

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product:	MZ-3, MZK-3	Trade Name:	Lock De-Icer Aerosol
Manufacturer:	AGS Company	Common Name:	Lock De-Icer Aerosol
Street Address:	2651 Hoyt St		
City/ State/ Zip	Muskegon Hts., MI 49444		
Phone:	800-253-0403		
Phone:	231-733-2101	Original Issue Date:	11/7/2006
FAX:	231-733-1784	Revision No.	5
Transportation Emergency:	CHEM-TEL	Date	12/10/2012
Phone:	800-255-3924		

SECTION 2 - COMPOSITION/ INFORMATION ON INGREDIENTS

ITEM		CAS NUMBER	WT/WT %
1	Mineral Spirits	64742-47-8	60-100%
2	Petroleum Distillates (Medium Aliphatic Solvent Naphtha - Petroleum)	64742-88-7	1-5%
3	Propane	74-98-6	7-13%

ITEM	Exposure Limits	LD/50, Route, Species	LC/50, Route, Species
1	100 ppm	>5000 mg/kg ORAL - RAT	1400 ppm/4H INHAL - RAT
2	100 ppm	6216 mg/kg ORAL - RAT	14.1 mg/l (4 hr) INHAL - RAT
3	1000 ppm	NOT Applicable	NOT AVAILABLE

SECTION 3 - HAZARDS IDENTIFICATION

ROUTE OF ENTRY:

EYE CONTACT: MAY CAUSE IRRITATION.
SKIN CONTACT: MAY CAUSE IRRITATION.
INHALATION: INHALATION OF SOLVENTS MAY CAUSE IRRITATION. PROPELLANT IS A SIMPLE ASPHYXIANT.
INGESTION: MAY CAUSE HEADACHE, NAUSEA, VOMITING, AND WEAKNESS.
SKIN ABSORPTION: NO DATA AVAILABLE.
EFFECTS OF ACUTE EXPOSURE: DIZZINESS, NAUSEA, IRRITATION TO SKIN & EYES.
EFFECTS OF CHRONIC EXPOSURE: SOLVENTS MAY CAUSE DEFATTING DERMATITIS.
EXPOSURE LIMIT OF MATERIAL: SEE SECTION 2

SECTION 4 - FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURE:

IN CASE OF EYE CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOUR OR SPRAY MISTY, REMOVE TO FRESH AIR. IF SWALLOWED; DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT @, TAG CLOSED CUP: LOWEST KNOWN VALUE IS MINERAL SPIRIT @ 43C
AUTOIGNITION TEMPERATURE: NOT AVAILABLE
SPECIAL PROCEDURES: WATER FROM FOGGING NOZZLES MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP IF EXPOSED TO EXTREME TEMPERATURES. FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN IN A FIRE INVOLVING THIS MATERIAL.
FLAMMABILITY: EXTREMELY FLAMMABLE
IF YES, UNDER WHICH CONDITIONS: EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
EXTINGUISHING MEDIA: WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.
UPPER FLAMMABLE LIMIT: 9.5
(% BY VOLUME)
LOWER FLAMMABLE LIMIT: 0.7
(% BY VOLUME)

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EXPLOSION DATA

SENSITIVITY TO STATIC DISCHARGE: NOT APPLICABLE
SENSITIVITY TO IMPACT: NOT APPLICABLE
HAZARDOUS COMBUSTION PRODUCTS: HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.
AEROSOL FLAME PROJECTION
CLASSIFIED AS: >15CM BUT <100CM
FLASHBACK: NONE

SECTION 6 - ACCIDENTAL RELEASE MEASURES

LEAK/SPILL: REMOVE ALL SOURCES OF IGNITION. USE AN INERT ABSORBENT MATERIAL, AND NON-SPARKING TOOLS. VENTILATE AREA. PREVENT FROM ENTERING A WATERCOURSE.

SECTION 7 - HANDLING AND STORAGE

STORAGE NEEDS: KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAMES.
ENGINEERING CONTROLS: VENTILATION - LOCAL (MECHANICAL IF USED INDOORS ON A CONTINUOUS BASIS).
HANDLING PROCEDURES & EQUIPMENT: STORE IN A COOL, WELL VENTILATED AREA NOT TO EXCEED 50 DEGREES C.
SYNERGISTIC MATERIALS: NONE KNOWN.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

