

MATERIAL SAFETY DATA SHEET

SHIELD INSECT REPELLENT

I. PRODUCT AND MANUFACTURER INFORMATION	
Product name	SHIELD INSECT REPELLENT, AEROSOL
Chemical name	
Synonyms	
CAS number	
Manufacturer	Ashburn Chemical Technologies 2911 Rusk Houston, TX 77003
Emergency phone number	713-425-3000
MSDS prepared by	
Date of last revision	7/22/04

II. HAZARDOUS INGREDIENTS					
HAZARDOUS COMPONENT	CAS NUMBER	% Optional	OSHA PEL	ACGIH TLV	CHEMICAL AND/OR COMMON NAME(S)
DIETHYL-M-TOLUAMIDE	134-62-3		NE	NE	
ISOPROPYL ALCOHOL	67-63-0		400 PPM	400 PPM	
PROPANE/n-BUTANE	68476-86-8		1000 PPM	600 PPM	
REPELLENT 326	136-45-8		NE	NE	

(All of the ingredients contained in this product are listed on the TSCA inventory.)

III. PHYSICAL AND CHEMICAL CHARACTERISTICS	
Boiling point	206 F
Vapor pressure (mm Hg at 20 °C)	1
Vapor density (air = 1)	1
Solubility in water	58%
Appearance and Odor	Clear Spray, Mild Musk Odor
Specific gravity (H ₂ O = 1.0)	0.87
Melting point	N/A
Evaporation rate (butyl acetate = 1)	1

IV. FIRE AND EXPLOSION HAZARD DATA	
Combustible/Not combustible	Combustible
Flammable/Not flammable	Flammable
Pyrophoric/Not pyrophoric	Not pyrophoric
Explosive/Not explosive	Not explosive
Flash point (test method)	130 F (TCC)
Flammable limits (in Air % by volume)	LFL: 1 UFL: 6
Extinguishing media	Standard chemical fire extinguishers, CO ₂ , Water
Special fire-fighting procedures or equipment	Wear self contained breathing apparatus when indicated
Unusual fire and explosion hazards	Extremely Flammable. Contents under pressure. Exposure to temperatures above 120 F may cause bursting

V. REACTIVITY DATA	
Material is stable/unstable	Stable
Conditions to avoid	Temperatures above 120 F
Incompatibility (materials to avoid)	Strong Acids, alkalies, oxidizers
Hazardous decomposition or by-products	Incomplete combustion may result in carbon monoxide gas
Hazardous polymerization will/will not occur	Will not occur

VI. HEALTH HAZARD DATA	
Primary route(s) of entry	Inhalation, Ingestion
Known Hazards Under 29 CFR 1910.1200	
Mutagenic (genetic defects)	Not a Hazard
Reproductive	Not a Hazard
Systemic	Not a Hazard
Teratogenic (birth defects)	Not a Hazard
Carcinogen listed in:	
NTP (National Toxicology Program)	Not a Carcinogen
IARC Monographs	Not a Carcinogen
OSHA	Not a Carcinogen
Signs and symptoms of exposure	
Inhalation	Prolonged exposure may cause headache/dizziness, suffocation.
Skin contact	Not a primary skin irritant
Eye contact	May cause mild to strong irritation if in eyes.
Ingestion	May cause nausea. Swallowing may be harmful or fatal
Emergency first aid procedures	
Inhalation	Remove to fresh air and consult physician.
Skin contact	Wash affected area with soap and water.
Eye contact	Flush with water for 15 minutes and consult physician.
Ingestion	Do not induce vomiting. Give water and contact physician immediately.
Medical conditions generally aggravated by exposure	None known
Notes to physician	

VII. PRECAUTIONS FOR SAFE HANDLING AND USE	
Steps to take if released or spilled	Wipe up with rag or use an absorbent clay material or towel.
Waste disposal method	Dispose of in accordance with federal, state and local guidelines. Do not puncture or incinerate container. Do not reuse empty container. Wrap container and place in trash collection.
Precautions for handling and storing	Do not use or store near heat or open flame.
Other precautions	None
Hazard ratings	HMIS
Health	1
Flammability	2
Reactivity	1
Personal protection	A

VIII. CONTROL MEASURES	
Protective gloves (type and material)	NA
Eye protection	Safety glasses are recommended whenever chemicals are used.
Other protective clothing or equipment	NA
Respiratory protection (specify type)	NA
Ventilation and conditions	
Local	Recommended
Mechanical	NA
Other	NA
Special	NA
Work/hygienic practices	Wash hands after use.

IX. ADDITIONAL REGULATORY INFORMATION	
SARA hazard category (Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III))	NONE
Toxic chemical(s) subject to the supplier notification requirements of section 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA) and the requirements of 40 CFR part 372	NONE
Ingredient(s) regulated under the Clean Air Act Section 112 hazardous air pollutants and subject to all reporting requirements of CERCLA (Superfund)	NONE

NA – not applicable NR – not reported ND – not determined NE – not established UN – unknown

The information presented in this MSDS has been compiled from sources deemed reliable. This MSDS is presented in good faith and believed to be accurate as of the effective date shown above. No warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another. It is the responsibility of the buyer to insure compliance with federal, state, provincial and local laws and regulations.