

Material Safety Data Sheet

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Pg 1 of 2

PRODUCT NAME: **Lemonene**

PRODUCT CODE: 015

MANUFACTURED FOR: **AFFLAB** / Affiliated Paper, P. O. Box 020997, Tuscaloosa, AL 35402

MEDICAL EMERGENCY: 1-800-228-5635 ext. 009 (outside USA 612-221-3999 ext. 009)

PRODUCT INFORMATION 205-344-4350

MSDS ISSUE DATE: 07/94

MSDS REVISION DATE: 09/24/1998

REVISION NUMBER: none

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS#</u>	<u>Exposure Limits</u>	<u>% by Wt.</u>
Denatured Ethanol Mixture			
Ethanol	64-17-5	OSHA/ACGIH TWA=1000ppm	40-50%
Methanol	67-56-1	OSHA/ACGIH TWA=200ppm	1-5%
Water	7732-18-5	NA	1-5%
Liquefied Petroleum Gas	68476-85-7	ACGIH TLV=1000ppm	20-30%

Unidentified ingredients are not considered hazardous under the Federal hazard Communication Standard.

SECTION 3: HAZARDS IDENTIFICATION

CAUTION! MAY CAUSE SKIN, EYE, RESPIRATORY TRACT AND DIGESTIVE TRACT IRRITATION.

ROUTES OF ENTRY: skin contact, eye contact, inhalation, possibly ingestion

EYE: Excess redness of the conjunctiva may occur. Contact with liquid can cause severe irritation, redness, tearing, blurred vision and possible freeze burns.

SKIN: Prolonged or repeated contact may cause defatting and drying of the skin. Contact with liquid can cause severe freeze burns similar to frostbite.

INGESTION: Aspiration hazard! May cause nausea, abdominal pain, vomiting, headache, dizziness, shortness of breath, weakness, fatigue, leg cramps, restlessness, confusion, drunken behavior, visual disturbances, drowsiness, coma and death. There may be a delay of several hours between swallowing methanol and the onset of signs and symptoms. The effects observed are in part due to acidosis and partially to cerebral edema. Visual effects include blurred vision, diplopia, changes in color perception, restriction of visual fields, and complete blindness. Ingestion of moderate quantities of methanol also produces metabolic acidosis. Onset of symptoms may be delayed up to 48 hours. 60-200 ml of methanol is a fatal dose for most adults. Ingestion of as little as 10 ml has caused blindness. With massive overdoses, liver, kidney and heart muscle injuries have been described.

INHALATION: Inhalation of vapor may produce anesthetic effects and feeling of euphoria. High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing. Nausea and vomiting may occur. Prolonged overexposure can cause rapid breathing, headache, dizziness, narcosis, drowsiness, disturbances of vision, numbness, tingling, pains in the hands and forearms, unconsciousness and death from asphyxiation, depending on concentration and time of exposure.

CONDITIONS AGGRAVATED BY EXPOSURE: Preexisting diseases of the skin, liver and kidneys may be aggravated by exposure to this product.

HMS RATING:HEALTH:(1) FIRE:(2) REACTIVITY:(0) PERSONAL EQUIPMENT:(B)

SECTION 4: FIRST AID MEASURES

EYE: Flush eyes with large amounts of water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.

SKIN: Immediately remove contaminated clothing. Flush skin with large amounts of soap and water. Wash contaminated clothing before reuse. To treat frostbite, gradually warm frostbite area with warm water (not to exceed 105°F). If irritation occurs, get medical attention.

INGESTION: If swallowed, DO NOT induce vomiting. Get immediate medical attention. Of immediate medical attention is not available, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey.

INHALATION: Remove to fresh air. Give artificial respiration if not breathing. Qualified personnel may give oxygen if breathing is difficult. Obtain medical attention.

