



MATERIAL SAFETY DATA SHEET

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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.	 <div style="display: inline-block; vertical-align: middle; text-align: center;"> CITRACE® HOSPITAL GERMICIDE </div>	
MANUFACTURER Caltech Industries, Inc.	DATE PREPARED: May 12, 2009 SUPERSEDES: November 24, 2003	
ADDRESS (NUMBER, STREET, P.O. BOX) 4520 E. Ashman Road, Suite C (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: <div style="display: flex; justify-content: space-between;"> <div> NTP? NO CALIFORNIA, Prop.65? </div> <div> IARC MONOGRAPHS? Yes, Ethyl Alcohol. Ethyl Alcohol for Developmental Reproductive Toxicity. </div> <div> OSHA REGULATED? NO Orthophenyl Phenol for carcinogenicity. </div> </div>		
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.		

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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	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">NIOSH</th> <th colspan="2">ACGIH</th> <th colspan="2">OSHA</th> </tr> <tr> <th>TWA ppm</th> <th>TWA mg/m3</th> <th>STEL ppm</th> <th>STEL mg/m3</th> <th>TLV/TWA ppm</th> <th>TWA mg/m3</th> <th>STEL ppm</th> <th>STEL mg/m3</th> </tr> </thead> <tbody> <tr> <td>Ethanol</td> <td>1000</td> <td>1900</td> <td>3300 IDLH</td> <td></td> <td>1000</td> <td></td> <td>1000 1900</td> </tr> <tr> <td>Orthophenyl phenol</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> </tr> <tr> <td>d-limonene</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> </tr> <tr> <td>Sodium nitrite</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> <td>NE</td> </tr> <tr> <td>Propane propellant</td> <td></td> <td></td> <td></td> <td></td> <td>1000</td> <td></td> <td>1000</td> </tr> </tbody> </table>	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	d-limonene	NE	NE	NE	NE	NE	NE	NE	Sodium nitrite	NE	NE	NE	NE	NE	NE	NE	Propane propellant					1000		1000
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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																																																								

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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)			
DOT HAZARD CLASS / Pack Group: ORM-D Consumer Commodity Ground Only		IATA HAZARD CLASS / Pack Group: Contact Manufacturer	
REFERENCE: 49CFR172, 49CFR173		IMDG HAZARD CLASS: Contact Manufacturer	
UN / NA IDENTIFICATION NUMBER: None - ORM-D		RID/ADR Dangerous Goods Code: Contact Manufacturer	
LABEL: ORM-D Consumer Commodity (USA Ground Only)		UN TDG Class / Pack Group: Contact Manufacturer	
HAZARD SYMBOLS: <div style="border: 2px solid black; padding: 10px; text-align: center; margin-top: 10px;"> CONSUMER COMMODITY <div style="border: 1px solid black; display: inline-block; padding: 5px 10px; font-size: 1.5em; font-weight: bold;">ORM-D</div> </div>		Hazard Identification Number (HIN): Contact Manufacturer Refer to 49CFR172 and 49CFR173 for pertinent regulations.	
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.			

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SECTION 15 - REGULATORY INFORMATION																
TSCA (USA - Toxic Substance Control Act): Listed.																
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):																
Acute Health: Yes	Chronic Health: Yes															
Fire: Yes	Sudden Release of Pressure: Yes															
Reactive: No																
313 REPORTABLE INGREDIENTS: This material contains 2-Phenylphenol (CAS# 90-43-7, 0.05-2.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR. CERCLA (USA - Comprehensive Response Compensation and Liability Act): No RQ's listed. California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: WARNING: This product contains Ethyl alcohol, a chemical known to the state of California to cause developmental reproductive toxicity. WARNING: This product contains 2-Phenylphenol, a chemical known to the state of California to cause cancer.																
SECTION 16 - OTHER INFORMATION																
Legend: NA=Not applicable NE= Not established NR= Not reported																
HMIS HAZARD RATINGS	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 35%;">HEALTH:</td> <td style="width: 15%; text-align: center;">1</td> <td style="width: 50%;">0 = INSIGNIFICANT</td> </tr> <tr> <td>FLAMMABILITY:</td> <td style="text-align: center;">3</td> <td>1 = SLIGHT</td> </tr> <tr> <td>PHYSICAL HAZARD:</td> <td style="text-align: center;">0</td> <td>2 = MODERATE</td> </tr> <tr> <td>PERSONAL PROTECTIVE EQUIPMENT:</td> <td style="text-align: center;">B</td> <td>3 = HIGH</td> </tr> <tr> <td></td> <td style="text-align: center;">0 + 1</td> <td>4 = EXTREME</td> </tr> </table>	HEALTH:	1	0 = INSIGNIFICANT	FLAMMABILITY:	3	1 = SLIGHT	PHYSICAL HAZARD:	0	2 = MODERATE	PERSONAL PROTECTIVE EQUIPMENT:	B	3 = HIGH		0 + 1	4 = EXTREME
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REVISION SUMMARY: Revised with additional shipping information 5/12/2009, supercedes 11/24/2003 issue. JTV/LB																
MSDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com																
<small>The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.</small>																

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