WAVE ENERGY SYSTEMS INC -- 0140 WAVICIDE-01 (2% GLUTARALDEHYDE SOLN) HAL-HEN CAT#3248 -- 6840-01-164-3159

============= Product Identification ========================

Product ID:0140 WAVICIDE-01 (2% GLUTARALDEHYDE SOLN) HAL-HEN CAT#3248

MSDS Date:06/27/1994

FSC:6840

NIIN:01-164-3159

MSDS Number: CDKQK === Responsible Party ===

Company Name: WAVE ENERGY SYSTEMS INC

Address:25 MANSARD CT

City:WAYNE State:NJ

ZIP:07470-5000 Country:US

Info Phone Num:201-633-1012/800-252-1125

Emergency Phone Num:800-962-1253

CAGE:51365

=== Contractor Identification ===

Company Name: WAVE ENERGY SYSTEMS, INC.

CAGE:51365

======= Composition/Information on Ingredients ========

Ingred Name: GLUTARALDEHYDE

CAS:111-30-8

RTECS #:MA2450000 Fraction by Wt: 2.0%

Other REC Limits: NONE RECOMMENDED

OSHA PEL:C 0.2 PPM

ACGIH TLV:C 0.2 PPM; 9596

========== Hazards Identification ==============

LD50 LC50 Mixture:TLV: 0.2PPMV

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:THIS MIXTURE HAS NOT BEEN TESTED AS WHOLE.INGEST:MAY CAUSE NAU, VOMIT, GENERAL SYSTEMIC ILLNESS.EYES:CONTACT W/LIQ CAUSES IRRIT.SKIN:AVOID PROL/REP COTNACT W/SKIN AS POSSIBLITY OF SENS EXISTS.FULL STREN GTH SOLN MAY CAUSE SKIN TO YELLOW.INHAL:VAP FROM FULL STRENGTH SOLN MAY CAUSE NASAL DISCOMFORT.

Explanation of Carcinogenicity:PER MSDS:MIXUTRE CONTAINS NO HAZ INGREDS LISTED AS CARCINOGEN

Effects of Overexposure:NAUSEA,VOMITING,GENERAL SYSTEMIC ILLNESS.EYE IRRIT,SKIN SENSITIZATION,YELLOW SKIN,NASAL DISCOMFORT. Medical Cond Aggravated by Exposure:SEE HEALTH HAZARDS.
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First Aid:INGEST:DO NOT GIVE WATER.DO NOT INDUCE VOMITING.CALL PHYSICIAN.EYE:FLUSH W/PLENTY OF WATER.SEEK MED AID.SKIN:FLUSH THOROUGHLY W/WATER & REMOVE CONTAMIN CLOTH.INHAL:IRRIT DEVELOPS R
EMOVE TO FRESH AIR.
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Flash Point:NONE Autoignition Temp:Autoignition Temp Text:NP Lower Limits:NP Upper Limits:NP
Extinguishing Media:CARBON DIOXIDE, FOAM, DRY CHEMICAL. Fire Fighting Procedures:SELF-CONTAINED BREATHING APPARATUS & PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING CHEMICAL FIRES. Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.
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Spill Release Procedures:FLUSH HEAVILY W/WATER.VENTILATION IS RECOMMENDED.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.
=========== Handling and Storage ============
Handling and Storage Precautions:THIS PRODUCT SHOULD BE STORED @ROOM TEMPERATURE,PREFERABLY IN COOL PLACE.  Other Precautions:AVOID CONTACT W/EYES,PROLONGED/REPEATED CONTACT W/SKIN & CONTAMINATION OF FOOD.
====== Exposure Controls/Personal Protection ========
Respiratory Pr

S/POT CARCINOGENS BY EITHER NTP/IARC/OSHA.

otection:NOT GENERALLY REQUIRED BUT IN CONFINED OR POORLY VENTILATED AREA USE OF NIOSH APPROVED RESPIRATOR MAY BE REQUIRED. Ventilation:LOCAL EXHAUST SYSTEM MEETING ACGIH CRITERIA AS NEEDED TO AVOID EXPO TO VAPORS. Protective Gloves:PROTECTIVE GLOVES RECOMMENDED. Eye Protection:SAF GLASSES,SPLASH GOGG OR FACE SHIELD. Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER. Work Hygienic Practices:AVOID INHAL & CONTACT W/SKIN/EYES. Supplemental Safety and Health
========== Phy
sical/Chemical Properties ==========
HCC:N1 Boiling Pt:B.P. Text:212F,100C Melt/Freeze Pt:M.P/F.P Text:NA Decomp Temp:Decomp Text:NP Vapor Pres:16.9 Vapor Density:0.64 Spec Gravity:1.005-1.013 pH:6.30 Viscosity:NP Evaporation Rate & Deference:0.81, BUTYL ACETATE=1. Solubility in Water:COMPLETE. Appearance and Odor:CLEAR,SLIGHTLY YELLOWISH LIQUID WITH TYPICAL ALDEHYDE ODOR & ADDED LEMON SCENT. Percent Volatiles by Volume:NP Corrosion Rate:NP
========= Stability and Rea
ctivity Data ==========
Stability Indicator/Materials to Avoid:YES ALKALIES CATALYZE & ALDO-TYPE CONDENSATION. Stability Condition to Avoid:HIGH TEMPS(REMOVAL OF WATER 200F).ALKALIES CATALIZED & ALDO-TYPE CONDENSATION(EXO BUT NOT EXPECTED TO BE VIOLENT). Hazardous Decomposition Products:THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON MONOXIDE.
========= Disposal Considerations ==============

Waste Disposal Methods:WASTES RESULTING FROM USE OF PR

## OD MAY BE DISPO OF ON SITE OR AT APPROVED WASTE DISPO FACILITY.

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