

MATERIAL SAFETY DATA SHEET

WISCONSIN PHARMACAL COMPANY
1 Pharmacal Way
P. O. Box 198
Jackson, WI 53037

EMERGENCY NUMBER: 1-800-255-3924
 (24 HOURS)

INFORMATION NUMBER: 1-800-558-6614
 (BUSINESS HOURS)

PRODUCT NAME: Coleman 100 Max Insect Repellent

EPA REG. NO.: 79533-2

PRODUCT CODE: 743, 748

DATE PREPARED: 3-6-09 **HMIS:** Health Hazard: 1

PREPARED BY: J. Duhacek

Fire Hazard: 1

Reactivity: 0

Personal Protective Equipment: B

• **HAZARDOUS INGREDIENTS/IDENTITY INFORMATION** •

Material	CAS#	%	OSHA PEL	ACGH TWA
N,N-Diethyl m-tolamide (Deet)	134-62-3	approx. 100	N/E	N/E

*N/E = NOT ESTABLISHED

• **HEALTH HAZARDS** •

Acute Inhalation: High gas, vapor, or mist concentrations may be harmful if inhaled.

Eye Contact: Causes moderate eye irritation.

Skin Contact: May cause skin irritation in rare cases. Keep away from mucous membranes and abraded skin.

Ingestion: May be harmful if ingested.

Primary Routes of Entry: Inhalation, eye, skin contact and ingestion.

Systemic & Other Effects: May cause CNS disturbances. There have been a handful of isolated cases of adverse systemic effects associated with excessive exposure to DEET. Most of these cases have involved longterm high dosage use of DEET on children.

Medical Conditions Aggravated by Exposure: Persons with pre-existing skin disorder, eye problems or impaired respiratory function may be more susceptible to the effects of this substance.

Chemicals Listed as Carcinogens or Potential Carcinogens: None known.

COMMENTS: Unnecessary exposure to this product, or any chemical, should be avoided.

EMERGENCY FIRST AID PROCEDURES:

Inhalation: Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Administer oxygen by trained personnel if difficulty in breathing.

Skin: Wash with soap if irritation occurs. If irritation persists, seek medical attention.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.

Oral: Contact Poison Control Center. If conscious, give several glasses of water to and induce vomiting by touching back of throat with finger. Keep head below hips to prevent aspiration of liquid into lungs. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

• TOXICOLOGY INFORMATION •

Irritation: •Non-irritating to intact skin; keep away from mucous membranes and abraded skin.
 •May cause moderate irritation to eyes

Oral: •Oral LD₅₀ (Mouse) = 1170 mg/kg
 •Oral LD₅₀ (Rat) = 667 - 891 mg/kg
 •Oral LD₅₀ (Rat) = 1950 mg/kg
 •Oral LD₅₀ (Rabbit) = 1584 mg/kg
 •Oral LD₅₀ (Rat) = 1892 mg/kg

Dermal: •Dermal LD₅₀ (Mouse) =3170 mg/kg
 •Dermal LD₅₀ (Rat) = 5000 mg/kg
 •Dermal LD₅₀ (Rabbit) = 3180 mg/kg

Inhalation: •Inhalation LC50 (Rat) = 760 ppm

Multiple Dose Effects:

- Mice and rabbits exposed dermally to 0.02 mL of 10,50 and 100% concentrations of DEET twice a week for 160 weeks had no significant differences in the number of tumors compared to controls.
- DEET was not mutagenic in Salmonella typhimurium strains TA100, TA1535, TA97, or TA98 with or without metabolic activation when tested in a preincubation assay. Exposure to Tradescantia paludosa pollen mother cells in early prophase I to 1-3 spray stages of pollen maturation.
- No significant reproductive or developmental effects were observed in the fetuses of female and male rats or rabbits given DEET. In female rats given 125 - 750 mg/kg/day orally on gestational days 6 - 15, no external, visceral, or skeletal malformations were observed in fetuses; however, reduced fetal weight gain was noted at 750 mg/kg. In a chronic two generation reproduction study, the F2 offspring of CD rats given 500 - 5000 ppm showed a slight increase in exploratory locomotor activity at the high dose level.

