

LIQUID DEVELOPMENT CO INC -- LDC-2805 NICKEL SOFT -- 6850-01-266-6622

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

Product ID:LDC-2805 NICKEL SOFT

MSDS Date:01/01/1990

FSC:6850

NIIN:01-266-6622

MSDS Number: BHYBC

=== Responsible Party ===

Company Name:LIQUID DEVELOPMENT CO INC

Address:3748 E 91ST STREET

City:CLEVELAND

State:OH

ZIP:44105-2156

Country:US

Info Phone Num:216-641-9366

Emergency Phone Num:216-641

-9366/800-424-9300(CHEMTREC)

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:NICKEL SULFAMATE

CAS:13770-89-3

RTECS #:QR9275000

Fraction by Wt: 50-60%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3

Ingred Name:WATER

CAS:7732-18

-5  
RTECS #:ZC0110000  
Fraction by Wt: 30-40%  
Other REC Limits:NONE SPECIFIED

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

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:EYES:IRRITATION. SKIN:NICKEL ITCH OR  
RASH, LEADING TO DERMATITIS. INHALATION:UPPER RESPIRATOR  
Y TRACT  
IRRITATION. INGESTION:MAY CAUSE GASTROINTESTINAL DISORDERS.  
Explanation of Carcinogenicity:NICKEL IS LISTED UNDER IARC AND NTP.  
Effects of Overexposure:EYES:IRRITATION. SKIN:NICKEL ITCH OR RASH.  
INHALATION:UPPER RESPIRATORY TRACT IRRITATION.  
INGESTION:GASTROINTESTINAL DISORDERS.  
Medical Cond Aggravated by Exposure:ASTHMA, ALLERGIES, KNOWN  
SENSITIZATION TO NICKEL, EASILY IRRITATED EYES OR RESPIRATORY  
PROBLEMS, CHRONIC SKIN DISORDERS.

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

First Aid:EYES:FLUSH WITH PLENTY OF WATER. SKIN:REMOVE CONTAMINATED  
WATER.FLUSH WITH PLENTY OF WATER. INHALATION:REMOVE TO FRESH  
AIR.GET MEDICAL ATTENTION. INGESTION:DO NOT INDUCE VOMIT.GET  
IMMEDIATE MEDICAL AT TENTION.

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

Flash Point:NONE  
Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY  
CHEMICAL.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED S

CBA &

FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF HAZARDOUS DECOMPOSITION PRODUCTS.

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

Spill Release Procedures:VENTILATE AREA. WEAR PROPER PROTECTIVE EQUIPMENT. SMOTHER WITH EXCESS NEUTRALIZING AGENT. SCOOP INTO CONTAINER FOR PROPER DISPOSAL.

Neutralizing Agent:SOD

A ASH (SODIUM CARBONATE) OR BAKING SODA (SODIUM BICARBONATE) 20% SOLUTION.

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

Handling and Storage Precautions:STORE BETWEEN 45-75F, OUT OF DIRECT LIGHT, WITH CONTAINER SEALED TIGHT.

Other Precautions:DO NOT EAT, DRINK OR SMOKE IN WORK AREA.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR AS APPROPRIATE FOR EXPOSURE OF CONCERN.

Ventilation:

LOCAL EXHAUST VENTILATION TO MAINTAIN CONCENTRATIONS BELOW TLV.

Protective Gloves:RUBBER GLOVES.

Eye Protection:CHEMICAL GOGGLES OR FACESHIELD.

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING (APRON, BOOTS, ETC). EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING SANITARY FACILITIES.

Supplemental Safety and Health

DO NOT GET ON SKIN, IN EYES OR ON CLOTHING. DO NOT BREATHE VAPORS OR MISTS. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

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

HCC:C2

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

Spec Gravity:1.23-1.24

Solubility in Water:COMPLETE

Appearance and Odor:BLUEISH-GREEN LIQUID, NO NOTICEABLE ODOR.

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

Stability Indicator/Materials to Avoid:YES

STRONG CAUSTICS.

Stability Condition to Avoid:HIGH TEMPERATURES AND OPEN FLAMES

Hazardous Decomposition Product

s:CARBON MONOXIDE, CARBON DIOXIDE,  
OXIDES OF SULFUR, NICKEL OXIDE, NITROGEN OXIDES.

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

Waste Disposal Methods:CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER.  
DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.  
DO NOT FLUSH DOWN THE SEWER SYSTEM.

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