MATERIAL SAFETY DATA SHEET: COILEX, M/M

Section I - General Information

(000000-0000000-- K006)

Date of Issue:

1/9/2006 12:00:00 AM

Chemical Name & Synonyms:

Chemical Family:

N/A

ACTIECTIS SURFACTANT

Manufacturer Name: CERTIFIED LARS DIV OF NCH CORP

Manufacturer Address: BOX 152170

IRVING, TEXAS 75015

R Mohochi/Chemist

Prepared By:

Supercedes:

1/5/2006 12:00:00 AM Trade Name & Synonyms:

COILEX, M/M

Formula is a mixture: $[\sqrt{\ }]$

Product Code Number:

800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)

NONYLPHENOL POLYETHOXYLATE DIETHANOLAMINE

Hazard IRRITANT

TLV N/E 1 2MG/M3 1

N/E 2

Emergency Phone Number:

STEL N/E

CAS # 9016-45-9 111-42-2

Section III - Physical Data

Boiling Point (°F):212° Vapor Pressure (mm Hg):17.16 Vapor Density (Air=1):0.6 рн @ 100% :9.8 % Volatile by Volume:82 H₂0 Solubility: COMPLETE Specific Gravity $(H_20=1):1.01$ Color: GREEN Odor:MINT Clarity: TRANSPARENT

Evaporation Rate (BuAc=1):0.50 Viscosity: NON-VISCOUS

Section IV - Fire and Explosion Hazard

Flash Point: >200°F

Flammable Limits: DIETHANOLAMINE

LEL: 1.6%

Method Used: SETAFLASH

UEL: 9.8%

Aerosol Level (NFPA 30B): $\ensuremath{\mathbb{N}}/\ensuremath{\mathbb{A}}$

-Extinguishing Media: -

[√] Foam [√] Dry Chemical [√] Alcohol Foam [√] CO2 [√] Water Spray] Other NFPA 704 Hazard Rating: -

4-Extreme 3-High

Flammability: 1

2-Moderate

Instability: 0

0-Insignificant

Special:

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.

Unusual Fire and Explosion Hazards:

THE USE OF WATER SPRAY (FOG) WHILE EFFECTIVE, MAY CAUSE FROTHING AND FOAMING. NEVER USE A WATER JET AS THIS WILL JUST SPREAD THE FIRE. USE CARE AS SPILLS MAY

Section V - Health and Hazard Data

Threshold Limit Value:

2 PPM AS DIETHANOLAMINE 1

Effects of Overexposure:

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, SWELLING, STINGING, REDNESS, BLURRED VISION, AND A BURNING SENSATION. PROLONGED CONTACT MAY CAUSE IRREVERSIBLE DAMAGE OF THE EYE. SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING AND REDNESS. PROLONGED OR REPEATED CONTACT MAY CAUSE SWELLING AND TISSUE DESTRUCTION. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS. INHALATION: MAY CAUSE CHEST PAIN AND RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. MAY CAUSE DIFFICULTY IN BREATHING AND NOSE AND THATTATION. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIABRHEA. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, WEAKNESS, STAGGERING GAIT, NAUSEA, BLURRED VISION, EXCITATION, AND IN EXTREME CASES COMA OR DEATH.

Chronic: (Long Term Exposure)

OVEREXPOSURE TO THIS MATERIAL HAS BEEN SUGGESTED AS A CAUSE OF MILD, REVERSIBLE LIVER AND KIDNEY EFFECTS IN LABORATORY ANIMALS. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS. TARGET ORGANS: LIVER, LUNGS, CENTRAL NERVOUS SYSTEM, TESTED, AND KIDNEYS. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry

] Inhalation $[\sqrt{\ }]$ Ingestion [√] Absorption

Emergency First Aid Procedures:

REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

Skin Contact:

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WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING, IF VOMITING OCCURS, GIVE FLUIDS AGAIN, SEEK MEDICAL ATTENTION IF DISCOMFORT OCCURS,

Notes to Physician:

THERE IS NO SPECIFIC ANTIDOTE. TREAT THE PATIENT SYMPTOMATICALLY.

