



Bug X 30 Insect Repellent Spray with DEET
Revision: Jan. 1, 2013
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MATERIAL SAFETY DATA SHEET

(according to (EC) 1907/2006)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Bug X 30 Insect Repellent Spray with DEET

Synonyms:

N,N-Diethyl-m-toluamide, DETA

1.2. Relevant identified uses of the substance or mixture and uses advised against

For Manufacturing of End-Use Insect Repellent Products Only

1.3. Details of the supplier of the safety data sheet

Manufacturer Information: CoreTex Products, Inc.
1850 Sunnyside Ct.
Bakersfield, CA 93308 USA

Non-Emergency Fax Number: 1-661-833-2753

Non-Emergency Phone Number: 1-877-684-5774 (Toll Free)

1.4. Emergency telephone number

CHEMTREC (USA): 1-800-255-3924 (collect calls accepted); (Int'l): 1-703-527-3887 (collect calls accepted; 011 prefix not needed)

SECTION 2: Hazards Identification

HMIS Rating	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008)

Environmental Chronic Category 3

Serious Eye Damage/Eye Irritation Category 2

Skin Corrosion/Irritation Category 2

Signal Word:

Warning

Hazard Precautions:

H412 - Harmful to aquatic life with long lasting effects.

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

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2.2. Label elements

Hazard Symbols (Pictogram):



Prevention Precautions:

P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P264 - Wash hands thoroughly after handling.

First Aid Precautions:

P337+P313 - If eye irritation persists: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362 - Take off contaminated clothing and wash before reuse.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P321 - Specific treatment (see supplemental information on this label).
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

Storage Precautions:

Not required.

Disposal Precautions:

P501 - Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

Single Exposure Target Organs:

Not applicable

Repeated Exposure Target Organs:

Not applicable

(According to Directive 67/548/EEC)

Symbol: Xn, Xi, F
Risk Phrases: R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36/38: Irritating to eyes and skin.
Safety Phrases: S2: Keep out of the reach of children.
S61: Avoid release to the environment. Refer to special instructions/safety data sheet.
S7: Keep container tightly closed.
S16: Keep away from sources of ignition - No smoking.

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2.3. Other hazards

Signs and Symptoms of Potential Overexposure: May be harmful if ingested in sufficient quantities. Non-irritating to intact skin; keep away from mucous membranes and abraded skin. Contact with eyes causes irritation. High gas, vapor, or mist concentrations may be harmful if inhaled. This product does not present an immediate concern for emergency personnel.

Primary Route(s) of Exposure: Ingestion. Skin contact, Eye contact. Inhalation.

Medical Conditions Aggravated by Exposure: No data found

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (%)	EINECS / ELINCS	EU Symbol	Risk Phrases
Water	7732-18-5	50 - 80	231-791-2	N/A	Not applicable
N,N-Diethyl-m-toluamide (DEET)	134-62-3	10 - 30	205-149-7	Xn, Xi	R22- R36/38- R52/53
Ethanol	64-17-5	8 - 12	200-578-6	F	R11
Other emulsifiers, emollients, preservatives and fragrances (present at < 1% each)	MULTIPLE	2 - 3	Not listed.	N/A	Not applicable
Emollient	TRADE SECRET	2 - 3	Not listed.	N/A	Not applicable
Lubricant	TRADE SECRET	2 - 3	Not listed.	N/A	Not applicable

NOTE: See Section 8 of this MSDS for exposure limit data for these ingredients.
See Section 15 of this MSDS for trade secret information (where applicable).
See Section 16 of this MSDS for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: Keep away from mucous membranes and abraded skin

Eye Contact: Can cause moderate irritation. Immediately flush the eyes with plenty of water for at least 15 minutes. Call a physician.

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

Ingestion: May be harmful if ingested.

4.2. Most important symptoms and effects, both acute and delayed

Acute: May be harmful if ingested in sufficient quantities. Non-irritating to intact skin; keep away from mucous membranes and abraded skin. Contact with eyes causes irritation. High gas, vapor, or mist concentrations may be harmful if inhaled. This product does not present an immediate concern for emergency personnel.