NOTE TO PHYSICIAN: Treat patient symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:ND

FLAMMABLE LIMITS: (Propellant): LEL: 1.9 UEL: 9.5

AUTO IGNITION TEMPERATURE: ND EXTINGUISHING MEDIA: dry chemical, carbon dioxide or foam

AEROSOL FLAMMABILITY: This product has been tested in accordance with the method described in 40 CFR 156.10 and found to be flammable.

FIRE FIGHTING INSTRUCTIONS: containers should be cooled with water to prevent vapor pressure build up. Use equipment or shielding, as required, to protect personnel from bursting, rupturing or venting containers.
HAZARDOUS COMBUSTION PRODUCTS: carbon dioxide, carbon monoxide, and volatile hydrocarbon vapors
SPECIAL HAZARDS: At elevated temperatures (over 130°F/54°C) containers exposed to direct flame or heat contact should be cooled with water to prevent weakening of container structure.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate sources of ignition. Provide good ventilation. Soak up spill with an inert absorbent and place into a designated disposal container. Consult local regulatory agency for proper disposition of material.

SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid breathing vapor. Keep away from heat, sparks and flame. Use with adequate ventilation. Do not puncture or incinerate containers.

STORAGE: Do not expose to direct sunlight or store at temperatures above 130°F/54°C. Keep container closed. Store as a Level 2 Aerosol (NFPA 30B). **INCOMPATIBILITIES:** strong oxidizing agents, strong inorganic acids

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

EYE PROTECTION: Chemical safety glasses should be worn.

SKIN PROTECTION: Chemical resistant gloves should be worn.

VENTILATION: Local exhaust is adequate under normal conditions, mechanical ventilation is optional.

RESPIRATORY PROTECTION: None required if good ventilation is maintained. If exposure exceeds occupational exposure limits, use a NIOSH approve respirator to prevent overexposure.

OTHER: Wear impervious clothing to prevent skin contact. Ensure strict sanitary conditions are conformed to when working around chemicals. Protective clothing and equipment should be in accordance with 29 CFR 1910.132 and 1910.133.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: 125 PSIG @ 130°F

VAPOR DENSITY: >1 (air=1)

SOLUBILITY IN WATER: appreciable

SPECIFIC GRAVITY: <1 (H₂O=1)

EVAPORATION RATE: ND (ether=1)

APPEARANCE AND ODOR: coarse mist with alcohol odor

SECTION 10: STABILITY AND REACTIVITY

STABLE: yes **MATERIALS TO AVOID (INCOMPATIBILITY):** strong oxidizing agents, strong inorganic acids

SECTION 11: TOXICOLOGICAL INFORMATION

Long-term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Long-term repeated overexposure to methanol vapor concentrations of 3000 ppm or greater may allow a cumulative effect to occur with resulting nausea, vomiting, headache, ringing in the ears, insomnia, trembling, unsteady gait, vertigo, clouded and double vision. Liver and/or kidney injury may occur. Prolonged overexposure at levels of 800-1000 ppm may result in severe eye damage in some persons. Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects, which together constitute the fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders, and small size head.

SECTION 12: ECOTOXICOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: none known

CHEMICAL FATE INFORMATION: none known

BIODEGRADABILITY: none known

SECTION 13: DISPOSAL CONSIDERATIONS

Do not puncture or incinerate containers. When contents are depleted continue to depress button until all gas is expelled. Dispose of container in accordance with local, state, and federal regulations.

SECTION 14: TRANSPORT INFORMATION

D.O.T. CLASSIFICATION: Consumer Commodity (Hazard Class ORM-D)

SECTION 15: REGULATORY INFORMATION

To the best of our knowledge, all intentionally present components are listed on the TSCA Inventory of Chemical Substances.

SECTION 16: OTHER INFORMATION

While the information set forth herein is believed to be accurate as of the date hereof, the Company makes no warranty or guarantee, express or implied, and disclaims all liability arising out of the use of this information.

Created by: Amanda M. Zrout 630-543-7600 As of 09/24/1998