tools
 P243 - Take precautionary measures against static discharge
 P260 - Do not breathe fume, mist, vapours
 P264 - Wash hands, forearms and face thoroughly after handling
 P280 - Wear eye protection, protective clothing, protective gloves
 P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing

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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/physician
P321 - Specific treatment (see SECTION 4 on this label)
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use Collect all waste in suitable and labelled containers and dispose according to local legislation, In case of fire: evacuate area for extinction
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to Collect all waste in suitable and labelled containers and dispose according to local legislation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	GHS-US classification
ACETIC ACID, GLACIAL (Main constituent)	(CAS No) 64-19-7	100	Flam. Liq. 3, H226 Skin Corr. 1A, H314

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove the victim into fresh air. Immediately consult a doctor/medical service. Doctor: administration of corticoid spray. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Give milk to drink. Do not induce vomiting. Do not give activated charcoal. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Do not give chemical antidote. Doctor: gastric lavage is not recommended. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Coughing. EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract. FOLLOWING SYMPTOMS MAY APPEAR LATER: Respiratory difficulties. Possible inflammation of the respiratory tract. Risk of pneumonia. Risk of lung oedema.
- Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.
- Symptoms/injuries after eye contact : Corrosion of the eye tissue. Permanent eye damage.

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- Symptoms/injuries after ingestion : Risk of aspiration pneumonia. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Blood in vomit. Diarrhoea. Shock. Change in the haemogramme/blood composition. Change in urine composition. Decreased renal function.
- Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. May stain the skin. Slight irritation. Inflammation/damage of the eye tissue. Dry/sore throat. Possible inflammation of the respiratory tract. Affection/discolouration of the teeth. Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Polyvalent foam. Alcohol-resistant foam. BC powder. Carbon dioxide. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : No unsuitable extinguishing media known. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD. Flammable. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Reactions involving a fire hazard: see "Reactivity Hazard". Flammable liquid and vapour.
- Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard". May form flammable/explosive vapour-air mixture.
- Reactivity : On heating: release of corrosive/combustible gases/vapours (acetic acid vapours). Upon combustion: CO and CO₂ are formed. Violent to explosive reaction with many compounds e.g.: with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) bases. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen). Thermal decomposition generates : Corrosive vapours.

5.3. Advice for firefighters

- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Protective equipment : Gas-tight suit. Corrosion-proof suit.
- Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute combustible/toxic gases/vapours with water spray. Take account of toxic/corrosive precipitation water. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.

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- Methods for cleaning up : Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Use corrosionproof equipment. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Exhaust gas must be neutralised. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Do not breathe. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof equipment. Comply with applicable regulations.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources., Keep container closed when not in use, Keep container tightly closed. Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Storage temperature : > 17 °C
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) bases. metals. alcohols. amines. water/moisture.
- Storage area : Store in a dry area. Ventilation at floor level. Keep out of direct sunlight. Fireproof storeroom. Keep locked up. Protect against frost. Provide for a tub to collect spills. Provide the tank with earthing. Detached building. Store only in a limited quantity. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: aluminium. glass. MATERIAL TO AVOID: steel. iron. zinc. lead. copper. bronze.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ACETIC ACID, GLACIAL (64-19-7)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	10 ppm

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.

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Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: butyl rubber. polyethylene/ethylenevinylalcohol. viton. GIVE GOOD RESISTANCE: neoprene. GIVE LESS RESISTANCE: natural rubber. PVC. GIVE POOR RESISTANCE: polyethylene. PVA.
Hand protection	: Gloves. Wear protective gloves.
Eye protection	: Chemical goggles or face shield. Safety glasses.
Skin and body protection	: Head/neck protection. Corrosion-proof clothing. Wear suitable protective clothing.
Respiratory protection	: Wear gas mask with filter type A if conc. in air > exposure limit. High vapour/gas concentration: self-contained respirator. Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 60.05 g/mol
Colour	: Colourless.
Odour	: Irritating/pungent odour. Vinegar odour.
Odour threshold	: 1 ppm 2.5 mg/m ³
pH	: 2.4 (6 %)
pH solution	: 6 %
Relative evaporation rate (butylacetate=1)	: 0.97
Relative evaporation rate (ether=1)	: 11
Melting point	: 17 °C
Freezing point	: No data available
Boiling point	: 118 °C
Flash point	: 40 °C
Critical temperature	: 322 °C
Self ignition temperature	: 485 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 16 hPa
Vapour pressure at 50 °C	: 75 hPa
Critical pressure	: 45300 hPa
Relative vapour density at 20 °C	: 2.1
Relative density	: 1.0
Relative density of saturated gas/air mixture	: 1.0
Density	: 1049 kg/m ³
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in tetrachloromethane. Soluble in glycerol. Soluble in dimethyl sulfoxide. Water: Complete Ethanol: Complete Ether: Complete Acetone: Complete
Log Pow	: -0.31 (Experimental value)
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.0012 Pa.s (20 °C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 4 - 19 vol % 100 - 430 g/m ³

9.2. Other information

Specific conductivity	: 600000 pS/m
VOC content	: 100 %

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Other properties : Gas/vapour heavier than air at 20°C. Clear. Hygroscopic. Volatile. Substance has acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

