

MATERIAL SAFETY DATA SHEET:NATURALIZER VC**DATE OF ISSUE:** 08/02/2002**SUPERCEDES:** 09/27/1999**SECTION I - GENERAL INFORMATION****Chemical Name & Synonyms:**

N/A

Chemical Family:

ORANGE TERPENE/SURFACTANT SOLUTION

Manufacturer's Name:

CHEMSEARCH DIV. OF NCH CORP.

Address:BOX 152170
IRVING, TX 75015**Prepared By:**

L Boynton/Chemist

Product Code Number

0480

Trade Name & Synonyms:

NATURALIZER VC

Formula Mixture: X**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	N/E 2	N/E	5989-27-5
HEXYLENE GLYCOL	IRRITANT	25PPM(C)1	N/E 2	N/E	107-41-5
DIETHANOLAMINE SALT OF TALL OIL FATTY ACID	IRRITANT	N/E 1	N/E 2	N/E	61790-66-7
TRIETHANOLAMINE SALT OF TALL OIL FATTY ACID	IRRITANT	N/E 1	N/E 2	N/E	68132-46-7
(C) CEILING LIMIT					

SECTION III - PHYSICAL DATA

Boiling Point (f):	378°	Specific Gravity (H2O=1):	0.87-0.90
Vapor Pressure (MM HG):	1.96	Color:	ORANGE
Vapor Density (Air=1):	4.1	Odor:	ORANGE CITRUS
pH @ 100% :	8.7	Clarity	TRANSPARENT TO HAZY
% Volatile by Volume:	86.6	Evaporation Rate (BU A/C=1):	0.18
H2O Solubility:	EMULSIFIABLE	Viscosity:	SLIGHT VISCOSUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point:	Flammable Limits:	LEL:	UEL:
119°F / T.C.C.	D-LIMONENE	0.7%	6.1%
Extinguishing Media:			
Foam:X Alcohol Foam:X	CO2:X	Dry Chemical:X	Water Spray: Other:

Special Fire Fighting Procedures:

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

Unusual Fire and Explosion Hazards:

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT SOURCES OF IGNITION AND FLASHBACK. USE CARE AS SPILLS MAY BE SLIPPERY.

NFPA Hazard Rating: (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

Health:1 Flammability:2 Instability:0 Special:

SECTION V - HEALTH HAZARD DATA**Threshold Limit Value:**

25 PPM AS HEXYLENE GLYCOL CEILING LIMIT 1.

Effects of Overexposure:

-Acute(Short Term Exposure)

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS SWELLING, TEARING, REDNESS, EXCESSIVE BLINKING AND A

BURNING SENSATION. PROLONGED CONTACT MAY CAUSE CORNEAL INJURY. SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING, REDNESS, DRYNESS AND DEFATTING OF THE SKIN; MAY CAUSE AN ALLERGIC SKIN REACTION. INHALATION: INHALATION OF MIST OR VAPORS MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT SEEN AS COUGHING AND SNEEZING; MAY CAUSE AN ALLERGIC RESPIRATORY REACTION. INHALATION OF EXCESSIVE AMOUNTS OF HEATED VAPOR MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE AND DIZZINESS. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING AND DIARRHEA; MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, LOSS OF CONSCIOUSNESS AND WEAKNESS. 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 DERMAL AND RESPIRATORY SENSITIZATION IN SENSITIVE INDIVIDUALS. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA AND DERMATITIS. TARGET ORGANS: BLOOD-FORMING ORGANS, CENTRAL NERVOUS SYSTEM, LIVER, LUNGS AND KIDNEYS.

Primary Routes of Entry: Inhalation:X Ingestion: Absorption:X

Emergency and 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:

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:

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 ENDOTRACHAEAL TUBE WILL PREVENT ASPIRATION.

SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC: No NTP: No OSHA: No ACGIH: No OTHER: No

SCAQMD VOC INFORMATION: VOC CONTENT OF UNDILUTED MATERIAL 562 G/L. VOC AFTER DILUTION WITH 6 PARTS WATER, 80 G/L. VAPOR PRESSURE OF THE VOC COMPONENT, 2 MMHG @ 20°C. THE VOC COMPONENT IS PHOTOCHEMICALLY REACTIVE. VOC CONTENT: 66.3% BY VOLUME; 62.5% BY WEIGHT. AFTER DILUTION WITH 6 PARTS WATER: 9.47% BY VOLUME; 8.9% BY WEIGHT

D-LIMONENE

ORL-RAT LD50: >5 G/KG 3.

SKN-RBT LD50: >5 G/KG 3.

SKN-RBT: SEVERELY IRRITATING 3.

