CLIFF PATENAUDE - BBN

MCB REAGENTS

MCB Manufacturing Chemists, Inc.
An Associate of E. Merck, Darmstadt, Germany
Corporate Headquarters
480 Democrat Road
Gibbstown, New Jersey 08027
(609) 423-6003

PLAINTIFF'S EXHIBIT

BIR-833

Dear Sir:

Enclosed you will find the MCB Material Safety Data Sheet equivalent to the OSHA-20 Form. We trust this will satisfy your laboratory and regulatory requirements.

If we can be of any additional service please do not hesitate to contact. Phone 609-423-6003.

Regards,

Bruce Crane
Technical Service Manager

480 Democrat Road, Gibbstown, New Jersey 08027, Phone (609) 423-6003

MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor "Essentially Similar to Form OSHA-20")

Chemical Name: Toluene	Catalog Number: TX0735, TX0734, TX0737, TX0745, TX0750
Trade Name & Synonyms: Toluol, Methylbenzene	Chemical Family: Aromatic Hydrocarbon
Formula: $C_6H_5CH_3$	Formula Weight: 92.14

Boiling Point, 760 mm Hg (°C)	110.6°C	Specific Gravity (H_2O = 1)	0.866@20°C
Melting Point (°C)	-95°C	Solubility in H_2O, % by wt. at 20°C	0.05
Vapor Pressure at 20°C	21.86 mm Hg	Appearance and Odo	Clear, colorless liquid with aromatic odor
Vapor Density (air = 1)	3.1		
Percent Volatiles by Volume	100	Evaporation Rate (Butyl Acetate = 1)	2.24

Flash Point (test method)	40° F (TCC)	Flammable Limits	Lel 1.27% Uel 7%

Extinguishing Media: Carbon dioxide, dry chemical and foam extinguishers

Special Hazards and Procedures:

Unusual Fire and Explosion Hazards: Vapors heavier than air increasing chances of contact with ignition source.

Stable x	Conditions to Avoid
Unstable	

Materials to Avoid

( ) Water ( ) Acids ( ) Bases ( ) Corrosives ( ) Oxidizers

( ) Other (specify)

Hazardous Decomposition Products: carbon monoxide

Steps to be Taken in Case Material is Released or Spilled: Take up liquid with absorbent material and transfer to hood.

Waste Disposal Method: To be performed in compliance with all current local, state and federal regulations.

We believe the data contained herein is factual, however, it is offered solely for your consideration, investigation, and verification. Do not take as a warranty.

Threshold Limit Value 100 ppm TXDS: ihl-man TCLo: 100 ppm
orl-rat LD50: 5000 mg/Kg

Effects of Overexposure

Causes severe eye irritation. May cause skin irritatation. Inhalation causes headache, dizziness, nausea, loss of consciousness.

First Aid Procedures

Flush eyes with water for 15 minutes. Get medical attention. If inhaled, remove to fresh air; artificial respiration if necessary - oxygen if available. Call physician. Flush skin with water.

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection

Provide adequate exhaust ventilation. For extreme exposure a self-contained breathing apparatus is recommended. Plastic gloves and safety goggles recommended.

DOT Hazard Classification: Flammable liquid

(refer to section 3 through 8)

EMERGENCY PHONE NUMBER (513) 631-0445

AUTHORIZED SIGNATURE Bruce Crane

DATE ISSUED: 8-28-81

DATE REVISED 6/81