GLOVES/TYPE: WEAR CHEMICAL RESISTANT GLOVES.
RESPIRATORY/TYPE: IF USED INDOORS ON A CONTINUOUS BASIS, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH/MSHATC 23C OR EQUIVALENT) IS RECOMMENDED.
EYE/TYPE: SAFETY GLASSES.
FOOTWEAR/TYPE: NOT NORMALLY REQUIRED.
OTHER/TYPE: NOT REQUIRED.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: AEROSOL
APPEARANCE: CLEAR
ODOR: HYDROCARBON
ODOR THRESHOLD: NOT AVAILABLE
VAPOUR PRESSURE(PSIG)-AEROSOL @ 20 40-50
BOILING POINT @ (CONC): 138-198
EVAPORATION RATE n-BUTYL ACETATE =1 LESS THAN 1
VAPOUR DENSITY (AIR=1) (BY WEIGHT): GREATER THAN 1
SOLUBILITY IN WATER g/L (20 DEG C) NEGLIGIBLE
pH: NA
SPECIFIC GRAVITY (LIQUID): 0.77-0.81
COEFFICIENT OF WATER/OIL DIST: NA
FREEZING POINT @: NA
AEROSOL % VOLATILE (BY WEIGHT): 99-100
SPECIFIC GRAVITY (AEROSOL): 0.71-0.75
 (See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

HAZARDOUS PRODUCTS OF DECOMPOSITION: HYDROCARBON FUMES & SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.
CHEMICAL STABILITY:
YES: UNDER NORMAL CONDITIONS.
NO, WHICH CONDITIONS?: NA
COMPATIBILITY WITH OTHER SUBSTANCES:
NO, WHICH ONES?: STRONG OXIDIZING AGENTS.
REACTIVITY CONDITIONS?: NA
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11 - TOXICOLOGICAL PROPERTIES

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REPRODUCTIVE EFFECTS: NO INFORMATION IS AVAILABLE AND NO ADVERSE EFFECTS ARE ANTICIPATED.
IRRITANCY OF MATERIAL: SLIGHT.
SENSITIZING CAPABILITY OF MATERIAL: UNKNOWN.
CARCINOGENICITY OF MATERIAL: THE INGREDIENTS OF THIS PRODUCT ARE NOT LISTED AS CARCINOGENS BY NTP, (NATIONAL TOXICOLOGY PROGRAM), NOT REGULATED AS CARCINOGENS BY OSHA AND HAVE NOT BEEN EVALUATED BY IARC, (INTERNATIONAL AGENCY FOR RESEARCH ON CANCER), NOR BY ACGIH (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS).
TERATOGENICITY: NO INFORMATION AVAILABLE AND NO ADVERSE EFFECTS ANTICIPATED.
MUTAGENICITY: NO INFORMATION AVAILABLE AND NO ADVERSE EFFECTS ANTICIPATED.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL: NA

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: DO NOT PUNCTURE OR INCINERATE CONTAINERS, EVEN WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL & FEDERAL REGULATIONS.

SECTION 14 - TRANSPORTATION INFORMATION

T.D.G. CLASSIFICATION: CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.1).
D.O.T. CLASSIFICATION: CONSUMER COMMODITY, ORM-D.

SECTION 15 - REGULATORY INFORMATION

CANADIAN REGULATIONS:

WHMIS CLASSIFICATIONS: A, B5, d2b
CNFC SECTION 3.3.5: LEVEL 3
CEPA: ALL SUBSTANCES IN THIS PRODUCT ARE LISTED ON THE CANDIAN DOMESTIC SUBSTANCES LIST (DSL) OR ARE REQUIRED TO BE LISTED.

U.S FEDERAL REGULATIONS:

HMIS RATING HEALTH: 2 MODERATE HAZARD
HMIS RATING FLAMMABILITY: 4 SEVERE HAZARD
HMIS RATING REACTIVITY: 0 MINIMAL HAZARD
HMIS RATING PERSONAL PROTECTION: B
NFPA CODE 30B: LEVEL 3
SARA 313 INFORMATION: THIS PRODUCT CONTAINS NO INGREDIENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW ACT OF 1986 & OF CFR 372.
CALIFORNIA PROPOSITION 65: THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT OF 1986: WARNING: THIS PRODUCT DOES NOT INTENTIONALLY CONTAIN ANYCHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
TSCA (TOXIC SUBSTANCES CONTROL ACT): ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.
VOC (w/w%): 99-100

SECTION 16 - OTHER INFORMATION

Disclaimer: The information contained herein is base on data available. However, no warranty is expressed or implied regarding the accuracy of the data or the results obtained from the use thereof. Because the information contained herein may be applied under conditions beyond our control, we assume no responsibility for its use.