Section VI - Toxicity Information

| - Product Contains Charicals Tieted on Consistent on Patrotical Consistent Pro- | | | | | | | | | | |
|---|--------------------------|-----------------------------|---------------------------------|------------------------------------|--------------------------|--|--|--|--|--|
| Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By: | | | | | | | | | | |
| [] IARC | [] NTP | [] OSHA | [] ACGIH | [] Other | | | | | | |
| | | | | | | | | | | |
| VOC CONTENT: 0.3% BY | WEIGHT; 0.4% BY VOLUME; | 3 G/L | | | | | | | | |
| | | , | | | | | | | | |
| NONYLPHENOL POLYETHYL | ENE GLYCOL ETHER | | | | | | | | | |
| ORL-RAT LD50: 1.3 G/K | G 4. | | | | | | | | | |
| SKN-RBT LD50: 2 ML/KG | /24HR OCCLUDED 4. | | | | | | | | | |
| SKN-RBT: NO IRRITATIO | N (UNCOVERED) 4. | | | | | | | | | |
| EYE-RBT: 0.5 ML @ 5% | DILUTION (SEVERE CORNEA | L INJURY) 4. | | | | | | | | |
| CONTRATNIC CUIDES COSMO M | HIGH DAGED ON CHINTED | WITHIN DADDING INVOLVING MI | E GUGENTNED OGGLUDED GONENGE | OF MILE INDITIONED GUDENGENIM WINI | GETNI TNDTGAME MUAM GUGU | | | | | |
| | | | | OF THE UNDILUTED SURFACTANT WITH | | | | | | |
| | | | | RESULTED IN SLIGHTLY INCREASED I | | | | | | |
| CONTINUINIST.V FYDOGED | TO MONVIDUENOI. AT DIETA | PV CONCENTRATIONS OF 200 | DDM OP GPFATER TIRIII.AP DEGENI | PRATION WAS ORSERVED AT 650 AND ' | 2000 DDM 4 | | | | | |

HIL-RAT MIST/VAPOR STUDY AT 170°C FOR 8 HRS, MORTALITY: 0/6, IRRITATION 4. ORL-RAT LD50: 620 UL/KG 3. SKN-RBT LD50: 7640 UL/KG 3. SKN-HMN: NON-SENSITIZING 4

SKN-RBT SDT: 500 MG/24H MILD 3 EYE-RBT SDT: 5500 MG SEVERE 3.

INGESTION OF DIETHANOLAMINE PRODUCED NERVOUS SYSTEM INJURY IN DOGS AND RATS. HEART AND SALIVARY GLAND LESIONS HAVE ALSO BEEN OBSERVED IN MICE TREATED CUTANEOUSLY AND IN DRINKING WATER. RATS GIVEN HIGH DOSES DEVELOPED ANEMIA AND TESTICULAR LESIONS. IN A 90-DAY DIETARY STUDY WITH RATS, THE RATS THAT RECEIVED AND ALSO AND 0.5% OF DIETHANOLAMINE DIED WITHIN 4 TO 30 DAYS. THE MAJOR SIGNS WERE CLOUDY SWELLING AND DEGENERATION OF THE KIDNEY TUBULES AND EARLY FATTY DEGENERATION OF THE LIVER. 4.

IN THEIR PRELIMINARY REPORT, THE NTP HAS CONCLUDED THAT THERE IS NO EVIDENCE OF CANCER IN MALE AND FEMALE RATS AND CLEAR EVIDENCE OF LIVER TUMORS AND SOME EVIDENCE OF KIDNEY TUMORS IN MALE MICE AND CLEAR EVIDENCE OF LIVER TUMORS IN FEMALE MICE DERMALLY EXPOSED FOR THEIR LIFETIME. 4.