On heating: release of corrosive/combustible gases/vapours (acetic acid vapours). Upon combustion: CO and CO₂ are formed. Violent to explosive reaction with many compounds e.g.: with (strong) oxidizers: (increased) risk of fire/explosion. Reacts violently with (some) bases. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen). Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Hygroscopic. Not established. Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 2.4 (6 %)
Serious eye damage/irritation	: Not classified pH: 2.4 (6 %)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Coughing. EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract. FOLLOWING SYMPTOMS MAY APPEAR LATER: Respiratory difficulties. Possible inflammation of the respiratory tract. Risk of pneumonia. Risk of lung oedema.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	: Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion	: Risk of aspiration pneumonia. Burns to the gastric/intestinal mucosa. Possible esophageal perforation. Blood in vomit. Diarrhoea. Shock. Change in the haemogramme/blood composition. Change in urine composition. Decreased renal function.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. May stain the skin. Slight irritation. Inflammation/damage of the eye tissue. Dry/sore throat. Possible inflammation of the respiratory tract. Affection/discolouration of the teeth. Gastrointestinal complaints.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Classification concerning the environment: not applicable.
Ecology - air	: TA-Luft Klasse 5.2.5/II.

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Ecology - water : Mild water pollutant (surface water). Harmful to fishes. Harmful to invertebrates (Daphnia). Not harmful to algae. pH shift. Inhibition of activated sludge.

ACETIC ACID, GLACIAL (64-19-7)	
LC50 fishes 1	75 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	47 mg/l (24 h; Daphnia magna; Not neutralized)
EC50 other aquatic organisms 1	> 5000 mg/l (5 h; Activated sludge)
LC50 fish 2	94 mg/l (96 h; Oryzias latipes)
EC50 Daphnia 2	95 mg/l (24 h; Daphnia magna; Static system)
TLM fish 1	100 ppm (96 h; Carassius auratus)
Threshold limit algae 1	90 mg/l (192 h; Microcystis aeruginosa; Neutralized)
Threshold limit algae 2	4000 mg/l (192 h; Scenedesmus quadricauda; Neutralized)

12.2. Persistence and degradability

ACETIC ACID, GLACIAL (64-19-7)	
Persistence and degradability	Readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil. Not established.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O ₂ /g substance
Chemical oxygen demand (COD)	1.03 g O ₂ /g substance
ThOD	1.07 g O ₂ /g substance
BOD (% of ThOD)	0.56 - 0.69 % ThOD

12.3. Bioaccumulative potential

ACETIC ACID, GLACIAL (64-19-7)	
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.

12.4. Mobility in soil

ACETIC ACID, GLACIAL (64-19-7)	
Surface tension	0.028 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove for physico-chemical/biological treatment. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water. May be discharged to wastewater treatment installation. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Use appropriate containment to avoid environmental contamination.

Additional information : LWCA (the Netherlands): KGA category 03. Hazardous waste according to Directive 2008/98/EC. Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN2789 Acetic acid, glacial (with more than 80 percent acid, by mass), 8, II

UN-No. (DOT) : 2789

DOT NA no. : UN2789



DOT Proper Shipping Name : Acetic acid, glacial
with more than 80 percent acid, by mass

Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136

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Hazard labels (DOT)	: 8 - Corrosive 3 - Flammable liquid
	 
Packing group (DOT)	: II - Medium Danger
DOT Special Provisions (49 CFR 172.102)	: A3 - For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings. A6 - For combination packagings, if plastic inner packagings are used, they must be packed in tightly closed metal receptacles before packing in outer packagings. A7 - Steel packagings must be corrosion-resistant or have protection against corrosion. A10 - When aluminum or aluminum alloy construction materials are used, they must be resistant to corrosion. B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 243
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

Other information	: No supplementary information available.
State during transport (ADR-RID)	: as liquid.

ADR

Transport document description	: UN 2789 Acetic acid, glacial, 8 (3), II, (D/E)
Packing group (ADR)	: II
Class (ADR)	: 8 - Corrosive substances
Hazard identification number (Kemler No.)	: 83
Classification code (ADR)	: CF1
Danger labels (ADR)	: 8 - Corrosive substances 3 - Flammable liquids



Orange plates	: 
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Tunnel restriction code	: D/E
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Transport by sea

UN-No. (IMDG)	: 2789
Class (IMDG)	: 8 - Corrosive substances
Subsidiary risk (IMDG)	: 3
EmS-No. (1)	: F-E
EmS-No. (2)	: S-C

Air transport

UN-No.(IATA)	: 2789
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: II - Medium Danger
Subsidiary risk (IATA)	: 3

SECTION 15: Regulatory information

15.1. US Federal regulations

ACETIC ACID, GLACIAL (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb
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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226
Skin Corr. 1A H314

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

C; R35
R10

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

ACETIC ACID, GLACIAL(64-19-7)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H226	Flammable liquid and vapour

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H314

Causes severe skin burns and eye damage

NFPA health hazard

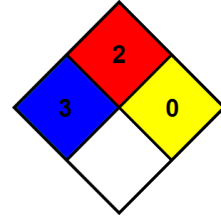
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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