G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME:----------> Acetic Acid, Glacial (All Grades)

PRODUCT NUMBER(S):----------> 100060,100070,100071,100073,100074

TRADE NAMES/SYNONYMS:----> Ethanoic Acid, Methanecarboxylic Acid

CAS-No: 64-19-7 Chemical Family: Organic Acid

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
IDENTIFIED USES: Industrial: Manufacture of dyed paper articles, Water treatment chemicals, Used in textile processing, Solvent, Intermediate, Use in oil field drilling, Production of biogas, Distribution, Use in manufacture of esters, Use in coatings, Laboratory Chemicals
USES ADVISED AGAINST: No information available

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET
Company: G.J. CHEMICAL CO., INC.
Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873
Telephone: 1-973-589-1450
Fax: 1-973-589-3072

1.4 Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
Flammable liquids (Category 3), H226
Corrosive to Metals (Category 1), H290
Skin corrosion (Category 1A), H314
Serious eye damage (Category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram

GHS02 GHS05

Signal word: DANGER

Hazard statement(s)
H226 Flammable liquid and vapor.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary statement(s)
Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
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 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310 IF IN EYES: 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.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P406 Store in corrosive resistant stainless steel container with a resistant inner liner

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Acetic Acid	64-19-7 EC-No.200-580-7 Index-No.607-002-00-6 Reg.-No. 01-2119475328-30-XXXX	99.85	Flammable liquids (Category 3), H226 Skin corrosion (Category 1A), H314 Corrosive to Metals (Category 1), H290 Serious eye damage (Category 1), H318

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: Acetic Acid

*******FIRST AID-* **Remove to fresh air. If not breathing give artificial respiration. Keep warm and quiet. Get medical attention immediately.**

EYE CONTACT (Splash): Acetic Acid

*******FIRST AID-* **Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Immediately take to a physician.**

SKIN CONTACT (Splash): Acetic Acid

*******FIRST AID-* **Wash affected area with soap and water for 15 minutes. Remove contaminated clothing and shoes. Consult a physician if irritation persists.**

INGESTION: Acetic Acid

*******FIRST AID-* **Patient should be made to drink large amounts of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED
Eye: Exposure to liquid causes severe eye burns, damage irreversible, exposure to vapors causes eye irritation; Symptoms are eye irritation, burning sensation, pain, watering and/or change of vision;
Skin: Causes skin burns, may be harmful if absorbed through skin; Symptoms are redness or discoloration, swelling, itching, burning or blistering.
Inhalation: Causes respiratory tract irritation; Symptoms are nasal discharge, hoarseness, coughing, chest pain, and breathing difficulty. Accumulation of fluid in lungs, symptoms can be delayed for several hours.
Ingestion: Causes digestive tract burns, Symptoms are nausea, vomiting, loss of appetite, diarrhea. In addition inflammation of mouth, throat, esophagus and/or stomach.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: Note to physician: Observe for latent pulmonary edema.

5. FIRE FIGHTING MEASURES

FLASH POINT: 40°C (104°F) TCC **LEL %:4 (V)**
AUTO-IGNITION TEMP: 485°C (905°F) **UEL %:19.9 (V)**
UNIFORM FIRE CODE: Combustible Liquid Class II

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other-->

Unsuitable extinguishing media: None

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.
VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.
VAPOR-AIR MIXTURES ARE EXPLOSIVE.
Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Water run-off and vapor cloud may be corrosive. Dike and collect water used to fight fire for neutralization before release. Water streams should not be directed to the liquid, as this will cause the liquid to boil and generate more vapor.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides, nitrogen oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Evacuate all non-emergency responder personnel. Avoid breathing vapors, stay upwind. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Do not enter fire area without structural fire fighter's protective equipment including NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in positive pressure mode. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. Extinguish only if fire can be stopped. Wear full fire-fighting turn out gear and NIOSH/MSHA approved self-contained breathing apparatus (SCBA) where exposure to vapor is present.

⑥. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Flammable Liquid and Vapor; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. For large spills evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate.

6.2 ENVIRONMENTAL PRECAUTIONS:
Keep out of water sources and sewers. Do not flush into surface water or sanitary sewer system. Risk of explosion.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Methods for cleanup and containment:
Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. Place saturated absorbent in an approved container for disposal. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.
Methods for disposal:
Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace reside. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

REPORTABLE QUANTITY (RQ): 5000lbs.
The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the

metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Liquid evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:
Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C (59-77°F). Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally.

