



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION								
PRODUCT NAME: CITRACE® HOSPITAL GERMICIDE								
PRODUCT NUMBER: 49100 (14 oz Spray Can), 49110 (5oz Spray Can) DATE: May 12, 2009								
TRADE NAME: CITRACE® HOSPITAL GERMICIDE GENERAL USE: Hospital Germicide CHEMICAL FAMILY: Phenolic in Ethanol PRODUCT DESCRIPTION: Pressurized aerosol, clear pale yellow liquid with a citrus odor.	 CITRACE® HOSPITAL GERMICIDE							
MANUFACTURER Caltech Industries, Inc.	DATE PREPARED: May 12, 2009							
ADDRESS (NUMBER, STREET, P.O. BOX) 4520 E. Ashman Road, Suite C	SUPERSEDES: November 24, 2003							
(CITY, STATE AND ZIP CODE) Midland, MI 48642-8911	TELEPHONE NUMBER FOR INFORMATION / Customer Service 800-234-7700							
COUNTRY USA	CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER  1-800-255-3924 North America Toll Free							
SECTION 2 - HAZARDOUS INGREDIENTS								
Hazardous Components	% (by Weight)	CAS #						
Ethanol	65-67	64-17-5						
Orthophenyl phenol	0.05-2.5	90-43-7						
d-limonene	1.0-4.0	5989-27-5						
Sodium nitrite	<0.1	7632-00-0						
Propane propellant	3-5	74-98-6						
Notes: * The balance of ingredients not listed above are non-hazardous as defined in the OSHA hazard communication standard 29CFR 1910.1200.								
SECTION 3 - HAZARDS IDENTIFICATION								
EMERGENCY OVERVIEW 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.								
POTENTIAL HEALTH EFFECTS								
INHALATION: No significant effect expected from a single short-term exposure. Respiratory Irritation and depressed CNS function is expected with prolonged and long term exposure.								
SKIN: Essentially non-irritating.								
EYES: May cause eye irritation.								
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.								
CARCINOGENICITY: <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">NTP? NO</td> <td style="width: 33%;">IARC MONOGRAPHS? Yes, Ethyl Alcohol.</td> <td style="width: 33%;">OSHA REGULATED? NO</td> </tr> <tr> <td>CALIFORNIA, Prop.65?</td> <td colspan="2">Ethyl Alcohol for Developmental Reproductive Toxicity. Orthophenyl Phenol for carcinogenicity.</td> </tr> </table>			NTP? NO	IARC MONOGRAPHS? Yes, Ethyl Alcohol.	OSHA REGULATED? NO	CALIFORNIA, Prop.65?	Ethyl Alcohol for Developmental Reproductive Toxicity. Orthophenyl Phenol for carcinogenicity.	
NTP? NO	IARC MONOGRAPHS? Yes, Ethyl Alcohol.	OSHA REGULATED? NO						
CALIFORNIA, Prop.65?	Ethyl Alcohol for Developmental Reproductive Toxicity. Orthophenyl Phenol for carcinogenicity.							
SECTION 4 - FIRST AID MEASURES								
INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult medical personnel.								
EYES: 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 irritation persists.								
SKIN: Wash with soap and water, no further first aid should be required.								
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.								

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: CITRACE® HOSPITAL GERMICIDE
PRODUCT NUMBER: 49100 (14 oz Spray Can), 49110 (5oz Spray Can) **DATE:** May 12, 2009

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL 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. Flash point=20°C (68°F) Closed cup.

EXTINGUISHING MEDIA:

Water fog, carbon dioxide and dry chemical.

FIRE FIGHTING PROCEDURES:

Wear SCBA when fighting fires involving this product. Individual aerosol containers are under pressure and can and will rupture under fire conditions sometimes with explosive force.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Fight fire as with any flammable aerosol product.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, Carbon Dioxide.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

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.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Handle in areas equipped with good area ventilation. Avoid buildup of vapors in confined areas. 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).