Section VII - Reactivity Data

| Stability | _ Hazardous Polymerization | | |
|----------------------------------|----------------------------------|--|--|
| - | [√] Will not occur [] May occur | | |
| Conditions to Avoid: NONE KNOWN. | Conditions to Avoid: | | |

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; REDUCING AGENTS SUCH AS SODIUM THIOSULFATE; ACIDS, BASES, ALDEHYDES, FORMATES, KETONES, ORGANIC ANHYDRIDES AND HALIDES, OXALATES, AND MATERIALS REACTIVE WITH HYDROXYL COMPOUNDS. UNDER CERTAIN CONDITIONS, MAY REACT WITH NITRITES OR OTHER NITROSATING AGENTS TO FORM CARCINOGENIC NITROSAMINES.

Hazardous Decomposition Products:

OXIDES OF CARBON AND NITROGEN; AMMONIA.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:

WEAR APPROPRIATE PROTECTIVE CLOTHING, USE CARE AS SPILLS MAY BE SLIPPERY. VENTILATE THE AREA. SHUT OFF SOURCE OF LEAK. DIKE AND CONTAIN SPILL. ABSORB WITH AI INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF WATER. FLUSH AREA WITH WATER. ABSORB WITH AN

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

Neutralizing Agent:

Section IX - Special Protection Information

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE MISTS OR VAPORS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

Respiratory Protection:

RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (288.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEPIECE RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI 288.2-1992.

NEOPRENE OR NITRILE RUBBER GLOVES IF REPEATED OR PROLONGED SKIN CONTACT IS LIKELY. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

CHEMICAL GOGGLES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

WEAR GENERAL DUTY WORK CLOTHING AND SHOES. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE. REMOVE SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

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| Storage Temperature | | Storage Conditions | | | | |
|---------------------|----------|--------------------|--------------|------------|------------------|--|
| Max: 120°F M | in: 35°F | [√] Indoors | [] Outdoors | [] Heated | [] Refrigerated | |

Precautions to be Taken in Handling and Storing:

ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. KEEP FROM FREEZING. IF PRODUCT FREEZES ALLOW IT TO SLOWLY WARM TO ROOM TEMPERATURE AND STIR THOROUGHLY BEFORE USING.

Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS. TRACES OF FREE ETHYLENE OXIDE MAY BE PRESENT IN THIS PRODUCT AND COULD ACCUMULATE IN THE HEADSPACE OF STORAGE AND TRANSPORT VESSELS.

Section XI - Regulatory Information

<u>Chemical Name</u> DIETHANOLAMINE CAS Number

Upper % Limit

5

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2005. 2. OSHA PEL. 3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODISC, 2005. 4. VENDOR'S MSDS. ALL THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (TSCA) AND ARE EITHER LISTED ON THE TSCA INVENTORY OR OTHERWISE EXEMPTED FROM LISTING. IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE CARC:CARCINOGENIC, TOX:TOXIC, N/A:NOT APPLICABLE, N/E:NOT ESTABLISHED, COC:CLEVELAND OPEN CUP, PMCC:PENSKY-MARTIN CLOSED CUP, TCC:TAGLIABUE CLOSED CUP, LEL:LOWBE EXPLOSION LIMIT, UPDE: UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE PROTECTION ASSOCIATION, IARC:INTERNATIONAL AGENCY FOR THE RESEARCH ON CANCER, NTP:NATIONAL TOXICOLOGY PROGRAM, OSHA:OCCUPATIONAL SAFETY HEALTH ADMINISTRATION, ACGIH:AMBRICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV:THRESHOLD LIMIT VALUE, PEL:PERMISSIBLE EXPOSURE LIMIT, STEL:SHORT-TERM EXPOSURE LIMIT, MLD:MILD, MOD:MODERATE, SEV:SEVERE, MUT:MUTAGENIC, ASPHYX:ASPHYXIANT, PNOS:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN THE INFORMATION CONTAINED HERBIN IS BASED ON DATA CONSIDERED ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. MANTEK, DIVISION OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product.

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