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Acetic Acid	64-19-7	99.85	10ppm TWA (ACGIH)
	EC-No.200-580-7		15ppm STEL (ACGIH)
	Index-No.607-002-00-6		10ppm REL (NIOSH)
	Reg.-No. 01-2119475328-30-XXXX		15ppm STEL (NIOSH)
			10ppm PEL (OSHA Z-1)
			10ppm TWA (OSHA Z-1)
			50ppm (IDLH)

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
(REL) = Recommended Exposure Limit
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For vapor concentrations 1 to 10 times ACGIH TWA use air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TWA and in confined areas use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

BODY CLOTHING: Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.
Full contact: Glove material: butyl-rubber
Glove thickness: 0.7 mm
Break through time: > 480 min
Splash contact: Glove material: natural latex
Glove thickness: 0.6 mm
Break through time: > 30 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION> Use safety eyewear with splash guards or face shield. A safety shower and eyewash should be easily accessible to the work area.

⑨. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:
Acetic Acid 64-19-7

Appearance----------> Clear Liquid
Color----------> Colorless
Odor----------> Pungent, Vinegar-like odor
Odor Threshold---------- > No data available
pH---------- > 2.4 at 60.05 g/l @20°C
Molecular weight---------- > 60.05amu
Melting/Freezing Point----------> 16.2°C (61.2°F)
Boiling Range (°F)---------- > 117 - 118°C (243 - 244°F)
Specific Gravity---------- > 1.049@25°C (77°F)
Vapor Pressure----------> 11.4mmHg@20°C (68°F)
Vapor Density (air=1)----------> 2.07
Water Solubility---------- > complete
Partition Coefficient N-Octanol/water- > log Pow -0.17
Evaporation Rate (Butyl Acetate=1)----> 0.97
Flash Point----------> 40.0°C (104.0°F) - closed cup
Upper Flammability Limit----------> 19.9% (V)
Lower Flammability Limit----------> 4% (V)
Auto-ignition Temperature----------> 485.0°C (905°F)
Decomposition Temperature----------> No data available
Viscosity----------> No data available
Explosive Properties----------> No data available
Oxidizing Properties---------- > No data available

9.2 OTHER INFORMATION----------> No data available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: Vapor/air-mixtures are explosive at intense warming.

10.2 CHEMICAL STABILITY: Unstable ( ) Stable (X)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
Risk of explosion with: peroxi compounds, perchloric acid, fuming sulfuric acid, phosphorus halides, hydrogen peroxide, chromium(VI) oxide, potassium permanganate, Peroxides, Strong oxidizing agents Risk of ignition or formation of inflammable gases or vapors with:
Metals: Iron, Zinc, Magnesium, Mild steel. Possible formation of: Hydrogen

HAZARDOUS POLYMERIZATION: May occur ( ) Will not occur (X)

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

10.5 INCOMPATIBLE MATERIALS: Ammonium Nitrate, Chlorine trifluoride, strong bases, strong acids, strong oxidizing agents, bromine pentafluoride.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Exposure to liquid causes severe eye burns, damage irreversible, exposure to vapors causes eye irritation; Symptoms are eye irritation, burning sensation, pain, watering and/or change of vision;

Skin> Causes skin burns, may be harmful if absorbed through skin; Symptoms are redness or discoloration, swelling, itching, burning or blistering.

Inhalation> Causes respiratory tract irritation; Symptoms are nasal discharge, hoarseness, coughing, chest pain, and breathing difficulty. Accumulation of fluid in lungs, symptoms can be delayed for several hours.

Ingestion> Causes digestive tract burns, Symptoms are nausea, vomiting, loss of appetite, diarrhea. In addition inflammation of mouth, throat, esophagus and/or stomach.

Chronic:

Medical Conditions Aggravated by Exposure> Significant exposure to this chemical may adversely affect people with disease of the:
Respiratory tract, skin, eyes.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit)	Inhalation LC50
Acetic Acid	3.2-5.6g/kg	1.1g/kg	>16000ppm/4hr

SKIN CORROSION/IRRITATION: Causes burns. Rabbit.

SERIOUS EYE DAMAGE/EYE IRRITATION: Corrosive to eyes. Rabbit
Causes serious eye damage: Risk of blindness. Risk of corneal clouding.

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS: Shows mixed results for mutagenic potential in vitro.

TERATOGENICITY: Did not show teratogenic effects in animal experiments.