EYE-RBT: SEVERELY IRRITATING 3.

HEXYLENE GLYCOL

ORL-RAT LD50: 4.76 G/KG 3.

SKN-RBT LD50: 8.56 ML/KG/24HR OCCLUDED 3.

SKN-RBT: 4HR UNCOVERED, MINIMAL ERYTHEMA 3.

EYE-RBT: 0.1 ML, SEVERE INJURY 3.

IHL-RAT: STATIC GENERATION OF SUBSTANTIALLY SATURATED VAPOR, 8HR, MORTALITY: 0/6 3.

IHL-RAT: MIST FROM VAPOR GENERATED AT 170°C, 8HR, MORTALITY: 0/6 3.

IN A REPEATED PATCH TEST STUDY OF ECZEMA PATIENTS, HEXYLENE GLYCOL ELICITED EDEMA AND ERYTHEMA IN 2.8% OF THE SUBJECTS TESTED (CONTACT DERMATITIS 21:154, 1989) 3.

HEXYLENE GLYCOL HAS PRODUCED EVIDENCE OF SLIGHT FETAL TOXICITY AT A MATERNALLY TOXIC DOSE (1000

MG/KG/DAY) 3.

**TRIETHANOLAMINE SALT OF TALL OIL FATTY ACID
(DATA IS FOR TRIETHANOLAMINE)**

ORL-RAT LD50: 4920 UL/KG 4.

IHL-RAT TClo: 2 G/M3/6H/3W-I, CHANGES IN BLADDER, LIVER AND THYMUS WEIGHT 4.

SKN-RBT LD50: >20 ML/KG 4.

SKN-HMN SDT: 15 MG/3D (INTERMITTENT) MILD 4.

EYE-RBT SDT: 10 MG MILD 4.

**DIETHANOLAMINE SALT OF TALL OIL FATTY ACID
(DATA IS FOR DIETHANOLAMINE)**

ORL-RAT LD50: 620 UL/KG 4.

SKN-RBT LD50: 7640 UL/KG 4.

SKN-RBT SDT: 500 MG/24H MILD 4.

EYE-RBT SDT: 5500 MG SEVERE 4.

THERE ARE REPORTS THAT INGESTION OF DIETHANOLAMINE (DEA) PRODUCED NERVOUS SYSTEM INJURY IN DOGS AND RATS. HEART AND SALIVARY GLAND LESIONS HAVE ALSO BEEN OBSERVED IN MICE TREATED WITH DEA CUTANEOUSLY AND IN DRINKING WATER. RATS GIVEN HIGH DOSES OF DEA DEVELOPED ANEMIA AND TESTICULAR LESIONS. AN INCREASED INCIDENCE OF SOME SKELETAL VARIATIONS SUGGESTIVE OF A SLIGHT DEVELOPMENTAL DELAY WAS SEEN ONLY IN THE FETUSES OF RATS GIVEN 1500 MG/KG/DAY CUTANEOUSLY WHICH ALSO CAUSED SIGNIFICANT MATERNAL TOXICITY. HOWEVER, NO FETAL MALFORMATIONS WERE OBSERVED IN EITHER RATS OR RABBITS SIMILARLY TREATED. 3.

SECTION VII - REACTIVITY DATA

Stability:

Stable:X

Unstable:

Conditions to Avoid: AVOID HEAT, HOT SURFACES, SPARKS AND OPEN FLAMES.

Incompatibility (Materials to Avoid):

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

Hazardous Decomposition Products:

OXIDES OF CARBON AND NITROGEN; AMMONIA AND AMINES.

Hazardous Polymerization:

May Occur:

Will Not Occur:X

Conditions to Avoid: N/A

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. 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:

NONE KNOWN.

SECTION IX - SPECIAL PROTECTION INFORMATION

Required Ventilation:

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE MISTS OR VAPORS.

Respiratory Protection:

A NIOSH/MSHA APPROVED RESPIRATOR IN POORLY VENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV OR OSHA PEL OR WHERE MISTING EXISTS.

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN.

Eye Protection:

CHEMICAL GOGGLES SHOULD BE WORN WHEN HANDLING.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING.

SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors:X Outdoors: Heated: Refrigerated:X

Minimum Temperature:35°F

Maximum Temperature:100°F

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
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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, 2002.
2. OSHA PEL.
3. VENDOR'S MSDS.
4. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2002.
ALL COMPONENTS IN THIS PRODUCT CAN BE FOUND IN THE CURRENT TSCA INVENTORY.

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, PNOS:PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD
DRAIZE TEST, ORL:ORAL,
IHL:INHALATION, HMN:HUMAN

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