



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

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Vinegar(>100 - 300 grain)  
 Other means of identification : >100 - 300 grain vinegar

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

Use of the substance/mixture : Product/Food Ingredient

#### 1.3. Details of the supplier of the safety data sheet

Mizkan Americas, Inc.  
 1661 Feehanville Dr., Suite 300  
 Mount Prospect, IL 60056  
 T (847) 590-0059  
[www.mizkan.com](http://www.mizkan.com)

#### 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)

Skin Corr. 1A H314  
 Serious Eye Damage 1 H318  
 Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger  
 Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage  
 Precautionary statements (GHS-US) : P260 - Do not breathe mist, spray, vapors  
 P264 - Wash exposed skin thoroughly after handling  
 P280 - Wear protective gloves, protective clothing, eye protection  
 P301 + P330 + P331 - If swallowed: rinse mouth. Do NOT induce vomiting. Drink plenty of water,  
 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 easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER  
 P321 - Specific treatment (see Section 4 on this label)  
 P363 - Wash contaminated clothing before reuse  
 P405 - Store locked up  
 P501 - Dispose of contents/container to comply with local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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

### 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	10 - 30	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.
- 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 : Wash with plenty of 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 : Irritating to the nose, throat, and respiratory tract.
- Symptoms/injuries after skin contact : Contact with material may irritate or burn skin.
- Symptoms/injuries after eye contact : Extremely irritating to the eyes. If not removed promptly, will injure eye tissue, which may result in permanent damage, including blindness.
- Symptoms/injuries after ingestion : Can irritate or burn mouth, throat, and stomach if swallowed.

#### 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 : Use personal protective equipment as required. Wear personal protective equipment 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.

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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

Methods for cleaning up : LARGE SPILLS PROCEDURE:  
Contain spilled material. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime. Avoid runoff into storm sewers and ditches that lead to waterways. Treat or dispose of waste material as a weak acid in accordance with all local, state/provincial, and national requirements. SMALL SPILLS PROCEDURE:  
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 hands 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)

Use of the substance/mixture : 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/m <sup>3</sup> )	25 mg/m <sup>3</sup>
ACGIH	ACGIH (TWA) (ppm)	10 ppm
ACGIH	ACGIH (STEL) (mg/m <sup>3</sup> )	37 mg/m <sup>3</sup>
ACGIH	ACGIH (STEL) (ppm)	15 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	37 mg/m <sup>3</sup>
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. Recommended material: Butyl Rubber or equivalent material  
Eye protection : Wear chemical goggles or safety glasses for 100 to 200 grain. Wear chemical goggles plus face shield for 200 or 300 grain.  
Skin and body protection : When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

### 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 : 0.037-0.15 ppm acetic acid

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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

pH	: 2 at 30% acetic acid (calculated)
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: -9 °C (15°F) at 30% acetic acid (calculated)
Boiling point	: 103 °C (217°F) at 30% acetic acid (calculated)
Flash point	: Not Applicable
Auto-ignition temperature	: Not Applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not Applicable
Vapor pressure	: 15.6 mm Hg at 30% acetic acid (calculated)
Relative vapor density at 20 °C	: 1.03 - 1.04 at 30% 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	: Not Applicable
Oxidizing properties	: Incompatible with strong oxidizers.
Explosive limits	: Not Applicable

### 9.2. Other information

No additional information available

## 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 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	: Causes severe skin burns and eye damage. pH: 2 at 30% acetic acid (calculated)
Serious eye damage/irritation	: Causes serious eye damage pH: 2 at 30% acetic acid (calculated)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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

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
Symptoms/injuries after inhalation	: Irritating to the nose, throat, and respiratory tract.
Symptoms/injuries after skin contact	: Contact with material may irritate or burn skin.
Symptoms/injuries after eye contact	: Extremely irritating to the eyes. If not removed promptly, will injure eye tissue, which may result in permanent damage, including blindness.
Symptoms/injuries after ingestion	: Can irritate or burn mouth, throat, and stomach if swallowed.

### 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

No additional information available

#### 12.3. Bioaccumulative potential

Vinegar(>100 - 300 grain), concentrated (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

#### 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

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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

### 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(>100 - 300 grain), concentrated (8028-52-2)

WHMIS Classification Class E - Corrosive Material

##### 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

#### 15.2.2. National regulations

#### 15.3. US State regulations

##### 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 : 05/19/2015

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:ddb eng\\$3.0](http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates$fn=default.htm$vid=dneleng:ddb eng$3.0)].

Full text of H-phrases:

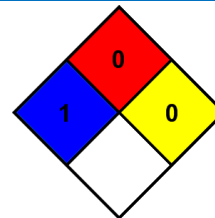
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H402	Harmful to aquatic life

# Vinegar(>100 - 300 Grain)

## Safety Data Sheet

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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)

*Mizkan Americas, Inc. does not represent or warrant that any hazard listed herein is the only hazard which exists. Effects can be aggravated by the presence of other materials or this material may aggravate or add to the effects of other materials. This information represents a compilation of data drawn directly from various sources. As of the date of preparation of this document, the information is believed to be accurate to the best of our knowledge.*

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