• ECOLOGICAL INFORMATION •

- EC₅₀ (48h, Daphnia) = 56 - 100 ppm
- LC50 (96h, Rainbow Trout) = 71.25 ppm
- LC50 (96h, Pimephales promelas - flathead Minnow) = 110 mg/L
- LC50 (Colinus virginianus - Northern Bobwhite Quail) = 1375 mg/kg

Not predicted to exhibit significant toxicity to fish. Not expected to bioaccumulate. Modeling suggests rapid degradation in the atmosphere; biodegradation data suggests moderate rate of biodegradation.

• PHYSICAL/CHEMICAL CHARACTERISTICS •

BOILING POINT: 160° @ 19mmHg

FREEZING/MELTING POINT: -43°C (-45°F)(Pour Point)

VAPOR PRESSURE: 1.67 × 10⁻³ mmHg @ 25°C

SPECIFIC GRAVITY: 0.996 at 25°C

VAPOR DENSITY: 6.7

PERCENT VOLATILE BY VOLUME: Not determined

EVAPORATION RATE: <1%

SOLUBILITY IN WATER: <1%

APPEARANCE AND ODOR: Clear oily liquid with mild characteristics.

• REACTIVITY DATA •

STABILITY: Stable.

INCOMPATIBILITY (Material to Avoid): Strong oxidizing agents, halogens and aldehydes. Contact with strong acids and bases may cause hydrolysis. Do not use on Rayon, Acetate, or Dynel clothing. It will have a softening effect on most plastics and some paint/varnishes. Do not use on leather.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: Products of combustion are carbon monoxide, carbon dioxide, and oxides of nitrogen.

CONDITIONS TO AVOID: Extreme temperatures, fire, flames or sparks.

• FIRE AND EXPLOSION HAZARDS •

FLASH POINTS: 311°F (155°C)COC

AUTOIGNITION: Not determined.

FLAMMABILITY LIMITS IN AIR, % BY VOL.: Not determined.

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical, water spray.

UNUSUAL FIRE OR EXPLOSION HAZARDS: None known.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing.

• PRECAUTIONS FOR SAFE HANDLING AND USE •

SPILL RESPONSE: Contain spilled liquid with sand or vermiculite and place in a chemical waste container. Prevent run off from entering drains, sewers, and streams.

WASTE DISPOSAL AND PRECAUTIONS: Contact your Local, State, and Federal Regulations concerning health and pollution to determine approved disposal procedures.

HANDLING: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE: This product should be stored at ambient temperature in a dry, well-ventilated location. Keep container tightly closed.

OTHER PRECAUTIONS: Keep out of reach of children. Read and follow directions on product label. Good practice requires that gross amounts of any chemical be removed from the skin as practical, especially before eating or smoking.

• CONTROL MEASURES •

RESPIRATORY PROTECTION: None normally required.

VENTILATION: Use only in a well ventilated area.

PROTECTIVE EQUIPMENT: Not required with normal use. Keep out of eyes.

SKIN: Wash skin after use.

EMERGENCY NUMBER: 1-800-255-3924

COMMENTS: Do not apply toward face. Wash with soap and water after use.

• TRANSPORT INFORMATION •

D.O.T. SHIPPING NAME : Insect repellent other than agricultural
D.O.T. HAZARD CLASS : N/A
U.N./ID NUMBER : N/A
D.O.T. HAZARD LABEL : N/A
I.M.O : Not Listed

• REGULATORY INFORMATION •

OSHA STATUS : Irritant (eye)
SARA TITLE III : Not Listed
CERCLA : Not Applicable

Inventories

TSCA : Yes
CANADA : DSL
EINECS : 205-149-7
JAPAN : 3-1321; 3-1677
AUSTRALIA : Yes
KOREA : KE-10492
CHINA : Yes
PHILIPPINES : Yes
SWITZERLAND : G-2482

NOTE: This data represents typical values, not product specifications. No guarantee of accuracy or completeness is made. No responsibility is assumed for any kind of loss or damages arising from use of this data. The aforementioned effects are based on the evaluation of individual components and the relevancy to the product as a whole is unknown. Information within this MSDS has been taken from Morflex's MSDS for DEET dated 2/04.