

MATERIAL SAFETY DATA SHEET: CITRUS KLAW

Section I - General Information

(000000-000000- - 0616)

Date of Issue:
11/21/2005 12:00:00 AM
Chemical Name & Synonyms:
N/A
Chemical Family:
ORANGE TERPENE/FATTY AMIDE/ALKENE BLEND
Manufacturer Name:
CERTIFIED LABS, DIV. OF NCH CORP.
Manufacturer Address:
BOX 152170
IRVING, TEXAS 75015
Prepared By:
M McDowell/Chemist

Supercedes:
5/20/2002 12:00:00 AM
Trade Name & Synonyms:
CITRUS KLAW
Formula is a mixture: [√]

Product Code Number: 0616
Emergency Phone Number: 800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
D-LIMONENE	COMB/IRR	N/E 1	5 MG/M3 \$2	N/E	5989-27-5
1-TETRADECENE	IRRITANT	5 MG/M3 #1	5 MG/M3 #2	10 MG/M3#1	1120-36-1
1-DODECENE	IRRITANT	5 MG/M3 #1	5 MG/M3 #2	10 MG/M3#1	112-41-4
1-OCTADECENE	IRRITANT	5 MG/M3 #1	5 MG/M3 #2	10 MG/M3#1	112-88-9
1-HEXADECENE	IRRITANT	5 MG/M3 #1	5 MG/M3 #2	10 MG/M3#1	629-73-2
TALL OIL FATTY AMIDE, N,N-BIS(HYDROXYETHYL)	COMB/IRR	N/E 1	N/E 2	N/E	68155-20-4
\$ VEGETABLE OIL MIST VALUE					
# OIL MIST VALUES					

Section III - Physical Data

Boiling Point (°F):435°
Vapor Pressure (mm Hg):0.69
Vapor Density (Air=1):4.8
pH @ 100% :8.5±10%
% Volatile by Volume:92
H₂O Solubility:EMULSIFIABLE

Specific Gravity (H₂O=1):0.803
Color:STRAW - AMBER
Odor:CITRUS
Clarity:TRANSPARENT
Evaporation Rate (BuAc=1):0.04
Viscosity:NON-VISCOUS

Section IV - Fire and Explosion Hazard

Flash Point:159°F
Flammable Limits:PRODUCT MIXTURE
LEL:0.3%

Method Used:T.C.C.
UEL:6.1%
Aerosol Level (NFPA 30B):N/A

Extinguishing Media:

<input checked="" type="checkbox"/> Foam	<input type="checkbox"/> Alcohol Foam	<input checked="" type="checkbox"/> CO2
<input checked="" type="checkbox"/> Dry Chemical	<input checked="" type="checkbox"/> Water Spray	<input type="checkbox"/> Other

NFPA 704 Hazard Rating:

4-Extreme	Health: 2
3-High	Flammability: 2
2-Moderate	Instability: 0
1-Slight	Special:
0-Insignificant	

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.

Unusual Fire and Explosion Hazards:

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT AND/OR LOW-LYING SOURCES OF IGNITION AND FLASHBACK. PRODUCT MAY PRODUCE A FLOATING FIRE HAZARD AS LIQUID FLOATS ON WATER. 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 BE SLIPPERY.

Section V - Health and Hazard Data

Threshold Limit Value:

5 MG/M3 AS OIL MIST 1.

Effects of Overexposure:

Acute: (Short Term Exposure)

EYE CONTACT: CAUSES IRRITATION SEEN AS STINGING, TEARING, AND REDNESS. SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING AND REDNESS. MAY CAUSE ALLERGIC SKIN REACTION SEEN AS DELAYED SKIN RASH WHICH MAY BE FOLLOWED BY BLISTERING, SCALING, AND OTHER SKIN EFFECTS. PROLONGED OR REPEATED CONTACT AS FROM CLOTHING WET WITH MATERIAL MAY CAUSE DRYING, DEFATTING, AND CRACKING OF THE SKIN. INHALATION: MAY CAUSE RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. MAY CAUSE ALLERGIC RESPIRATORY REACTION. AT LOW VAPOR CONCENTRATIONS, NO HARMFUL EFFECTS ARE EXPECTED. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEAKNESS, UNCONCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, AND MAY BE FATAL. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIARRHEA. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL.

Chronic: (Long Term Exposure)

MAY CAUSE SKIN AND RESPIRATORY SENSITIZATION. ON RARE OCCASIONS, PROLONGED AND REPEATED EXPOSURE TO HYDROCARBON MIST POSES A RISK OF CHRONIC LUNG INFLAMMATION. THIS CONDITION IS USUALLY ASYMPTOMATIC AS A RESULT OF REPEATED SMALL ASPIRATIONS. SHORTNESS OF BREATH AND COUGHING ARE THE MOST COMMON SYMPTOMS. ASPIRATION MAY LEAD TO PULMONARY EDEMA AND HEMORRHAGE AND MAY BE FATAL. SIGNS OF LUNG INVOLVEMENT INCLUDE INCREASED RESPIRATION AND HEART RATES AS WELL AS A BLUISH DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT MAY PROMOTE DERMATITIS AND OIL ACNE. IN RARER CASES, AN INCREASED SENSITIVITY TO SUNLIGHT (PHOTOSENSITIVITY) MAY OCCUR. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS; PRE-EXISTING LIVER AND KIDNEY DISEASES. TARGET ORGANS: CENTRAL NERVOUS SYSTEM, BLOOD-FORMING ORGANS, LIVER, KIDNEYS, AND LUNGS. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry

<input checked="" type="checkbox"/> Inhalation	<input type="checkbox"/> Ingestion	<input checked="" type="checkbox"/> Absorption
--	------------------------------------	--

Emergency First Aid Procedures:

MATERIAL SAFETY DATA SHEET: CITRUS KLAW

Inhalation:

REMOVE FROM THE AREA TO FRESH AIR. IF NOT BREATHING, CLEAR THE AIRWAY AND START MOUTH TO MOUTH ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

Eye Contact:

RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING WITH PLENTY OF WATER FOR SEVERAL MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS.

Skin Contact:

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.

Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

Notes to Physician:

INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION.

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC NTP OSHA ACGIH Other

VOC CONTENT OF UNDILUTED PRODUCT: 20% BY WEIGHT, 19.1% BY VOLUME, 160.6 G/L
VOC CONTENT AT USE DILUTION: 5%

D-LIMONENE

ORL-RAT LD50: 4400 MG/KG 3.
SKN-RBT LD50: >5 G/KG 4.
SKN-RBT: SEVERELY IRRITATING 4.
EYE-RBT: SEVERELY IRRITATING 4.

HYDROCARBON MISTS DERIVED FROM HIGHLY REFINED OILS ARE REPORTED TO HAVE LOW ACUTE AND SUB-ACUTE TOXICITIES IN ANIMALS. EFFECTS FROM SINGLE AND SHORT-TERM REPEATED EXPOSURES TO HIGH CONCENTRATIONS OF MINERAL OIL MISTS WELL ABOVE APPLICABLE WORKPLACE EXPOSURE LEVELS INCLUDE LUNG INFLAMMATORY REACTION, LIPOID GRANULOMA FORMATION, AND LIPOID PNEUMONIA. 4.

1-TETRADECENE

NO TOXICITY DATA AVAILABLE

1-DODECENE

NO TOXICITY DATA AVAILABLE

1-OCTADECENE

NO TOXICITY DATA AVAILABLE

1-HEXADECENE

ORL-RAT LD50: >10 G/KG 3.
IHL-RAT LC50: >8500 MG/M3/1H 3.
SKN-RBT LD50: 10 G/KG 3.

TALL OIL FATTY AMIDE, N,N-BIS(HYDROXYETHYL)

NO TOXICITY DATA AVAILABLE

Section VII - Reactivity Data

Stability

Stable Unstable

Conditions to Avoid:

AVOID HEAT, HOT SURFACES, SPARKS, AND OPEN FLAMES.

Hazardous Polymerization

Will not occur May occur

Conditions to Avoid:

N/A

Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; ACIDS, CLAYS, ALUMINUM CHLORIDE, HALOGENS, IODINE PENTAFLUORIDE, VINYL CHLORIDE, PLASTICS, AND RUBBER.

Hazardous Decomposition Products:

OXIDES OF CARBON AND NITROGEN.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:

WEAR APPROPRIATE PROTECTIVE CLOTHING. ELIMINATE ALL SOURCES OF IGNITION AND VENTILATE THE AREA. USE ONLY NON-SPARKING EQUIPMENT. USE CARE AS SPILLS MAY BE SLIPPERY. SHUT OFF SOURCE OF LEAK. DIKE AND CONTAIN SPILL. ABSORB WITH AN 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.

Waste Disposal Method(s):

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

Neutralizing Agent:

N/A

Section IX - Special Protection Information

Required Ventilation:

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF 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 (Z88.2-1992). 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 Z88.2-1992.

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

MATERIAL SAFETY DATA SHEET: CITRUS KLAW

Eye Protection:

SAFETY GLASSES WITH SIDE SHIELDS IF THE METHOD OF APPLICATION PRESENTS THE LIKELIHOOD OF EYE CONTACT. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING. REMOVE SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE.

Section X - Storage and Handling Information

Storage Temperature

Max: 120°F Min: 32°F

Storage Conditions

Indoors Outdoors Heated Refrigerated

Precautions to be Taken in Handling and Storing:

ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY, AND OPEN FLAME. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES WHICH MAY EXHIBIT THE HAZARDS OF THE PRODUCT. TO AVOID POSSIBLE EXPLOSION DO NOT PRESSURIZE, CUT, WELD, SOLDER, DRILL, GRIND, OR EXPOSE EMPTY CONTAINERS TO HEAT, HOT SURFACES, SPARKS, OR OPEN FLAMES. GROUND AND BOND CONTAINER WHEN HANDLING NEAR FLAMMABLE VAPORS AND ALL SOURCES OF IGNITION.

Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

Section XI - Regulatory Information

Chemical Name

CAS Number

Upper % Limit

None.

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, CINFOWeb, 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:LOWER EXPLOSION LIMIT, UEL: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:AMERICAN 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:ASPHYXIAN, PPOS:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN
THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

CERTIFIED LABS, DIV. 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.

©2008 [NCH Corporation](#) All rights reserved.