Vinegar (40 to 100 Grain)

Safety Data Sheet

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

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

1.1. Product identifier

Product form : Mixture.

Product name : Vinegar (40 to 100 grain).

Other means of identification : 40 - 100 grain vinegar.

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

Use of the substance/mixture : Food Product/Food Ingredient.

1.3. Details of the supplier of the safety data sheet

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Contact Name: Shen Chang
VP of Quality, Food Safety
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1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC - Day or Night.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irritant 2A H319.

Full text of H-phrases: see section 16.

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US) : Warning.

Hazard statements (GHS-US) : H319 – Causes serious eye irritation.

Precautionary statements (GHS-US) : P264 - Wash exposed skin thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection.
P305 + P351 + P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 20 minutes.
P337 + P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS-US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Acetic Acid	(CAS No) 64-19-7	4 - 10	Flam. Liq. 3, H226. Acute Tox. 4 (Dermal), H312. Skin Corr. 1A, H314. Aquatic Acute 3, H402.

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Never give anything by mouth to an unconscious individual.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Gently wash with plenty of mild soap and water. Take off contaminated clothing and wash it before reuse.

First-aid measures after eye contact : Immediately flush with large amounts of water, holding eyelids open, for at least 20 minutes. Repeat if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance if irritation persists.

First-aid measures after ingestion : Drink plenty of water. Do not induce vomiting. Do not give emetics or baking soda. Get medical advice/attention.

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

Symptoms/injuries after inhalation : Prolonged or excessive inhalation may cause respiratory tract irritation.

Symptoms/injuries after skin contact : Prolonged contact with material may irritate skin.

Symptoms/injuries after eye contact : Irritating to the eyes.

Symptoms/injuries after ingestion : No hazard in normal use. If accidentally ingested in large quantities, may cause gastrointestinal distress.

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 : Any. Use media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Material is not combustible.

Reactivity : Stable under normal conditions of use.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection to protect from hazardous combustion products/oxygen deficiencies.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes. Evacuate area.

6.1.2. For emergency responders

Protective equipment : Wear PPE to prevent skin and eye contact.

Emergency procedures : Keep unauthorized personnel away.

6.2. Environmental precautions

Avoid release to the environment : Dike for treatment or disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

6.3. Methods and material for containment and cleaning up

For containment : Contain spilled material. Water may be used to dilute.

Methods for cleaning up : Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements. Water may be used to dilute.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Always wash with plenty of mild soap and water after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed in a dry and well-ventilated place.

Incompatible products : Store away from strong oxidizing materials. Strong bases.

7.3. Specific end use(s)

Food Product/Food Ingredient.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Vinegar	
ACGIH	Not Established.
OSHA	Not Established.

Acetic Acid (64-19-7)		
ACGIH	ACGIH (TWA) (mg/m³)	25 mg/m³
ACGIH	ACGIH (TWA) (ppm)	10 ppm
ACGIH	ACGIH (STEL) (mg/m³)	37 mg/m³
ACGIH	ACGIH (STEL) (ppm)	15 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	25 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	25 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	37 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	15 ppm

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. General ventilation used in combination with local exhaust as necessary to control airborne contaminants to below acceptable exposure guidelines.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : In case of repeated or prolonged contact wear gloves made of Butyl rubber or equivalent material.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : When prolonged or frequently repeated contact could occur, use protective clothing made of Butyl rubber or equivalent material.

Respiratory protection : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid.

Color : Appropriate color for type of vinegar.

Odor : Appropriate odor for type of vinegar.

Odor threshold : No data available.

pH : 2.3 at 10% acetic acid (calculated).

Relative evaporation rate (butyl acetate=1) : No data available.

Melting point : No data available.

CONTINUED FROM 9.1.

