

# MATERIAL SAFETY DATA SHEET

## I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT IDENTIFICATION

PRODUCT NAME: VINEGAR  
SYNONYMS: 40 – 100 GRAIN VINEGAR (ALL TYPES)  
CHEMICAL NAME: VINEGAR  
CHEMICAL FAMILY: CARBOXYLIC ACID  
CAS NUMBER: 8028-52-2

### COMPANY IDENTIFICATION

MIZKAN AMERICAS, INC  
1661 FEEHANVILLE DRIVE  
SUITE 300  
MT. PROSPECT, ILLINOIS 60056  
(847) 590-0059  
CONTACT NAME: ZIA MIR DIRECTOR OF TECHNICAL SERVICES  
(PHONE EXTENSION 1331)  
DATE MADE: FEBRUARY 28, 2008

## II. COMPOSITION INFORMATION ON INGREDIENTS

<u>CHEMICAL NAME</u>	<u>AMOUNT</u>	<u>CAS NUMBER</u>
ACETIC ACID	4.0 – 10.0 %	64-19-7

(SEE SECTION 8 FOR EXPOSURE GUIDELINES)

(SEE SECTION 15 FOR REGULATORY INFORMATION)

### HAZARDS DISCLOSURE

THIS PRODUCT CONTAINS HAZARDOUS MATERIALS AS  
DEFINED BY THE OSHA HAZARD COMMUNICATION  
STANDARD 29 CFR 1910.1200

## III. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

EYE IRRITANT. PROLONGED OR EXCESSIVE  
EXPOSURE MAY CAUSE RESPIRATORY TRACT IRRITATION

POTENTIAL HEALTH EFFECTS

EYE:

IRRITATING TO THE EYES

INHALATION:

PROLONGED OR EXCESSIVE INHALATION MAY CAUSE  
RESPIRATORY TRACT IRRITATION

INGESTION:

NO HAZARD IN NORMAL USE

CARCINOGENICITY INFORMATION:

NO KNOWN CANCER HAZARDS

REPRODUCTIVE HAZARDS:

NOT A REPRODUCTIVE HAZARD

#### **IV. FIRST AID MEASURES**

EYE CONTACT FIRST AID:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER

INHALATION FIRST AID:

IF EXPOSED TO EXCESSIVE LEVELS OF FUMES, REMOVE TO FRESH  
AIR

INGESTION FIRST AID:

IF SWALLOWED IN LARGE AMOUNTS, WATER SHOULD BE  
CONSUMED TO DILUTE. DO NOT INDUCE VOMITING. DO NOT GIVE  
EMETICS OR BAKING SODA

#### **V. FIRE FIGHTING MEASURES**

FLAMMABLE PROPERTIES:

FLASH POINT: NOT APPLICABLE – NO FLASH WHEN SAMPLE OF 100  
GRAIN WHITE DISTILLED VINEGAR TESTED IN TAG CLOSED CUP  
TESTER

FLAMMABLE LIMITS IN AIR:

LEL: NOT APPLICABLE

UEL: NOT APPLICABLE

EXTINGUISHING MEDIA:

WILL NOT BURN

FIRE & EXPLOSION HAZARDS:

MATERIAL WILL NOT BURN

## **VI. ACCIDENTAL RELEASE MEASURES**

### **SAFEGUARDS (PERSONNEL):**

PROTECT EYES FROM EXPOSURE. AVOID BREATHING VAPOR.

### **INITIAL CONTAINMENT:**

WATER MAY BE USED TO DILUTE. TREAT OR DISPOSE OF WASTE MATERIAL AS A WEAK ACID IN ACCORDANCE WITH ALL LOCAL STATE/PROVINCIAL AND NATIONAL REQUIREMENTS.

### **LARGE SPILLS PROCEDURE:**

WATER MAY BE USED TO DILUTE. TREAT OR DISPOSE OF WASTE MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE/PROVINCIAL AND NATIONAL REQUIREMENTS.

### **SMALL SPILLS PROCEDURE:**

WATER MAY BE USED TO DILUTE. TREAT OR DISPOSE OF WASTE MATERIAL AS A WEAK ACID IN ACCORDANCE WITH ALL LOCAL, STATE/PROVINCIAL AND NATIONAL REQUIREMENTS.

## **VII. HANDLING AND STORAGE**

### **HANDLING (PERSONNEL):**

AVOID BREATHING VAPOR. AVOID CONTACT WITH EYES.

## **VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **ENGINEERING CONTROLS:**

GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS.

### **EYE / FACE PROTECTION REQUIREMENTS:**

WHERE CONTACT WITH THIS MATERIAL IS LIKELY, EYE PROTECTION IS RECOMMENDED.

### **SKIN PROTECTION REQUIREMENTS:**

NONE NEEDED FOR PROPER USE IN ACCORDANCE WITH LABEL DIRECTIONS.

### **RESPIRATORY PROTECTION REQUIREMENTS:**

UNDER NORMAL USE CONDITIONS, WITH ADEQUATE VENTILATION, NO SPECIAL HANDLING EQUIPMENT IS REQUIRED.