CARCINOGEN STATUS:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No evidence of reproductive effects.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available
Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL INFORMATION:
Target organ effects: Overexposure may cause: Injury to eyes, digestive tract damage, respiratory tract damage and skin damage.

RTECS AF1225000

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS
May be dangerous if it enters water intakes.
Notify local health and pollution control officials.
Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY (Acute):
The aquatic toxicity and biodegradation of acetic acid are expected to be influenced by its potential to lower pH.
Exhibits slight acute toxicity to aquatic species.
Toxicity to fish:

LC50 Oncorhynchus mykiss (rainbow trout)	**1,000 mg/l -**	**96 h**
LC50 Fathead Minnow	**79-88ppm –**	**96 h**
LC50 Fathead Minnow	**92-106ppm –**	**48 h**
LC50 Fathead Minnow	**106-122ppm –**	**24 h**
LC50 Mosquitofish	**251ppm –**	**96 h**

Toxicity to daphnia and other invertebrates:

EC50 Daphnia magna (Water flea)	**300.82 mg/l –**	**48 h**

Method: OECD Test Guideline 202

12.2 PERSISTANCE AND DEGRADABILITY:
Acetic Acid will biodegrade readily if released to water (e.g. BOD 5day 63-81%).
Atmospheric photochemical degradation half-life is estimated to be 26.7 days.

12.3 BIOACCUMULATIVE POTENTIAL:
The log n octanol/water partition coefficient is 0.17. This material has a low potential to bio-accumulate.

12.4 MOBILITY IN SOIL: No data available

12.5 RESULTS OF PBT AND vPvB: No data available

12.6 OTHER ADVERSE EFFECTS: Biological effects: Harmful effect due to pH shift. Caustic even in diluted form. Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:
Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with

all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID numbers are: D001 and D002

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

14.1 USDOT ID Number----------> UN2789
14.2 USDOT Shipping Name----------> Acetic Acid, Glacial
14.3 USDOT Hazard Classification-------> 8 (Corrosive Material)
USDOT Label Codes----------> 8,3 (Corrosive, Flammable Liquid
14.4 USDOT Package Code----------> II
14.5 Marine Pollutant----------> No
14.6 Special precautions for user--------> None
Emergency Response Guide--------> 132
Reportable quantity----------> 5000lbs.

IMDG
14.1 ID Number----------> UN2789
14.2 Proper shipping name----------> ACETIC ACID, GLACIAL
14.3 Hazard Classification----------> 8 (Corrosive Material)
Label Codes----------> 8 (3)
14.4 Package Code----------> II
14.5 Marine Pollutant----------> No
14.6 Special precautions for user----------> None
EMS-Number----------> F-E, S-C

IATA
14.1 ID Number----------> UN2789
14.2 Proper shipping name----------> ACETIC ACID, GLACIAL
14.3 Hazard Classification----------> 8 (Corrosive Material)
Label Codes----------> 8 (3)
14.4 Package Code----------> II
14.5 Environmental hazard----------> No
14.6 Special precautions for user----------> None

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)
SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed
SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard, Fire Hazard.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed
Reportable Quantity - 5,000 pounds.

SECTION 101(14) Reportable Quantity: 5,000 lbs

Massachusetts Right to Know Components
Acetic acid CAS-No.64-19-7

Pennsylvania Right to Know Components
Acetic acid CAS-No.64-19-7

New Jersey Right to Know Components
Acetic acid CAS-No.64-19-7

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)
Acetic Acid CAS 64-19-7 is listed on the TSCA Inventory.

International Inventories:

Country or Region	Inventory Name	On inventory yes/no
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes

Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Japan	Industrial Safety & Health Law Inventory (ISHL)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Mexico	National Inventory of Chemical Substances (INSQ)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Switzerland	Inventory of Notified New Substances (CHINV)	Yes
Taiwan	National Existing Chemical Inventory (NECI)	Yes
United States & Puerto Rico	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION

HMIS (Hazardous Materials Identification System)
Hazard Rating:

4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=3 Fire=2 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=3 Fire=2 Reactivity=0 PPE=H

Hazard statement(s) from Section 2 and 3:
H226 Flammable liquid and vapor.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Date of preparation--------> February 23, 2005
Revision Number: Added REACH registration numbers. Section 3 and 8
Revision Date----------> December 19, 2018
Prepared by----------> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists
AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute
API - American Petroleum Institute
CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act
DOT - U.S. Department of Transportation
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer
MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association

NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System