MATERIAL SAFETY DATA SHEET

/ HMIS HAZARD
/ UIGON INTERNATIONAL INC.
AIRPORT ROAD
EAST STROUDSBURG, PA 18301
/ HEALTH = 2
/ FLAMMABILITY = 1
/ REACTIVITY = 0

FOR CHEMICAL EMERGENCY DURING TRANSPORTATION ONLY

CALL CALL INFOTRAC 1-800-535-5053 Acct# 78928 WITHIN THE U.S.A. CALL INFOTRAC 1-352-323-3500 FOR INTERNATIONAL SHIPMENTS WITHIN THE U.S.A.

CALL INFOTRAC 352-323-3500 FOR INTERNATIONAL SHIPMENTS

24 HRS PER DAY, 7 DAYS PER WEEK

I. PRODUCT IDENTIFICATION

-----ITEM#: N-0022321

PRODUCT NAME: NORLIMBANOL™ CAS #: 70788-30-6

FORMULA: C H O 15 30

II. COMPOSITION OR INFORMATION ON INGREDIENTS Product and/or component(s) carcinogenic at 0.1% or greater according to OSHA, IARC, NTP, or Other: NO

III. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS...

PRIMARY ROUTES OF EXPOSURE: Eyes, Skin

EFFECTS OF EXPOSURE: May be irritating to the skin and eyes. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort. Vapors or mist, in excess of permissible concentration, or in unusually high concentration generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the throat and nose, headache, nausea and drowsiness.

IV. EMERGENCY AND FIRST AID PROCEDURES

INHALATION EXPOSURE: If headache, irritation, nausea, or drowsiness occurs, remove to fresh air and call a physician. EYE CONTACT: Remove contact lenses. Flush eyes with cool water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eyes and lids. Call a physician. SKIN CONTACT: Remove contaminated clothing. Wash skin with mild soap and water. If irritation or any other symptoms occur, call a physician. INGESTION: If patient is conscious and can swallow, administer water and call a physician or poison control center immediately. Do not induce vomiting. OTHER INSTRUCTIONS: None. V. FIREFIGHTING MEASURES

FLASH POINT (CC, F): >200

RECOMMENDED FIRE EXTINGUISHING MEDIA: Carbon-dioxide, foam, or dry chemicals.

RECOMMENDED PROTECTIVE EQUIPMENT FOR FIREFIGHTERS AND SPECIAL PROCEDURES: Use of self-contained breathing apparatus with full face piece operated in the positive pressure demand mode when fighting fires.

Protective clothing is recommended. Prevent contact with skin and eyes.

Cool fire exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible liquid. Avoid heat, sparks, and open flames.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, fumes.

HAZARDOUS POLYMERIZATIONS: None occurs.

VI. ACCIDENTAL RELEASE MEASURES

PROCEDURES IN CASE OF ACCIDENTAL RELEASE, BREAKAGE, OR LEAKAGE: Ventilate area. Avoid breathing vapor. Avoid contact with skin, eyes and clothing. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear NIOSH approved respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. Remove any sources of flame or sparks. Contain spill if possible. Absorb spill with vermiculite or other suitable absorbant material. Shovel up material and place in approved disposal container. Dispose of in accordance with current local, state, and federal laws and regulations.

ITEM: N-0022321 PRODUCT: NORLIMBANOL™

VII. HANDLING AND STORAGE INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. STORAGE: Keep tightly closed. Store in cool dry place.

VIII. EXPOSURE CONTROLS AND PROTECTION INFORMATION THRESHOLD LIMIT VALUE (TLV): Not established. OSHA PERMISSIBLE EXPOSURE LIMIT (PEL): Not established. RESPIRATORY PROTECTION: Usually not required. VENTILATION: Mechanical (General) - meeting ACGIH standards. PROTECTIVE GLOVES: Rubber gloves. EYE PROTECTION: Safety glasses. OTHER PROTECTIVE EQUIPMENT: Safety shower, eye wash.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless liquid that could crystallize. ODOR DESCRIPTION: Dry, sawdust, woody, powdery, amber, sandalwood odor. BOILING POINT: 278-279°C VAPOR PRESSURE (mm Hg @ 20° C): 0.000469 @ 25°C VAPOR DENSITY (AIR = 1): 7.8 SPECIFIC GRAVITY @ 25 C (WATER = 1): 0.89

SOLUBILITY IN WATER: Insoluble

X. STABILITY AND REACTIVITY

CONDITIONS/MATERIALS TO AVOID: Normally stable under proper conditions. Avoid excessive heat, open flames, or other sources of ignition. Avoid contact with strong acids, alkalies, and/or oxidizing agents.

XI. TOXICOLOGICAL INFORMATION

RIFM Monograph 1190 LD50 (oral, rat) (OECD 401 : limit): >5000 mg/kg LD50 (oral, rat) (OECD 401 : limit): >20 ml/kg LD50 (dermal, rabbit) (OECD 402 : limit): >2000 mg/kg Irritation (dermal) (FHSA) : Non irritant @ 100% Irritation (dermal) (HRIPT) : Non irritant @ 2% ITEM: N-0022321 PRODUCT: NORLIMBANOL™ Irritation (dermal) (Human Max.) : Non irritant @ 10%
Irritation (ocular) (FHSA) : Non irritant @ 20%
Irritation (ocular) (FHSA) : Non irritant @ 100%
Sensitization (guinea pig, Buehler) : Non sensitizing @ 20%
Sensitization (HRIPT) : Non sensitizing @ 2%
Sensitization (Human Max.) : Non sensitizing @ 10%
Photo-toxicity : No effects @ 2%
Photo-allegenicity : No effects at 2%
Mutagenicity (Salmonella Reversion) (OECD 471) : non mutagenic

XII. ECOLOGICAL INFORMATION

A summary of ecotoxicological data is available on request from D. Grell, Firmenich SA, Case Postale 239, 1211 Geneva 8, Switzerland.

XIII. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

XIV. TRANSPORTATION INFORMATION

TRANSPORTATION BY GROUND, AIR OR VESSEL: NOT REGULATED SEGREGATION: Usual precautions for combustible liquids.

XV. REGULATORY INFORMATION

This substance contains no materials subject to the reporting requirements of SARA TITLE III SECTION 313.

XVI. OTHER INFORMATION

Containers should be either reconditioned by CERTIFIED firms or properly disposed of by APPROVED firms. Disposal of containers should be in accordance with applicable laws and regulations. "Empty" drums should not be given to individuals. Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive material. Cutting or welding of empty containers may cause fire, explosion, or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep containers closed and drum bungs in place. THE INFORMATION IN THIS MSDS WAS OBTAINED FROM CURRENT AND REPUTABLE SOURCES. THIS DATA IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS CORRECTNESS OR ACCURACY. IT IS THE USER'S RESPONSIBILITY BOTH TO DETERMINE SAFE CONDITIONS FOR USE OF THIS PRODUCT AND TO ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE, OR, EXPENSE RESULTING FROM IMPROPER USE OF THIS PRODUCT.

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