Safety Data Sheet

Date printed: 4/25/2017
Date updated: 3/27/2017

Section 1: Product & Company Identification

1.1 Product Name: **NATURAL ACETIC ACID**
Chemical name: Acetic acid, natural
Product Number: 9294
Brand: **Elan Inc.**
CAS Number: **64-19-7**
EC Number: **200-580-7**
FEMA Number: 2006

1.2 Recommended use of chemical: Intermediate chemical used in flavor and food application

1.3 Supplier details:

Elan Inc.
268 Doremus Avenue
Newark, NJ 07105
U.S.A.
(973) 344-8014
jbissonette@elan-chemical.com

1.4 **Emergency telephone:** **(800) 424-9300 (Chemtrec)**

Section 2: Hazard(s) Identification

2.1 **Classification of the Substance or mixture:** GHS classification in accordance to 29 CFR 1910 (OSHA HCS)

Physical Hazard(s): Flammable liquids: Catgeory 3

Health Hazard(s): Skin corrosion: Category 1A
Serious eye damage: Category 1

Environmental Hazard(s): Not a Hazard

2.2 **Label Elements:**

Pictogram(s):

Signal word: **Danger**

Hazard Statement(s):

Physical Hazard(s)

H226 Flammable liquid and vapor

Health Hazard(s)

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage

Environmental Hazard(s) N/A

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… thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P363	Wash contaminated clothing before reuse.
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/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
P370+P378	In case of fire: Use … to extinguish.

Storage:

P403+P235	Store in a well-ventialted place. Keep cool.
P405	Store locked up.

Disposal:

P501	Dispose of contents/container to … your waste control program

2.3 Other Hazards:

No additional information available

Section 3: Composition/Information on Ingredients

3.1 Substances:

Identity:	Acetic acid, natural		
Synonyms:	Vinegar acid, Ethanoic Acid		
CAS Number:	64-19-7		
EC Number:	200-580-7		
Purity:	90.0% min.		
Molecular Formula:	**C2H4O2**	Molecular Weight:	60.05 g/mol

3.2 Mixtures:

Not applicable

Section 4: First Aid Measures

4.1 Description of necessary measures:

Inhalation Exposure:	If inhaled, move to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.
Skin Exposure:	In case of contact, immediately wash skin with soap and copious amounts of water. Consult a physician.
Eye Exposure:	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes as a precaution.
Oral Exposure:	If swallowed; do not induce vomiting. Wash out mouth with water provided person is conscious. Call a physician.

4.2 Most important symptoms/effects, acute and delayed: If you feel unwell, seek medical advice (show the label where possible)

4.3 Indication of immediate medical attention and special treatment, if necessary: If the person is unconscious immediately call 911. Never give anything by mouth to an unconscious person.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Suitable:	For smaller fires use:	Foam Carbon Dioxide Dry Chemical Powder
	For Larger fires use:	From a distance use very large quantites of misted water (flooding).
Unsuitable:	Unknown	

5.2 Specific hazards arising from the chemical: Emits toxic fumes under fire conditions – carbon oxides.

5.3 Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.4 Further information: Use flooding water to cool unopened containers

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective equipment, and emergency procedures: Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors, mist or gas. Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in lower areas.

6.2 Environmental precau Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Contain spillage and ventilate.

Collect with a properly grounded dedicated wet vacuum and place in container for waste disposal (see company waste SOP)

Section 7: Handling and Storage Procedures

7.1 Precautions for safe handling: Do not breathe vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. No smoking! Avoid any electrostatic charges. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. All equipment used when handling the product must be grounded. Contaminated rags and cloths must be put in fireproof containers for disposal.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from heat and open flame. Store container(s) in a cool & dry place.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters: TWA 10.00000ppm USA. ACGIH Threshold Limit Values (TLV)
STEL 15 ppm USA. ACGIH Threshold Limit Values (TLV)

8.2 Appropriate Engineering Controls: Practice proper hygienic and work place safety procedures.

8.3 Individual protection measures (PPEs):

Eye Protection:	Chemical Safety goggles
Skin (Hand) Protection:	Chemical resistant gloves
Respiratory protection:	At a minimum, wear a NIOSH-approved full-face airpurifying respirator

Other Information:	Wash contaminated clothing before reuse Wash thoroughly after handling When using do not eat, drink or smoke

Section 9: Physical/Chemical Properties

Appearance:	Colorless to slightly yellow liquid
Odor:	N/A
Odor Threshold:	N/A
pH:	2.4
Melting point/freezing point:	16.2 °C
Initial Boiling Point and Boiling:	117-118 °C
Flash Point:	104.0 °F 40.0 °C
Evaporation Rate:	N/A
Flammability (solid, gas):	N/A
Upper.lower flammability or explosive limits:	19.9 % 4% (V/V)
Vapor pressure:	15.2 hPa (11.4 mmHg) at 20.0 °C
Vapor Density:	4.15 - (Air = 1.0)
Relative Density:	1.047-1.059 g/cm3
Refractive index:	1.371-1.376
Solubility (ies):	completely miscible
Partition coeffecient: n-octanol/water:	log Pow: -0.17
Auto-ignition Temperature:	905 °F 485 °C
Decomposition Temperature:	N/A
Viscosity:	N/A

