

# SAFETY DATA SHEET



This Safety Data Sheet (SDS) complies with the requirements of the U.S. Federal Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200, as updated in 2012) and equivalent state Standards. It has also been developed in accordance with the United Nations Globally Harmonized System of Classification of Chemicals (GHS) and the Canadian Workplace Hazardous Materials Information System (WHMIS). Refer to Section 16 of this document for the definition of terms and abbreviations.

## SECTION 1: IDENTIFICATION

### 1.1 PRODUCT IDENTIFIER

- ITEM NUMBER(S): 470007
- PRODUCT NAME: **Sleep Tight Bed Bug, Lice and Dust Mite Spray**
  - 20 oz cans/12 per case: 470007

### 1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE

- RECOMMENDED USE: Pesticide.
- IDENTIFIED USERS: For sale to, use and storage by service persons only.

### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

- MANUFACTURER/  
SUPPLIER: **Waxie's Enterprises, LLC, an Envoy Solutions Company**
- ADDRESS: 9353 Waxie Way; San Diego, CA 92123-1036
- BUSINESS PHONE: 1-800-995-4466
- EMERGENCY PHONE: 1-800-255-3924 (CHEMTEL; 24 hours)

### 1.4 OTHER PERTINENT INFORMATION

- EPA Registration: EPA ##706-110-14994
- This product is sold and used in relatively small volumes. This SDS has been developed to address safety concerns affecting small volume handling situations and those involving warehouses and other workplaces where large numbers of these items are stored or distributed.

## SECTION 2: HAZARD IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

**OSHA/HCS Status:** The product is a pesticide that has been labelled according to the regulations under FIFRA (Federal Insecticide, Fungicide and Rodenticide Act). The following GHS information has been developed based on OSHA regulations under Hazard Communication (29 CFR 1910.1200), the hazards associated with the components and their concentrations, and the anticipated routes of exposure for this product as sold and used.

**Classification of the Substance or Mixture** Extremely flammable aerosol (Category 1); Skin sensitization (Category 1); Aspiration Hazard (Category 1); Aquatic Toxicity – Acute/Chronic (Category 1).

### 2.2 LABEL ELEMENTS: ELEMENT

#### Hazard Pictograms



#### Signal Word

DANGER.

#### Hazard Statements

H222: Extremely flammable aerosol. H304: May be fatal if swallowed and enters airways. H317: May cause an allergic skin reaction. H410: Very toxic to aquatic life with long lasting effects.

#### Precautionary Statements Prevention

P102: Keep out of reach of children. P103: Read label before use. P210: Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P211: Do not spray on an open flame or other ignition source. P251: Do not pierce or burn, even after use. P261: Avoid breathing mist, vapors, and spray. P264: Wash exposed skin thoroughly after handling. P272: Contaminated work clothing must not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release into the environment.

## SECTION 2: HAZARD IDENTIFICATION (Continued)

### 2.2 LABEL ELEMENTS (Continued)

#### ELEMENT

##### Precautionary Statements

##### Response

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor. P331: Do not induce vomiting. P391: Collect spillage.

##### Storage

P410+403: Store in a cool dry place at room temperature away from direct sunlight. P412: Do not expose to temperatures exceeding 50 °C/122 °F.

##### Disposal

P501: Dispose of contents and container according to the local, city, state, and federal regulations.

### 2.3 OTHER PERTINENT DATA ON CHEMICAL AND PHYSICAL HAZARDS:

- Not applicable.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCES/MIXTURES

CHEMICAL	CAS NUMBER	% (w/w) <sup>1</sup>
Distillates (petroleum), hydrotreated light	64742-47-8	10- <20
Propane	74-98-6	2.5 - <10
Butane	106-97-8	2.5 - <10
Permethrin	52645-53-1	0.1 - <1.0

## SECTION 4: FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

#### AREA EXPOSED

##### Eye Contact

Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention if irritation persists.

##### Skin Contact

Flush area with warm, running water for several minutes. Seek medical attention if irritation persists.