### **EXPOSURE GUIDELINES:**

**NOTE, THESE VALUES REFER TO THE ACETIC ACID CONTENT**

OSHA permissible Exposure Limit (PEL).....10 ppm acetic acid (25 mg/m<sup>3</sup>)  
 (The PEL is the official OSHA occupational exposure standard, and is an 8  
 hour time weighted average (TWA))  
 ACGIH Threshold Limit value (TLV).....10 ppm acetic acid (25 mg/m<sup>3</sup>)  
 (The TLV is the 8hour TWA occupational exposure guidance level  
 recommended by the American Conference of Governmental Industrial  
 Hygienists)  
 ACGIH Short Term Exposure Limit (STEL)...15 ppm acetic acid (37  
 mg/m<sup>3</sup>)  
 (The STEL is a level that can be permitted for up to 15 minutes, up to 4 times  
 per day, provided the overall workshift average does not exceed the TLV-  
 TWA)  
 Recommended Exposure Limit (REL).....10 ppm acetic acid (25 mg/m<sup>3</sup>)  
 (The REL is the maximum exposure level recommended by the National  
 Institute for Occupational Safety and Health)  
 Immediately Dangerous to Life or Health (IDLH) Level....50 ppm acetic acid  
 (125 mg/m<sup>3</sup>)  
 (The IDLH is the maximum concentration in air from which one could  
 escape within 30 minutes without escape impairing symptoms or irreversible  
 health effects)  
 Skin Designation.....No  
 Odor Designation.....0.037-0.15 ppm acetic acid

## IX. PHYSICAL AND CHEMICAL PROPERTIES

FORM	LIQUID
COLOR	APPROPRIATE COLOR FOR TYPE OF VINEGAR
ODOR	APPROPRIATE ODOR FOR TYPE OF VINEGAR
BOILING POINT	214 DEGREES F @ 760MM HG AT 10%ACETIC ACID (CALCULATED)
VAPOR PRESSURE	16.9MM HG @ 68 DEGREES F AT 10% ACETIC ACID (CALCULATED)
SOLUBILITY IN WATER	COMPLETE
SPECIFIC GRAVITY	1.01 AT 10% ACETIC ACID, (WATER=1)
MELTING/FREEZING POINT	~26 DEGREES AT 10% ACETIC ACID (CALCULATED)
PH	2.3 AT 10% ACETIC ACID (CALCULATED)
% VOLATILES	100%

## X. STABILITY AND REACTIVITY

STABILITY: STABLE

POLYMERIZATION: PRODUCT WILL NOT UNDERGO  
POLYMERIZATION

INCOMPATIBILITY: AVOID CONTACT WITH STRONG  
(WITH OTHER OXIDIZING AGENTS. AVOID  
MATERIALS) CONTACT WITH STRONG BASES

DECOMPOSITION: DECOMPOSITION WILL NOT OCCUR  
IF STORED AND HANDLES PROPERLY

#### **XI. TOXICOLOGICAL INFORMATION**

MISCELLANEOUS: NO TOXIC EFFECTS ARE LIKELY  
(OTHER THAN EYE IRRITATION FROM  
DIRECT CONTACT, RESPIRATORY  
IRRITATION FROM EXCESSIVE  
EXPOSURE TO VAPOR)

#### **XII. ECOLOGICAL INFORMATION**

BIODEGRADES READILY UNDER AEROBIC AND ANAEROBIC  
CONDITIONS. NO TENDENCY TO BIOACCUMULATE.

#### **XIII. DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL:  
TREAT OR DISPOSE OF WASTE MATERIAL AS A WEAK ACID IN  
ACCORDANCE WITH ALL LOCAL, STATE/PROVINCIAL AND  
NATIONAL REQUIREMENTS.

#### **XIV. TRANSPORTATION INFORMATION**

PRODUCT LABEL: VINEGAR

DOT SHIPPING NAME: NOT APPLICABLE

TECHNICAL SHIPPING NAME: NOT APPLICABLE

DOT HAZARD CLASS: NOT APPLICABLE

UN NUMBER: NOT APPLICABLE

PRODUCT RQ (LBS): QUANTITY CONTAINING THE  
EQUIVALENT OF 5,000 LB OF  
100 % ACETIC ACID (E.G., 50,000 LBS  
OF VINEGAR CONTAINING 10%  
ACETIC ACID)

DOT LABEL: NOT APPLICABLE

**XV. REGULATORY INFORMATION**

CANADIAN DISCLOSURE LIST  
ACETIC ACID (64-19-7)

CERCLA HAZARDOUS SUBSTANCES  
ACETIC ACID (64-19-7) – RQ = QUANTITY CONTAINING 5000 LB OF  
100% ACETIC ACID (E.G., 50,000 LBS OF 10% ACETIC ACID)

FDA (FOOD AND DRUG ADMINISTRATION):  
MATERIAL IS A GRAS (GENERALLY RECOGNIZED AS SAFE) FOOD  
INGREDIENT

**XVI. OTHER INFORMATION**

THE INFORMATION IN THIS MSDS RELATES TO THIS SPECIFIC  
MATERIAL. IT IS THE USER'S RESPONSIBILITY TO EVALUATE THE  
APPLICABILITY OF THIS INFORMATION FOR THEIR PARTICULAR  
CONDITIONS OF STORAGE, HANDLING AND USE.