

SHANDONG ZHISHANG CHEMICAL CO.,LTD.

MATERIAL SAFETY DATA SHEET

Date of issue: 2/24/2018

Section 1. Chemical Product and Company Identification

Product identification

Catalog No.:

Product name: N, N-DIETHYL-M-TOLUAMIDE, 99%

Company Identification

SHANDONG ZHISHANG CHEMICAL CO.,LTD. .

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Section 2. Composition, Information on Ingredients

CAS #: 134-62-3

MF: C₁₂H₁₇NO

EC NO.: 205-149-7

Synonyms: DEET; N, N-Diethyl-3-methylbenzamide; Diethyltoluamide; Diethyl-m-toluamide; 3-Methyl-N, N-diethylbenzamide; m-DETA; off insect repellent; Flypel.

Section 3. Hazards Identification

Eye: Causes eye irritation.

Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system effects.

Inhalation: May cause respiratory tract irritation. May cause irritation of the mucous membranes.

Chronic: Prolonged or repeated exposure may cause adverse reproductive effects. Laboratory experiments have resulted in mutagenic effects. Chronic overexposure may produce erythremia, bullous eruptions, contact urticaria, muscle cramping, slurred speech, tremors, seizures, or coma.

Section 4. First Aid Measures

In case of eyes contact: Flush eyes immediately with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

In case of skin contact: Flush skin immediately with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. But never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air immediately. Get medical aid. Do NOT use mouth-to-mouth resuscitation. Administer oxygen. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Section 5. Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water.

Extinguishing Media: Carbon dioxide, dry chemical powder or appropriate foam.

Flash Point: 155 C (311 F)

Section 6. Accidental Release Measures

General Information: Evacuate area. Use proper personal protective equipment.

Spills/Leaks: Absorb spill on sand or vermiculite and place in closed containers for disposal.

Section 7. Handling and Storage

Handling: Wear chemical safety goggles and rubber gloves. Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Use only in a well-ventilated area. Do not ingest or inhale. Avoid contact with skin and eyes. Wash contaminated clothing before reuse.

Storage: Store in a tightly closed container and a cool, dry, well-ventilated area.

Section 8. Exposure Controls, Personal Protection

Personal Protective Equipment

Eyes: Wear chemical safety goggles to avoid eyes contact.

Skin: Wear rubber gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure, and wash contaminated clothing before reuse.

Respirators: Do NOT breathe vapor. Keep tightly closed and place in a cool dry area.

Section 9. Physical and Chemical Properties

Physical State: Liquid

Appearance: colorless or pale yellow liquid

Odor: characteristic (delighted) odor

pH: Not available.

Vapor Pressure: < 0.01 MM @ 25 C

Vapor Density: 6.7

Boiling Point: 111 C @ 1 MM

Flash Point: >230.

Decomposition Temperature: Not available.

Solubility: Insoluble.

Specific Gravity/Density: 0.996 g/cm³

Section 10. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Incompatibilities: Alkalis, strong oxidizing agents, strong acids, strong bases, strong reducing agents.

Hazardous combustion or decomposition products: Nitrogen oxides, carbon monoxide, carbon dioxide, irritating, toxic fumes and gases.

Section 11. Toxicological Information

LD50/LC50:

CAS# 134-62-3:

Draize test, rabbit, eye: 10 mg Moderate;

Draize test, rabbit, skin: 500 mg Moderate;

Inhalation, rat: LC50 = 5950 mg/m³;

Oral, mouse: LD50 = 1170 mg/kg;

Oral, rabbit: LD50 = 1584 mg/kg;

Oral, rat: LD50 = 1950 mg/kg;

Skin, rabbit: LD50 = 3180 uL/kg;

Skin, rat: LD50 = 5 gm/kg;<BR.

Carcinogenicity: CAS# 134-62-3: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: Oral, rat: TDLo = 7500 mg/kg (female 6-15 days after conception-Maternal effects and effects on embryo and fetus) Dermal, rat: TDLo = 19 gm/kg (female 1-19 days after conception -Effects on newborn). Oral, rabbit: TDLo = 4225 mg/kg (female 6-18 days after conception -Maternal effects).

Neurotoxicity: No information available.

Mutagenicity: Sperm Morphology: Inhalation, rat = 1500 mg/kg.

Section 12. Ecological Information

Ecotoxicity: No data available.

Environmental: Anaerobic effects: Decomposition can be effected by biodegradation under anaerobic conditions.

Physical: No information available.

Other: Estimated Koc value = 300. This value indicates that DEET will show moderate mobility in soil and may absorb to suspended matter in the water column. Estimated BCF values = 0.8-2.4. These values suggest that this product should not readily bio-concentrate in aquatic organisms.

Section 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste, and consult local hazardous waste regulations to ensure complete and accurate classification.

Section 14. Transport Information

No information available.

Section 15. Regulatory Information

European/International Regulations

Symbol: Xn Harmful

Risk phrases: R22-36/38-52/53

Harmful if swallowed. Irritating to eyes and skin. Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety phrases: S61

Avoid release to the environment. Refer to special instructions/Safety data sheets.

Local regulations

It is user's responsibility to comply with the local laws and regulations.

Section 16. Additional Information

The information above is believed to be accurate and represents the best information currently available to us. It does not purport to be all-inclusive and shall be used only as a guide. SHANDONG LOOK CHEMICAL CO.,LTD. shall not be held liable for any damage resulting from handling or from contact with the above product.

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