

MATERIAL SAFETY DATA SHEET

000084

PRODUCT NAME Braakleen (bulk) #05090,05091,05093	# MSDS 005090
MANUFACTURED BY: CRC CHEMICALS	Phone (215) 674-4300
885 LOUIS DRIVE, WARMINSTER, PA. 18974	

1. INGREDIENTS	CAS #	ACGIH TLV	OSHA PEL	Other Limits	%
1,1,1 Trichloroethane	71-55-6	350	350		92.9
Diethylene ether	123-91-1	25	100		} <7.1
Methyl butylol	115-19-5	N/A	N/A		
Sec. butyl alcohol	78-92-2	100	150		

2. PHYSICAL DATA

Specific Gravity	1.293 @70°F	Vapor Pressure	73 mm Hg @20°C	% Volatile	100 %
Boiling Point	164 °F	Evaporation Rate	Rapid		
Freezing Point	N/A	Vapor Density	4.16 (air = 1)		
Appearance and Odor Colorless liquid, irritating odor at high concentrations.					
Solubility Slight solubility in water - good solvent for many organic materials.					

3. FIRE AND EXPLOSION DATA

Flashpoint	None	Method	TCC, COC, TOC	Flammable Limits
Extinguishing Media	Water, fog			LEL 7.0 UEL 15.5
Unusual Hazards	N/A			

4. REACTIVITY AND STABILITY

Stability	Good - Avoid exposures to high temperatures (open flames, arcs, etc.)				
Hazardous decomposition products	Thermal - Hydrogen chloride, chlorine and some phosgene.				
Materials to avoid	Avoid storage in aluminum containers or contact with aluminum and/or zinc powders.				

5. PROTECTION INFORMATION

Ventilation	Maintain vapor concentrations below TLV - use mechanical ventiaition if necessary				
Respiratory	Above TLV use self contained breathing apparatus (air mask or vapor mask)				
Gloves	Solvent resistant	Eye & Face	Safety glasses		
Other Protective Equipment	Aprons and boots may be used if exposure is severe.				

6. HEALTH HAZARD DATA

Primary Routes of Entry Inhalation and skin contact

Signs and Symptoms of Exposure

1. Acute Overexposure Inhalation - headaches, dizziness, anesthetic effects, unconsciousness
Eyes - causes pain and some irritation. Skin - causes irritation
on repeated exposures.

2. Chronic Overexposure Repeated overexposures may cause liver and kidney effects.

Medical Conditions Generally Aggravated by Exposure High levels may cause cardiac arrhythmias
(over 8000 ppm).

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	IARC Monographs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	OSHA	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Emergency and First Aid Procedures (if symptoms persist, call a physician)

- 1. Inhalation Remove to fresh air - apply artificial respiration if needed.
- 2. Eyes Flush with large amounts of water for 15 minutes.
- 3. Skin Remove contaminated clothing. Wash exposed skin with soap and water.
- 4. Ingestion Do not induce vomiting - call a physician.

7. SPILL OR LEAK PROCEDURES

Precautions to be taken in Handling and Storage Store in a cool, dry area. Do not store in aluminum containers.

Steps to be taken in case Materials is released or spilled Keep out of water supply. Ventilate area. Do not enter spill area without a mask. Dike area and pump into containers or use absorbent to pick up.

Waste Disposal Treat as Hazardous Waste. Dispose of in conformance with Local, State and Federal regulations.

8. SPECIAL PRECAUTIONS AND USE DIRECTIONS

Avoid prolonged contact with skin. Avoid prolonged breathing of vapors. Vapors are heavier than air and will collect in low areas such as pits, storage tanks, the hold of a ship, etc. If vapors are suspected in low areas, do not enter unless special breathing apparatus is used and an observer is present for assistance.

PREPARED BY: Allen B. Reed
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