

MATERIAL SAFETY DATA SHEET

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION

PRODUCT NAME: VINEGAR
SYNONYMS: (ALL TYPES)
CHEMICAL NAME: VINEGAR
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: APRIL 8, 2005

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 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:
COC FLASH POINT: NO FLASH POINT – WILL NOT BURN

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

RECOMMENDED EXPOSURE LIMIT: 10PPM ACETIC ACID

ODOR THRESHOLD: 0.037-0.15PPM ACETIC ACID

IMMEDIATE DANGEROUS TO LIFE OR HEALTH (IDLH) LEVEL:

1000 PPM ACETIC ACID
(THE IDLH IS THE MAXIMUM CONCENTRATION IN AIR FROM WHICH
ONE COULD ESCAPE WITHIN 30 MINUTES WITHOUT ESCAPE-
IMPAIRING SYMPTOMS OR IRREVERSIBLE HEALTH EFFECTS)

OSHA TWA: 10 PPM ACETIC ACID
ACGIH TWA: 10 PPM ACETIC ACID
OSHA STEL: 15 PPM

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
OXIDIZING AGENTS. AVOID
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 5000 LB (AS 100% ACETIC ACID)

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

XVI. OTHER INFORMATION

THE INFORMATION IN THIS MSDS RELATES TO THIS SPECIFIC
MATERIAL. IT IS THE USER'S RESPONSIBILITY TO EVALUATE THE