##### Inhalation

Obtain fresh air.

##### Ingestion

If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.

### 4.2 MOST IMPORTANT ACUTE AND CHRONIC EXPOSURE SYMPTOMS

#### • ACUTE HEALTH EFFECTS:

#### AREA EXPOSED

##### Eye Contact

Liquid may cause eye irritation upon contact.

##### Skin Contact

Can cause allergic skin reaction.

##### Inhalation

May cause respiratory tract irritation; symptoms may include coughing and sneezing depending on volume of mist/spray inhaled.

##### Ingestion

May be fatal if swallowed and enters airways. May cause gastrointestinal system irritation; symptoms may include pain, sore throat, nausea and vomiting if large volumes are ingested.

- **CHRONIC HEALTH EFFECTS:** Prolonged or repeated skin exposures can cause allergic skin reaction.
- **TARGET ORGANS:** Not applicable.

<sup>1</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## SECTION 4: FIRST AID MEASURES (Continued)

### 4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

- **GENERAL INFORMATION:** For all exposures: In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- **RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- **MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None reported.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

- **RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Dry Powder, Foam, Carbon Dioxide, or any other.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** Water jet.

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- **NFPA FLAMMABILITY CLASSIFICATION:**

Classification



NFPA Rating

NFPA Classification

Extremely flammable aerosol.

- **UNUSUAL HAZARDS IN FIRE SITUATIONS:**

Decomposition

Generates carbon dioxide, carbon monoxide, and irritating vapors.

Explosion Sensitivity to Mechanical Impact

Not applicable.

Explosion Sensitivity to Static Discharge

This product may be sensitive to static discharge, which could result in fire or explosion.

### 5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool. Any equipment that comes in contact with this product can be rinsed thoroughly with water and then returned to service.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** Personnel who have received basic chemical safety training can generally handle small-scale releases. Gloves and safety glasses must be worn when cleaning-up spills. Use caution during clean-up; contaminated floors and items may be slippery.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Generally, releases of this product will be no larger than the loss of one shipment of material. Subsequently, personnel can follow the instructions for incidental releases. As needed, respond to non-incident chemical releases of this product (such as the simultaneous destruction of several pallets of this product) by clearing the impacted area and contacting appropriate emergency personnel.
- **RESPONSE PROCEDURES FOR ANY RELEASE:** Ensure area has good ventilation. Check for ignition sources before beginning clean up. Rinse area thoroughly. All items that come in contact with the solution can be returned to service after rinsing.

## SECTION 6: ACCIDENTAL RELEASE MEASURES (Continued)

### 6.2 ENVIRONMENTAL PRECAUTIONS

- Avoid response actions that can cause a release of a significant amount of product into the environment. Avoid accidental dispersal of spilled material into soil, waterways, and sewers.

### 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

- **SPILL RESPONSE EQUIPMENT:** Polypad or other absorbent material.

### 6.4 REFERENCES TO OTHER SECTIONS

- **SECTION 8:** For exposure levels and detailed personal protective equipment recommendations.
- **SECTION 13:** For waste handling guidelines.

## SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

#### Hygiene Practices

Keep out of reach of children. Follow good chemical hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of mists and sprays. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up spilled product immediately.

#### Handling Practices

Employees must be appropriately trained to use this product safely as needed. Do not use near any source of heat or open flame, furnace areas, pilot lights, stoves, etc. Ensure all equipment is electrically grounded before beginning transfer operations. Do not spray on an open flame or other ignition source.: Do not pierce or burn container, even after use. Place top back on aerosol can when not in use.

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

#### Storage Practices

Do not expose to temperatures exceeding 50 °C/122 °F. Ensure all containers are correctly labeled. Store containers away from direct sunlight, sources of intense heat, or where freezing is possible. Store this product away from incompatible chemicals. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Empty containers may contain residual liquid; therefore, empty containers should be handled with care. Do not puncture, cut, or weld empty containers.