Delayed Effects: None known.

4.3. Indication of any immediate medical attention and special treatment needed



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Thermal Exposure: Not applicable.
Note to Physician: No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Foam Dry chemical Water spray Carbon dioxide

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: As with other organic materials, combustion will produce carbon monoxide and carbon dioxide.

Potential for Dust Explosion: not available

Special Flammability Hazards: Not applicable.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: Wear self-contained breathing apparatus and protective clothing. Normal firefighting procedures may be used.

Flammability Classification (OSHA): Not applicable.

NFPA Rating



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Special Instructions: Remove all contaminated clothing to prevent further absorption. Decontaminate affected personnel using the first aid procedures in Section 4. Leather shoes that have been saturated must be discarded.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers, and waterways.

6.3. Methods and material for containment and cleaning up

Containment Techniques and Clean-up Procedures: Contain spilled liquid with sand or vermiculite and place in chemical waste container Prevent runoff from entering drains, sewers, and streams

Special Reporting Requirements: Not applicable.

6.4. Reference to other sections



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Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for Unique Hazards:	Not applicable.
Practices to Minimize Risk:	Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material.
Special Handling Equipment:	Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations:	This product should be stored at ambient temperature in a dry, well-ventilated location. Keep container closed when not in use.
Dangerous Incompatibility Reactions:	Incompatible with oxidizing materials.
Incompatibilities with Materials of Construction:	none known

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits (United States):	OSHA PEL: 1000 ppm TWA; 1900 mg/m3 TWA	ACGIH TLV: 1000 ppm STEL
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8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Personal Protective Equipment:	Goggles or glasses with side shields. Clothing should be sufficient to minimize physical contact. The use of a NIOSH-approved organic vapor respirator is recommended whenever this product is used in a confined space or heated above ambient temperature.
Respirator Caution:	Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.
Ventilation:	All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided.
Other Engineering Controls:	All appropriate engineering controls should be used to minimize exposure potential. Use exhaust ventilation to keep airborne concentrations below exposure limits.
Thermal Hazards:	Not applicable.
Additive or Synergistic Effects:	None known.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):	lotion or cream White liquid		
Molecular Formula:	mixture	Molecular Weight:	mixture
Vapor Pressure:	Not available.	Evaporation Rate:	< 1 (Butyl Acetate = 1)
Specific Gravity or Density:	1.000	Vapor Density (air = 1):	Not available.
Boiling Point:	291.7 °C @ 760 mm Hg	Freezing / Melting Point:	Not available. Not available.
Solubility in Water:	water emulsion	Octanol / Water Coefficient:	Not available.
pH:	5.0 - 7.5 @ 1% aqueous solution	Odor Threshold:	Fragrance added
Viscosity:	Not available.	Autoignition Temperature:	Not available.
Flash Point and Method:	> 201°F (> 94°C) (COC)	Flammable Limits:	Not available. (LEL) – Not available. (UEL)

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity	Not classified as dangerously reactive.
10.2. Chemical stability	Stable
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	No data.
10.5. Incompatible materials	Incompatible with oxidizing materials.
10.6. Hazardous decomposition products	Combustion will produce carbon monoxide, carbon dioxide and oxides of nitrogen. Incomplete combustion yields carbon monoxide, carbon dioxide and dense smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD ₅₀ :	Rat (female) 2000 - 5000 mg/ kg Rat (male) > 5000 mg/ kg
Acute Dermal LD ₅₀ :	Dermal LD ₅₀ (rat) > 5000 mg/ kg
Acute Inhalation LC ₅₀ :	Inhalation LC ₅₀ (rat) > 2000 mg/m ³



