Material Safety Data Sheet

I. PRODUCT IDENTITY

CITRACE® HOSPITAL GERMICIDE

Item Number

Manufactured by: Caltech Industries, Inc. 4520 E. Ashman Road, Midland, MI 48642-8911

II. KEY COMPONENTS

| Component | CAS# | Percent |
|----------------|-----------|---------|
| Ethanol* | 64-17-5 | 60 - 70 |
| D-limonene | 5989-27-5 | 1 - 5 |
| o-Phenylphenol | 90-43-7 | <1.0 |
| | | |

*Exposure Limits - OSHA PEL 1,000 ppm and ACGIH TLV 1,000 ppm

III. PHYSICAL DATA

Boiling Point......Approximately 78.1°C Vapor Density (air=1): Less than 1

Solubility in Water Dispersible

Specific Gravity 0.857 - 0.863 (25°/25°C) **pH** 9.5

Odor.....Citrus

IV. FIRE & EXPLOSION HAZARD DATA

NFPA Hazard Rating 3

Flame Extension........... 12 inches

Flammable Limits $\dots N/A^2$

Extinguishing Media Water fog, carbon dioxide and dry

chemical

Special Fire Fighting Equipment & Hazards:

Aerosol package when exposed to extreme heat above 130°F could rupture releasing flammable ingredients. Ethanol vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may only be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires.

12 inch flame extension in CSMA flame extension test Ignition in 37.5 seconds in CSMA closed drum test

V. REACTIVITY DATA

NFPA Hazard Rating: 0

Stability: Stable

Incompatibility: (Specific Materials to Avoid) None known. Hazardous Decomposition Products: None known. Hazardous Polymerization: Will not occur.

VI. SPECIFIC HAZARDS

NFPA Hazard Rating: No NFPA Specific Hazard warnings are required for this product.

VII. HEALTH HAZARD DATA

NFPA Hazard Rating: 0

Eye: May cause eye irritation.

Skin Contact: Essentially non-irritating.

Ingestion: May cause digestive tract disturbances. Effects of ethyl alcohol ingestion depend on the amount and rate of consumption. Short-term overexposure can cause drunkenness, depression of the central nervous system, nausea, vomiting, diarrhea, and liver damage.

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Inhalation: No significant effect expected from a single short-term exposure.

Carcinogenicity: IARC has determined that alcoholic beverages are carcinogenic to humans (Group 1) and the occurrence of malignant tumors of the oral cavity, pharynx, larynx, esophagus and liver is causally related to the consumption of alcoholic beverages in humans. Not listed by ACGIH and NTP. CALIFORNIA PROP 65: . . . WARNING . . . This product contains a chemical (o-Phenylphenol) known to the State of California to cause

VIII. FIRST AID

Eves: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eyes. Seek medical attention if

Skin: No first aid should be needed.

Ingestion: If ingested in large amounts and victim is conscious and able to swallow, have victim drink water to dilute. Call a physician or Poison Control Center. Never give anything by mouth if a victim is unconscious or having convulsions. Induce vomiting only if advised by a physician or Poison Control Center.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artifical respiration. If breathing is difficult, give oxygen. Consult medical personnel.

IX. SPECIAL HANDLING INFORMATION

Ventilation: Good room ventilation usually adequate for most

Respiratory Protection: A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

Protective Clothing: No precautions other than clean bodycovering clothing should be needed.

Eye Protection: Use safety glasses or equivalent protection to avoid eye contact.

X. SPILL, LEAK & DISPOSAL PROCEDURES

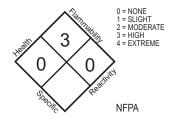
Action to take for spills/leaks: Eliminate all sources of ignition. Stop leak if without risk. Absorb spill with inert material (vermiculite, earth, or sand). Dispose of saturated absorbent materials appropriately since spontaneous heating may occur.

Disposal Method: Landfill in accordance with local, state, and federal regulations.

XI. SPECIAL PRECAUTIONS & ADDITIONAL INFORMATION

Precautions to be taken in handling and storage: Do not puncture, incinerate, store in heat or sun as container may burst above 130°F. Avoid contact with food. Flammable. Do not use near fire, sparks, or flame. Do not spray in eyes. Contents under pressure. STORE AS LEVEL 2 AEROSOL (NFPA 30B).

Emergency Phone 989.496.3110





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