#### Incompatibilities

See Section 10 (Stability and Reactivity).

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:** The following components have published airborne exposure limits.

COMPONENT	ACGIH TLV	OSHA PEL	NIOSH REL	OTHER
Butane	STEL = 1000 ppm; Danger of explosion.	NE	TWA = 800 ppm	CA PEL: TWA = 800 ppm
Propane	Danger of asphyxiation and explosion	TWA = 1000 ppm	TWA = 1000 ppm IDLH = 1600 ppm	NIOSH IDLH 2100 ppm (10% LEL) CA PEL: TWA = 1000 ppm
Distillates (petroleum), hydrotreated light	TWA = 200 mg/m <sup>3</sup>	NE	100 mg/m <sup>3</sup>	NE

- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** Not established.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

### 8.2 EXPOSURE CONTROLS

Engineering Controls	Use in well-ventilated environment.
Respiratory Protection	None needed in normal circumstances of use.
Hand Protection	Neoprene, PVC, or butyl gloves are recommended if there is a potential for skin contact. Ensure gloves are intact prior to use.
Eye Protection	Safety glasses if splashes/sprays can occur when using.
Body Protection	None needed in normal circumstances of use.

### 8.3 PERSONAL PROTECTION SYMBOLS

Hand Protection  
(If skin contact is anticipated)

Eye Protection  
(If splashes or sprays can occur)



## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid propelled by compressed gas
Odor	Mild odor.
Odor Threshold	No data available.
pH	No data available.
Melting Point/Freezing Point	No data available.
Initial Boiling Point/Boiling Range	No data available.
Flash Point	Estimated -104.4 °C (-156 °F)
Evaporation Rate (Water = 1)	No data available.
Flammability	Extremely flammable aerosol.
Upper/Lower Explosive Limits	Estimated 9.5%/1.9%.
Vapor Pressure	Estimated 70-85 psig (21 °C / 70°F)
Vapor Density	No data available.
Relative Density (Density)	Estimated 0.863
Solubility	No data available.
Partition Coefficient/n-octanol/water	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	No data available.

### 9.2 OTHER INFORMATION

- VOC (less water & exempt): No data available.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 REACTIVITY

- Not reactive under typical conditions of use or handling.

### 10.2 CHEMICAL STABILITY

- Normally stable under standard temperatures and pressures.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

- This product is not self-reactive, water-reactive, or air-reactive.
- This product will not undergo hazardous polymerization.

## SECTION 10: STABILITY AND REACTIVITY (Continued)

### 10.4 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals.
- Avoid adverse storage conditions (see Section 7).

### 10.5 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include carbon dioxide, carbon monoxide, and irritating vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

#### • ACUTE TOXICITY:

##### ○ PRODUCT TOXICITY DATA:

- LD50 (Rat, Oral): 12479 mg/kg (Test Results).
- LC50 (Rat, Inhalation): 32 mg/L – 4 hours (Test Results)

##### ○ COMPONENT TOXICOLOGY DATA: The following data are available for components of this product.

###### Propane

LC 50 (Mouse, Inhalation): 1,237 mg/l

###### Distillates (petroleum), hydrotreated light

LD 50 (Rat, Oral): > 5,000 mg/kg

LD 50 (Rabbit, Dermal): > 2,000 mg/kg

LC 50 (Inhalation): > 5 mg/l

LC 50 (Inhalation): > 20 mg/l

###### Butane

LC 50 (Mouse, Inhalation): 1,237 mg/l

##### ○ DEGREE OF IRRITATION: This product may cause eye irritation and mild skin irritation if there is contact with the liquid. Refer to Section 4 (First Aid Measures) for additional information.

##### ○ SENSITIZATION: This product can cause allergic skin reaction.

##### ○ REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE: See Section 2 (Hazards Information) and Section 4 (First Aid Measures) for additional details.

###### **Eyes**

Liquid may cause eye irritation upon contact.

###### **Skin**

This product can cause allergic skin reaction.

