

HILLSBORO ELEMENTARY SCHOOLS

MATERIAL SAFETY DATA SHEET

CM 0198

213 E.E. 5th Ave.
HILLSBORO, OR 97123

MATERIAL SAFETY DATA SHEET : NATURALIZER

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SECTION I - GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS N/A	TRADE NAME & SYNONYMS NATURALIZER
CHEMICAL FAMILY ORANGE TERPENE SOLUTION	FORMULA X<-MIXTURE
MANUFACTURER NAME: NATIONAL CHEMSEARCH DIV. OF NCH CORP.	
ADDRESS (NUMBER, STREET, CITY, STATE & ZIP CODE) BOX 182170 IRVING, TEXAS 75015	
PREPARED BY: R REEVES/CHEMIST	PRODUCT CODE NUMBER 0480
	EMERGENCY TELEPHONE NUMBER 214-438-1381

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS.

CHEMICAL NAME (INGREDIENTS): D-LIMONENE		
HAZARD----->CONS/IRR. STEL(TWA)= ->N/E	TLV--->80 PPM 1. CAS#--->8009-27-0	PEL--->N/E 2.
CHEMICAL NAME (INGREDIENTS): HEXYLENE GLYCOL		
HAZARD----->IRR. STEL(TWA)= ->N/E	TLV--->25 PPM 1. CAS#--->107-41-0	PEL--->25 PPM 2.
DIETHANOLAMINE SALT OF TALL OIL FATTY ACID		
HAZARD----->IRR. STEL(TWA)= ->N/E	TLV--->N/E 1. CAS#--->8178-08-8	PEL--->N/E 2.
DIETHANOLAMINE SALT OF TALL OIL FATTY ACID		
HAZARD----->IRR. STEL(TWA)= ->N/E	TLV--->N/E 1. CAS#--->6778-47-8	PEL--->N/E 2.

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SECTION II - HAZARDOUS INGREDIENTS

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SECTION III - PHYSICAL DATA

BOILING PT. (FAHRENHEIT)	278	SPEC GRAVITY (H2O=1)	0.88
VAPOR PRESSURE (MM HG)	8	COLOR	ORANGE
VAPOR DENSITY (AIR=1)	8	ODOR	ORANGE
PH @ 100X	6.0X-8.5	CLARITY	TRANSPARENT
PERCENT VOLATILE BY VOLUME (2)	80	EVAPORATION RATE (BU AC - 1)	0.01
SOLUBILITY IN WATER	EMULSION		
VISCOSITY	24 CPS		

SECTION IV - FIRE AND EXPLOSION HAZARD

FLASH POINT (METHOD USED)	110 F T.C.C.	FLAMMABLE LIMITS % BY VOLUME IN AIR	0.7	UEL	8.1
EXTINGUISHING MEDIA	ALCOHOL FOAM	X<-CO2	X<-CHEMICAL	X<-WATER	X<-OTHER

SPECIAL FIRE FIGHTING PROCEDURES:
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED
BREATHING APPARATUS WITH FULL FACEPIECE IN THE POSITIVE PRESSURE MODE.
DO NOT USE WATER. TREAT AS AN OIL FIRE WITH CLASS B PROCEDURES.

UNUSUAL FIRE & EXPLOSION HAZARDS:
BURNING MAY PRODUCE GASES OF CARBON, SULFUR, AND NITROGEN.

NFPA HAZARD RATING (0=INSIGNIFICANT; 1=SLIGHT; 2=MODERATE; 3=HIGH; 4=EXTREME):
1<-HEALTH 2<-FLAMMABILITY 0<-REACTIVITY <-SPECIAL

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE :

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

EFFECTS OF OVEREXPOSURE

EYE CONTACT: MAY CAUSE IRRITATION, REDNESS, TEARING, SEVERE DISCOMFORT, AND POSSIBLE CORNEAL INJURY.

SKIN CONTACT: MAY CAUSE IRRITATION, SWELLING.

INHALATION: MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT. INGESTION: MAY CAUSE IRRITATION OF MOUTH AND THROAT, ABDOMINAL PAIN, NAUSEA, DIZZINESS, AND LOSS OF CONSCIOUSNESS.

MAY AGGRAVATE EXISTING DERMATITIS OR OTHER SKIN CONDITIONS.

TARGET ORGANS: NONE KNOWN.

ALTHOUGH THERE IS NO PRIMARY ROUTE OF ENTRY INTO THE BODY, THE PRIMARY ROUTE OF EXPOSURE IS BY EYE AND SKIN CONTACT.

PRIMARY ROUTE OF ENTRY: <-- INHALATION <-- INGESTION <-- ABSORPTION

EMERGENCY & FIRST AID PROCEDURES

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

EYE CONTACT:

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

SKIN CONTACT:

WASH AFFECTED AREAS WITH PLENTY OF SOAP AND WATER FOR SEVERAL MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS.

INGESTION:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION.

NOTES TO PHYSICIAN :

NONE

SECTION VI - TOXICITY INFORMATION

PRODUCT CONTAINS CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN BY:

IARC <--YES NTP <--YES OSHA <--YES ACCTH <--YES OTHER <--YES
X<--NO X<--NO X<--NO X<--NO X<--NO X<--NO

O-LIMONENE :

OEL-RAT LD50: 4400 MG/KG 3.
OEL-MUS LD50: 8800 MG/KG 3.
IPR-RAT LD50: 3600 MG/KG 3.
IVN-RAT LD50: 110 MG/KG 3.

