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

55 E. EUCLID AVENUE # 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

CHEMICAL NAME

AMOUNT

CAS NUMBER

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 10 PPM ACETIC ACID

ACGIH TWA: OSHA STEL:

15 PPM

IX. PHYSICAL AND CHEMICAL PROPERTIES

FORM

LIOUID

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

MELTING/FREEZING POINT

SPECIFIC GRAVITY

1.01 AT 10% ACETIC ACID, (WATER=1) ~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

INCOMPATIBILTY:

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)

ECOLOGICAL INFORMATION XII.

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 APPLICABILITY OF THIS INFORMATION FOR THEIR PARTICULAR CONDITIONS OF STORAGE, HANDLING AND USE.