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Skin Irritation:	Moderately irritating to skin.
Skin Sensitization:	Negative skin sensitizer
Eye Irritation:	Slight to moderate erythema observed in eyes in contact with material over 20 minutes to 3 hours.
Target Organs:	No data available.
Carcinogenicity:	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.
Teratogenicity:	No data available.
Reproduction:	No data available.
Neurotoxicity:	No data available.
Mutagenicity:	No data available.
Additional Toxicity Information:	Skin irritation (rabbit): 50 mg; slightly irritating Eye Irritation (rabbit): 100 mg; moderately irritating

SECTION 12: Ecological Information

12.1. Toxicity

Aquatic EC50 (48h) Daphnia = 56 - 100 ppm
Aquatic LC50 (96h) Oncorhynchus mykiss (rainbow trout) = 71.25 ppm
Aquatic LC50 (96h) Pimephales promelas (fathead minnow) = 110 mg/L
Aquatic LC50 Colinus virginianus (Northern bobwhite quail) = 1375 mg/kg
48 HR EC50 DAPHNIA MAGNA 2 MG/L [STATIC]
24 HR EC50 DAPHNIA MAGNA 10800 mg/L
48 HR LC50 DAPHNIA MAGNA 9268 - 14221 mg/L
96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC]

12.2. Persistence and degradability

No data Not expected to bioaccumulate. Modeling suggests rapid degradation in the atmosphere; biodegradation data suggests moderate rate of biodegradation.

12.3. Bioaccumulative potential

No data

12.4. Mobility in soil

No data

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not predicted to exhibit significant toxicity to fish. Ecotoxicological data are for individual components of this mixture.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number: Not applicable

Waste Disposal: Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws. Do NOT dump

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into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

<u>14.1. UN number</u>	Not applicable
<u>14.2. UN proper shipping name</u>	Chemicals, n.o.s. (DEET, ethanol)
<u>14.3. Transport hazard class(es)</u>	Not applicable
<u>14.4. Packing group</u>	Not applicable
<u>14.5. Environmental hazards</u>	Not applicable
<u>14.6. Special precautions for user</u>	Not available.
NA Emergency Guidebook Numbers:	Not applicable
	IMDG EMS: Not applicable
<u>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</u>	Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

OSHA Hazards: Health: Irritant (eye). Physical: Not applicable.

WHMIS Classification: Class D, Division 2, Subdivision B: Irritant.
Class B, Division 3: Combustible Liquid.

Chemical Inventory Lists:	Status
TSCA:	Present
EINECS:	231-791-2 205-149-7 200-578-6
Canada(DSL/NDL):	DSL
Japan:	(3)-1677; (3)-1421; (3)-1321 (2)-202
Korea:	KE-35400 KE-10492 KE-13217
Australia:	Present
New Zealand:	Present
China:	Present
Philippines:	Present
Switzerland:	G-2482



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New Zealand GHS Classification: Not classified by this country.

Japan GHS Classification: Not classified by this country.

Korea (MOL) GHS Classification: Not classified by this country.

Australia GHS Classification: Not classified by this country.

Taiwan GHS Classification: Not classified by this country.

Indonesia GHS Classification: Not classified by this country.

SARA 313: Not applicable

Other Regulatory Listings: This product is regulated under the PMRA in Canada. It must be used for purposes consistent with its labeling.
This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Full text of R phrases in Section 3: R22: Harmful if swallowed.
R36/38: Irritating to eyes and skin.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R11: Highly Flammable.



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Legend of abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CERCLA = Comprehensive Environmental, Response, Compensation and Liability Act (1990).
CFR = Code of Federal Regulations.
DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EEC = European Economic Community.
EINECS = European Inventory of Existing Commercial chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal concentration.
LD = Lethal dose.
MOL = Ministry of Labor.
NEMA = National Emergency Management Agency.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicological Program.
OSHA = Occupational Safety and Health Administration
PEL = Permissible exposure limit.
RQ = Reportable quantity.
SARA = Superfund Amendments and Reauthorization Act of 1986.
TLV = Threshold limit value.
WHMIS = Workplace Hazardous Materials Information System.

Precautionary Statement: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

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