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SECTION VI - TOXICITY INFORMATION

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DIETHANOLAMINE SALT OF TALL OIL FATTY ACID: NO DATA FOUND.

TRITHANOLAMINE SALT OF TALL OIL FATTY ACID: NO DATA FOUND.

HEXYLENE GLYCOL:

SKN-RAT LD50: 8800 MG/KG 3.
OEL-RAT LD50: 3700 MG/KG 3.
IPR-RAT LD50: 1800 MG/KG 3.
EYE-RAT 88 MG/100% 3.
SKN-RAT 500 MG/100% MODERATE 3.
SKN-RAT 480 MG/100% OPEN MILD 3.

SECTION VII - REACTIVITY DATA

STABILITY | X<--STABLE <--UNSTABLE | CONDITIONS TO AVOID

AVOID HEAT, SPARKS OR OPEN FLAMES.

INCOMPATIBILITY (MATERIALS TO AVOID)

STRONG ACIDS, BASIC STRENGTH OXIDIZERS, IODINE PENTAFLOURIDE, ETHYLENE CONTACT CAN BE EXPLOSIVE.

HAZARDOUS DECOMPOSITION PRODUCTS

GASES OF CARBON AND NITROGEN, SMOKE.

HAZARDOUS | WILL NOT MAY | CONDITIONS TO AVOID
X <--OCCUR <--OCCUR

POLYMERIZATION N/A

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
CONTAIN SPILL, PICK UP AND REUSE IF POSSIBLE. PLACE INTO LABELED CONTAINERS FOR PROPER DISPOSAL. CAUTION: SPILL CAN MAKE FLOOR SLIPPERY.

WASTE DISPOSAL METHOD

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

NEUTRALIZING AGENT

N/A

SECTION IX - SPECIAL PROTECTION INFORMATION

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REQUIRED VENTILATION
GENERAL EXHAUST SYSTEMS USUALLY ADEQUATE TO PREVENT AIRBORNE CONCENTRATIONS
EXCEEDING THE RECOMMENDED EXPOSURE LIMITS. IF THESE RECOMMENDED
LIMITS ARE NOT TO BE EXCEEDED WHEN GENERAL EXHAUST IS USED, THEN LOCAL
MECHANICAL EXHAUST WILL BE NECESSARY.

RESPIRATORY PROTECTION
NOT NORMALLY REQUIRED UNLESS VAPOR CONCENTRATIONS ARE EXCESSIVE OR EXCEED
THE RECOMMENDED EXPOSURE LIMITS, IN WHICH CASE A NIOSH/MSHA-APPROVED
RESPIRATOR FOR ORGANIC SOLVENTS SHOULD BE USED.

PROTECTIVE GLOVES
NEOPRENE FOR REPEATED OR PROLONGED CONTACT.

EYE PROTECTION
WEAR SAFETY GLASSES IF THE METHOD OF APPLICATION
PRESENTS THE LIKELIHOOD OF EYE CONTACT.

OTHER PROTECTION
N/A

SECTION X - STORAGE AND HANDLING INFORMATION

STORAGE TEMPERATURE
100 F. <--MAX 95 F. <--MIN | INDOOR | HEATED | REFRIGERATED | OUTDOOR

PRECAUTIONS TO BE TAKEN IN HANDLING A. STORING
KEEP AWAY FROM HEAT AND FLAME.
KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.
ALL HANDLING EQUIPMENT AND GEAR SHOULD BE PROPERLY
GROUNDED. CAUTION: PRODUCT IS COMBUSTIBLE.

OTHER PRECAUTIONS
FOLLOW LABEL DIRECTIONS.
KEEP OUT OF REACH OF CHILDREN.
READ ENTIRE LABEL BEFORE USING PRODUCT.
AVOID EYE CONTACT AND EXCESSIVE BREATHING OF
VAPORS.

SECTION XI - REGULATORY INFORMATION

CHEMICAL NAME C.A.S. NUMBER UPPER % LIMIT
N/A

THOSE INGREDIENTS LISTED ABOVE ARE SUBJECT TO THE REPORTING REQUIREMENTS OF
312 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF

NATURALIZER

1088 AND 70 CFR PART 372.
IF THE (USE EXEMPTION) APPEARS UNDER UPPER % LIMIT, END USERS ARE EXEMPT
FROM NOTIFICATION BECAUSE THE PRODUCT IS USED AND LABELED FOR ROUTINE
MAINTENANCE (SUCH AS FERTILIZERS AND HERBICIDES), OR THE PRODUCT IS USED AND
LABELED FOR MAINTAINING MOTOR VEHICLES.

WARNING: THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE (1) CANCER OR (2) BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:
NITROTRIFLUOROACETIC ACID (1) IS A TP300 COMPONENT.

SECTION XII - TRANSPORTATION = (FOR FUTURE USE)

APPLICABLE REGULATIONS
49 CFR 171-176 <--TARIFF 8 0 <--IATA <--MILITARY AIR (AFR 71-4)

SHIPPING NAME

HAZARD CLASS | ID NUMBER | REPORT QTY

LABELS | LIMITED QTY

UNIT CONTAINER

DOT EPS CONTAINER | NET EXPLOSIVE WT.

AEROSOL PROPPELLANT(S)

SECTION XIII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS
AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 1991-1992.
 2. MSDS PEL
 3. DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, 7TH ED., SAX AND LEWIS.
- SHORT TERM EXPOSURE LIMIT (TWA) LISTED AS FINAL RULE LIMITS PUBLISHED IN THE
FEDERAL REGISTER/VOL. 54 NO. 18, 1-13-89

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