Freezing point	:	-3°C (26°F) at 10% acetic acid (calculated).
Boiling point	:	101°C (214°F) @ 760 mm Hg at 10% acetic acid (calculated).
Flash point	:	Not applicable.
Auto-ignition temperature	:	No data available.
Decomposition temperature	:	No data available.
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	16.9 mm Hg @ 68°F at 10% acetic acid (calculated).
Relative vapor density at 20 °C	:	1.01 at 10% acetic acid (Water = 1).
Relative density	:	No data available.
Solubility	:	Soluble in water.
Log Pow	:	No data available.
Log Kow	:	No data available.
Viscosity, kinematic	:	No data available.
Viscosity, dynamic	:	No data available.
Explosive properties	:	No data available.
Oxidizing properties	:	Incompatible with strong oxidizers.
Explosive limits	:	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Refer to Section 10 on Incompatible Materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

10.6. Hazardous decomposition products

Combustion of surrounding materials may produce carbon monoxide and other harmful substances.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Acetic Acid (64-19-7)	
LD50 oral rat	3310 mg/kg
LD50 dermal rabbit	1130 mg/kg
ATE US (oral)	3310.000 mg/kg body weight.
ATE US (dermal)	1130.000 mg/kg body weight.

Skin corrosion/irritation	:	Not classified. pH: 2.3 at 10% acetic acid (calculated).
Serious eye damage/irritation	:	May causes serious eye irritation. pH: 2.3 at 10% acetic acid (calculated).
Respiratory or skin sensitization	:	Not classified.
Germ cell mutagenicity	:	Not classified.
Carcinogenicity	:	Not classified.

CONTINUED FROM 11.1.

Reproductive toxicity : Not classified.

Specific target organ toxicity (single exposure) : Not classified.

Specific target organ toxicity (repeated exposure) : Not classified.

Aspiration hazard : Not classified.

Symptoms/injuries after inhalation : Prolonged or excessive inhalation may cause respiratory tract irritation.

Symptoms/injuries after skin contact : Prolonged contact with material may irritate skin.

Symptoms/injuries after eye contact : Irritating to the eyes.

Symptoms/injuries after ingestion : No hazard in normal use.

SECTION 12: Ecological information

12.1. Toxicity

Acetic Acid (64-19-7)	
LC50 fish	88 mg/l
EC50 Daphnia	90.1 mg/l

12.2. Persistence and degradability

Vinegar(40 to 100 grain), (8028-52-2)	
Persistance and degradability	Biodegrades readily under aerobic and anaerobic conditions.

12.3. Bioaccumulative potential

Vinegar (40 to 100 grain), (8028-52-2)	
Bioaccumulative potential	This product is not expected to bioaccumulate.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements.

SECTION 14: Transport information

In accordance with DOT.

Not regulated for transport.

Additional information

Other information : No supplementary information available.

ADR

No additional information available.

Transport by sea

No additional information available.

Air transport

No additional information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Acetic Acid (64-19-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory. Not listed on the United States SARA Section 313.	
RQ (Reportable quantity, section 304 of EPA's List of Lists):	5000 lb.

15.2. International regulations

CANADA

Vinegar (40 to 100 grain)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects.

Acetic Acid (64-19-7)	
WHMIS Classification	Class B Division 2 - Flammable Liquid. Class E - Corrosive Material.

EU-Regulations

No additional information available.

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified.

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

Acetic Acid (64-19-7)
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities.
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations.
U.S. - Massachusetts - Right To Know List.
U.S. - New Jersey - Right to Know Hazardous Substance List.
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances.
U.S. - Pennsylvania - RTK (Right to Know) List.
U.S. - Washington - Permissible Exposure Limits - TWAs.

SECTION 16: Other information

Revision date : 06/012015

Data sources : ChemADVISOR, Inc.[https://www.chemadvisor.com]. GESTIS DNEL Database [http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates$fn=default.htm$vid=dneleng:ddbeng$3.0/].

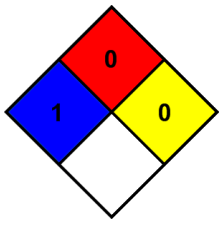
Full text of H-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4.
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3.
Eye Irritant 2A	Serious eye damage/eye irritation, Category 2A.
Flam. Liq. 3	Flammable liquids Category 3.
H226	Flammable liquid and vapor.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H402	Harmful to aquatic life.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard : 0 - Materials that will not burn.

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



HMIS III Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible.
Flammability	: 0 Minimal Hazard.
Physical	: 0 Minimal Hazard.

SDS US (GHS HazCom 2012)

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