Section 10: Stability and Reactivity

10.1	Reactivity:	no data available
10.2	Chemical Stability:	Stable under recommended storage conditions.
10.3	Possibility of hazardous reactions:	no data available
10.4	Conditions to avoid:	Heat, flames and sparks
10.5	Incompatible material(s):	Oxidizing agents. Acids and Bases
10.6	Hazardous Decomposition Products:	no data available

Section 11: Toxicological Information

11.1 Information on the likely routes of exposure:

Inhalation:	Maybe harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory system.
Ingestion:	Harmful if swallowed.
Skin Contact:	Causes burns.
Skin Absorption:	Harmful if absorbed through skin.
Eye Contact:	Causes burns.

11.2 Symptoms related to the physical, chemical and toxicological charcteristics: Basic symptoms include, but are not exclusive, irritation, nausea, unconscientiousness (consult specialist or Chemtrec).

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure: Consult physician, specialist and/or Chemtrec.

11.4 Numerical measures of toxicity (acute estimates): To the best of our knowledge, the toxicological properties are the following:

Oral: rat LD50:	3,310 mg/kg
Dermal: rat LD50:	1,112 mg/kg
Inhalation: Rat LC50:	11.4 mg/l - 4 h

Section 12: Ecological Information

12.1	Ecotoxicity (aquatic and terrestrial):	no data available
12.2	Persistence and degradability:	no data available
12.3	Bioaccummulative potential:	no data available
12.4	Mobility in soil:	no data available
12.5	Other adverse effects:	no data available

Section 13: Disposal Considerations

Disposal Instructions:	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national and international regulations.
Local disposal regualtions:	Dispose in accordance with all applicable regulations.
Hazardous waste code:	Not established.
Waste from residues/unused products:	Empty containers or liners may retain some product residues. This material and its products container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is empty.

Section 14: Transportation Information

DOT (US)

UN#:	2789
Proper Shipping Name:	Acetic Acid, glacial
Class:	8 (3)
Packing Group:	II

IMDG

UN#:	2789
Proper Shipping Name:	Acetic Acid, glacial
Class:	8 (3)
Packing Group:	II

IATA

UN#:	2789
Proper Shipping Name:	Acetic Acid, glacial
Class:	8 (3)
Packing Group:	II

Section 15: Regulatory Information

SARA 302 Components
Not subject to reporting requirements of SARA Title III, section 302.

SARA 313 Components
Not subject to reporting requirements of SARA Title III, section 313.

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components

Acetic Acid, glacial CAS#: 64-19-7 Revison Date: 4-24-1993

Pennsylvania Right to Know Components

Acetic Acid, glacial CAS#: 64-19-7 Revison Date: 4-24-1993

New Jersey Right to Know Components

Acetic Acid, glacial CAS#: 64-19-7 Revison Date: 4-24-1993

TSCA On inventory list

California Prop. 65 Components
not listed

Section 16: Other Information

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s):

C Corrosive.

R - phrase(s):

R: 10 35 Flammable. Causes Severe Burns

S - phrase(s):

S: 26 36/37/39 45 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable PPE. In case of accident or if you feel unwell, seek medical advice immediately.

HMIS Rating		**NFPA Rating**	
Health hazard:	3	Health hazard:	3
Chronic Health hazard:	*	Fire hazard:	2
Flammability:	2	Reactivity hazard:	0
Physical hazard:	0		

FEMA GRAS™ (Generally Recognized As Safe) status for the use of a flavor ingredient in food only stipulates current regulatory acceptability for oral ingestion as a food item and does not provide regulatory authority and/or acceptability in the U.S for the use of the flavor ingredient in devices which cause the flavorant to be inhaled.
Elan, Inc. does not represent or suggest that this flavor ingredient is safe for use in E-cigarettes.

This safety data sheet is intended to meet the specific requirements of GHS and should be used accordingly. While the information has been obtained from sources believed to be accurate and reliable, no warranty, expressed or implied, can be made with regard to its completeness, correctness or accuracy. Any users or handlers of this product who are not under the direct control of Elan Inc. are responsible for evaluating this information in light of their particular situation and are responsible for all losses, damages or expenses that result while this material is under their control. It is also the responsibility of the users and handlers to observe any and all laws and regulations (Global, Federal, State and Local) concerning the transportation, use, handling, storage and disposal of this product.

1. Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Sixth revised edition, United Nations, 2015.
2. ISO 11014:2009 Safety data sheet for chemical products -- Content and order of sections.
3. American National Standard for Hazardous Industrial Chemicals-MSDS Preparation (ANSI Z400.1/Z129.1-2010)
4. U.S. DOL, OSHA, 29 CFR 1910.1200, HAZCOM.