

LIQUID DEVELOPMENT CO INC -- LDC-2803 HI-SPEED NICKEL -- 6850-01-053-4242

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

Product ID:LDC-2803 HI-SPEED NICKEL

MSDS Date:01/01/2001

FSC:6850

NIIN:01-053-4242

Status Code:A

MSDS Number: CLLHL

=== 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:216-641-9366/800-

424-9300(CHEMTREC)

Emergency Phone Num:800-424-9300

Chemtrec Ind/Phone:(800)424-9300

CAGE:57868

=== Contractor Identification ===

Company Name:FAISON AND CO

Address:5821 ARROWHEAD DR SUITE 102

Box:3131

City:VIRGINIA BEACH

State:VA

ZIP:23454

Country:US

Phone:757-490-6090

Contract Num:SP0450-01-M-ZG74

CAGE:1P430

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

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Composition/Information on Ingredients =====

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Minumum % Wt:50.
Maxumum % Wt:60.

Ingred Name:NICKEL SULFATE
CAS:7786-81-4
RTECS #:QR9350000
Minumum % Wt:10.
Maxumum % Wt:20.
OSHA PEL:1 MG/M3
ACGIH TLV:0.1 MG/M3
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:CITRIC ACID
CAS:77-92-9
RTECS #:GE7350000
Minumum % Wt:1.
Maxumum % Wt:10.

Ingred Name:FORMIC ACID
CAS:64-18-6
RTECS #:LQ4900000
Minumum % Wt:1.
Maxumum % Wt:10.
OSHA PEL:9 MG
/M3;5 PPM
ACGIH TLV:9.4 MG/M3;5 PPM
ACGIH STEL:19 MG/M3;10 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:AMMONIUM HYDROXIDE
CAS:1336-21-6
RTECS #:BQ9625000
Minumum % Wt:10.
Maxumum % Wt:20.
OSHA PEL:35 MG/M3
ACGIH TLV:17 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

Routes of Entry: Inhalation:YES Skin:UNKNOWN Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chr

toxic:SKIN: NICKEL ITCH OR RASH. EYE:

AMMONIA VAPORS ARE IRRITATING AND MAY DAMAGE. EXPOSURE TO VAPORS CAN CAUSE PERMANENT UPPER RESPIRATORY TRACT IRRITATION, PNEUMONITIS. INGESTION: COULD CAUSE CORROSIVE EFFECTS ON THROAT AND MOUTH.

Explanation of Carcinogenicity:SOLUBLE NICKEL COMPOUNDS.

Effects of Overexposure:SKIN ITCH, BURNING AND TEARING OF EYES, RUNNY NOSE, COUGHING AND CHEST PAIN.

Medical Cond Aggravated by Exposure:ASTHMA, ALLERGIES, KNOWN SENSITIZATION TO NICKEL

, EASILY IRRITATED EYES OR RESPIRATORY PROBLEMS, CHRONIC SKIN DISORDERS.

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

First Aid:SKIN&EYE: REMOVE CONTAMINATED CLOTHING FLUSH WITH LARGE QUANTITIES OF WATER. SEEK MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR AND GET MEDICAL ATTENTION. INGESTION: GET IMMEDIATE MEDICAL ATTENTION. DO NOT INDUCE VOMITING.

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

Flash Point:NONE

Extinguishing

Media:WATER, CO2, DRY CHEMICAL

Fire Fighting Procedures:CHEMICAL RESISTANT CLOTHING AND SELF-CONTAINED BREATHING APPARATUS SHOULD BE WORN IN CASE OF SPILL.

Unusual Fire/Explosion Hazard:UNDER CERTAIN CIRCUMSTANCES AMMONIA VAPORS AND AIR CAN CREATE AN EXPLOSIVE MIXTURE.

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

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

Neutralizing Agent:SMOTHER WITH NEUTRALIZING AGENT

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===== 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.

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

Respiratory Protection:A NIOSH/MSHA APPROVED RESPIRATOR IS NECESSARY.

Ventilation:LOCAL EXHAUST SHOULD BE USED TO MAINTAIN CONCENTRATIONS

BELOW TLV.

Protective Gloves:RUBBER GLOVES

Eye Protection:FACESHIELD OR CHEMICAL GOGGLES.

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING 9(APRON, BOOTS, ETC)

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

Supplemental Safety and Health

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

HCC:B3

Boiling Pt:=93.3C, 200.F

Spec Gravity:1.16-1.18

pH:7.4-7.8

Evaporation Rate & Reference

:N/A (BUAC=1)

Solubility in Water:COMPLETE

Appearance and Odor:BLUE-GREEN LIQUID; STRONG AMMONIA SMELL

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

Stability Indicator/Materials to Avoid:YES

NONE EXPECTED

Hazardous Decomposition Products:NONE

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS. DO NOT FLUSH DOWN SEWER SYSTEM.

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