

LIQUID DEVELOPMENT CO INC -- LDC-01 ELECTROCLEAN -- 6850-01-046-0291

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

Product ID:LDC-01 ELECTROCLEAN
MSDS Date:01/01/1992
FSC:6850
NIIN:01-046-0291
MSDS Number: BGHPF
=== Responsible Party ===
Company Name:LIQUID DEVELOPMENT CO INC
Address:3748 E 91ST STREET
City:CLEVELAND
State:OH
ZIP:44105
Country:US
Info Phone Num:216-641-9366
Emergency Phone Num:216-641-9366/
800-424-9300(CHEMTREC)
Preparer's Name:DOUG HUTCHINSON
CAGE:57868
=== Contractor Identification ===
Company Name:LIQUID DEVELOPMENT CO INC
Address:3748 E 91ST STREET
Box:City:CLEVELAND
State:OH
ZIP:44105-2156
Country:US
Phone:216-641-9366/800-424-9300(CHEMTREC)
CAGE:57868

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

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 70 - 80%
Other REC Limits:NONE SPECIFIED

Ingred Name:SODIUM HYDROXIDE (SARA III)
CAS:131

0-73-2
RTECS #:WB4900000
Fraction by Wt: 1 - 10%
Other REC Limits:NONE SPECIFIED
OSHA PEL:2 MG/M3
ACGIH TLV:C 2 MG/M3; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:CITRIC ACID, ANHYDROUS
CAS:77-92-9
RTECS #:GE7350000
Fraction by Wt: 10 - 20%
Other REC Limits:NONE SPECIFIED

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE & CHRONIC-INGESTION:BURNS
MOUTH,THROAT & STOMACH.DEATH MAY OCCUR.EYES:IRRITATION & BURNS
POSSIBLE BLINDNESS.SKIN: IRRITATION LEADING TO BURNS &
SCARRING.INHALATION:IRRITATION & BURNS.SEVERE PNEU MONITIS MAY
OCCUR.
Explanation of Carcinogenicity:NO EVIDENCE HAS BEEN FOUND TO SUSPECT
THESE CHEMICALS.
Effects of Overexposure:IRRITATION OF EYES. IRRITATION AND INFLAMMATION
OF SKIN. COUGHING AND BURNING OF LUNGS. BURNING OF MOUTH, THROAT
AND STOMACH.
Medical Condition
Aggravated by Exposure:IMPAIRED PULMONARY FUNCTION.
RESPIRATORY, SKIN, AND EYE DISORDERS.

===== First Aid Measures =====

First Aid:SEEK MEDICAL ATTENTION.INHALATION:REMOVE TO FRESH AIR.
EYE:IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES.
SKIN:IMMEDIATELY WASH WITH PLENTY OF WATER.REMOVE CONTAMINATED
CLOTHING. INGESTION:DO NOT INDUCE VOMITING.

===== Fire Fighting Measures =====

Flash Point:NON

E

Extinguishing Media:WATER, CARBON DIOXIDE, DRY CHEMICAL.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED
SELF-CONTAINED BREATHING APPARATUS & CHEMICAL RESISTANT CLOTHING.
USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED

Unusual Fire/Explosion Hazard:CONTACT WITH ALUMINUM, ZINC OR TIN MAY
PRODUCE FLAMMABLE HYDROGEN GAS.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE AND VENTILATE AREA.WEAR PROTECTIVE
CLOTHING.SMOTHER WITH EXCESS NEUTRALIZING AGENTS.SCOOP INTO
CONTAINER FOR PROPER DISPOSAL.DO NOT FLUSH INTO SEWER SYSTEM.
Neutralizing Agent:DILUTE ACETIC ACID

===== Handling and Storage =====

Handling and Storage Precautions:STORE BETWEEN 45-75F,OUT OF DIRECT
LIGHT,IN A WELL VENTILATED AREA.KEEP CONTAINERS TIGHTLY SEALED,AWAY
FROM ACIDS.

Other Precautions:DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.WASH
THOROUGHLY AFTER HANDLING.DO NOT EAT,DRINK
OR SMOKE IN WORK AREA.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR AS NECESSARY.

Ventilation:LOCAL EXHAUST VENTILATION IS REQUIRED.

Protective Gloves:RUBBER

Eye Protection:SAFETY CHEMICAL GOGGLES & FACE SHIELD

Other Protective Equipment:EYE WASH STATION & SAFETY SHOWER.CHEMICAL
RESISTANT BOOTS, APRON, AND PROTECTIVE CLOTHING AS REQUIRED BY JOB
CONDITIONS.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR
FOOTWEAR.

Supplemental Safety and Health

MSDS RECEIVED BY DGSC:OCT 23,1987.

===== Physical/Chemical Properties =====

HCC:B1

Boiling Pt:B.P. Text:>200F,>93C

Spec Gravity:1.044- 1.054

pH:13.00

Solubility in Water:COMPLETE

Appearance and Odor:CLEAR LIQUID, NO NOTICEABLE ODOR

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:Y

ES

ACIDS, ALUMINUM, ZINC & TIN

Stability Condition to Avoid: CONTACT WITH ACIDS, ALUMINUM, ZINC OR TIN.

Hazardous Decomposition Products: NONE

===== Disposal Considerations =====

Waste Disposal Methods: DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department of Defense.

The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.