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3
Ethanol	1000	1900	3300 IDLH		1000		1000	1900
Orthophenyl phenol	NE	NE	NE	NE	NE	NE	NE	NE
d-limonene	NE	NE	NE	NE	NE	NE	NE	NE
Sodium nitrite	NE	NE	NE	NE	NE	NE	NE	NE
Propane propellant					1000		1000	

PERSONAL PROTECTION

RESPIRATORY PROTECTION:

A respiratory protection program that meets OSHA's 29 CFR 1910.134, ANSI Z88.2 requirements must be followed whenever workplace concentrations of this product in air exceed the published TLV's.

PROTECTIVE GLOVES:

Impervious rubber, or nitrile gloves are advised if prolonged or repeated exposure is likely.

EYE PROTECTION:

Use safety glasses with protective side shields to avoid eye contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Not required.

WORK / HYGIENIC PRACTICES:

Wash with soap and water after contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR Pressurized Aerosol, clear pale yellow liquid with a citrus odor.	VAPOR PRESSURE 40mmHg at 20°C
pH 9.5	SPECIFIC GRAVITY (WATER = 1) 0.867
BOILING POINT / BOILING RANGE 80°C (176°F)	SOLUBILITY IN WATER Dispersable
FLASH POINT 20°C (68°F) Closed cup.	VISCOSITY NA
FLAMMABLE LIMITS LEL: NE UEL: NE	VAPOR DENSITY (AIR = 1) <1
AUTOIGNITION TEMPERATURE NE	EVAPORATION RATE (WATER = 1) NR

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: CITRACE® HOSPITAL GERMICIDE
PRODUCT NUMBER: 49100 (14 oz Spray Can), 49110 (5oz Spray Can) **DATE:** May 12, 2009

SECTION 10 - STABILITY AND REACTIVITY

STABILITY	STABLE	X	CONDITIONS TO AVOID: Excessive heat above 130 °F, do not puncture or incinerate. Avoid sources of ignition.
-----------	--------	----------	--

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong acids, Strong oxidizers.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Carbon Monoxide, Carbon Dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.	CONDITIONS TO AVOID: None related to polymerization.
--	---

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Ethanol	64-17-5	Oral, mouse: LD50 = 3450 mg/kg Oral, rat: LD50 = 7060 mg/kg	Inhalation, mouse: LC50 = 39 gm/m3/4H
Orthophenyl phenol	90-43-7	Oral, mouse: LD50 = 1050 mg/kg Oral, rat: LD50 = 2700 mg/kg	NE
d-limonene	5989-27-5	Oral, mouse: LD50 = 5600 mg/kg Oral, rat: LD50 = 4400 mg/kg	NE
Sodium nitrite	7632-00-0	Oral, mouse: LD50 = 175 mg/kg Oral, rat: LD50 = 180 mg/kg	Inhalation, rat: LC50 = 5.5 mg/m3/4H
Propane propellant	74-98-6	NE	NE


SECTION 12 - ECOLOGICAL INFORMATION

No information is available for this blended product.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:
Landfill in a permitted waste disposal facility in accordance with all local, state, and federal regulations. Do not incinerate.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: ORM-D Consumer Commodity (within USA only)	
<p>DOT HAZARD CLASS / Pack Group: ORM-D Consumer Commodity Ground Only</p> <p>REFERENCE: 49CFR172, 49CFR173</p> <p>UN / NA IDENTIFICATION NUMBER: None - ORM-D</p> <p>LABEL: ORM-D Consumer Commodity (USA Ground Only)</p> <p>HAZARD SYMBOLS:</p> <div style="text-align: center; margin-top: 10px;">  </div>	<p>IATA HAZARD CLASS / Pack Group: Contact Manufacturer</p> <p>IMDG HAZARD CLASS: Contact Manufacturer</p> <p>RID/ADR Dangerous Goods Code: Contact Manufacturer</p> <p>UN TDG Class / Pack Group: Contact Manufacturer</p> <p>Hazard Identification Number (HIN): Contact Manufacturer</p> <p style="text-align: center; margin-top: 10px;">Refer to 49CFR172 and 49CFR173 for pertinent regulations.</p>

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