###### **Inhalation**

May cause respiratory tract irritation.

###### **Ingestion**

May be fatal if swallowed and enters airways. May cause gastrointestinal system irritation.

#### • CHRONIC TOXICITY:

##### ○ CARCINOGENICITY STATUS: The components of this product are not listed as carcinogens by IARC, NTP or OSHA.

##### ○ REPRODUCTIVE TOXICITY INFORMATION: The components of this product are not reported to cause adverse reproductive effects under typical circumstances of exposure.

##### ○ MUTAGENIC EFFECTS: The components of this product are not reported to cause mutagenic effects under typical circumstances of exposure.

##### ○ SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Not applicable.

##### ○ SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Not applicable.

##### ○ ASPIRATION HAZARD: Due to presence of petroleum distillates, this product may be fatal if swallowed and enters airways.

#### • OTHER INFORMATION:

##### ○ TOXICOLOGICALLY SYNERGISTIC PRODUCTS: None known.

##### ○ ADDITIONAL TOXICOLOGY: Not applicable.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 TOXICITY

- Based on available data, this product may be harmful or fatal to contaminated terrestrial or aquatic plants or animals, depending on the volume released into the environment.
- This product is classified as Aquatic Toxicity – Acute (Category 1), Aquatic Toxicity – Chronic (Category 1) Very toxic to aquatic life with long lasting effects.
- The following aquatic toxicity data are available for components of this product.

#### Propane

Various, 96 h): 147.54 mg/l QSAR, Key study

#### Butane

LC 50 (Various, 96 h): 147.54 mg/l QSAR, Key study

LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR, Key study

#### Permethrin

EC 50 (Daphnia magna, 48 h): 0.0006 - 0.0025 mg/l

LC50 Apache trout (Oncorhynchus gilae 96h) 0.0013 - 0.0022 mg/l.

#### Distillates (petroleum), hydrotreated light

LC 50 (Rainbow trout, Donaldson trout (Oncorhynchus mykiss), 96 h): 2.9 mg/l Mortality

NOAEL (Oncorhynchus mykiss, 96 h): 2 mg/l Experimental result, Key study

EC 50 (Daphnia magna, 24 h): 4.6 mg/l Experimental result, Key study

NOAEL (Daphnia magna, 48 h): 0.3 mg/l Experimental result, Key study

EC 50 (Daphnia magna, 48 h): 1.4 mg/l Experimental result, Key study

NOAEL (Daphnia magna): 1.2 mg/l Experimental result, Key study

EC 50 (Daphnia magna): 0.81 mg/l Experimental result, Key study

### 12.2 PERSISTENCE AND DEGRADABILITY

- When released into the soil, the components of this product are expected to biodegrade, dissipate in soils via oxidation, or otherwise chemically degrade or photo-decompose via solar radiation.
- The following data are available for components of this product:

#### Propane

100 % (385.5 h) Detected in water. Experimental result, Key study

50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

#### Butane

100 % (385.5 h) Detected in water. Experimental result, Key study

#### Distillates (petroleum), hydrotreated light

61 % Detected in water. Experimental result, Supporting study

### 12.3 BIOACCUMULATIVE POTENTIAL

- No data is available for this product.

### 12.4 MOBILITY IN SOIL

- No data available.

### 12.5 OTHER ADVERSE EFFECTS

- None reported.

## SECTION 13: DISPOSAL CONSIDERATION

### 13.1 WASTE TREATMENT METHODS:

- Dispose of in accordance with local, State and Federal regulations.

### 13.2 DISPOSAL CONSIDERATIONS

- EPA RCRA WASTE CODE:** D001, applicable to wastes consisting only of this product.



## SECTION 14: TRANSPORT INFORMATION

**NOTE:** This product is packaged in **LIMITED QUANTITY** volumes. Follow the requirements for Limited Quantity packagings appropriate to the mode of transport.

- DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS SHIPPING REGULATIONS:**

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Label	North American Emergency Response Guide #	Marine Pollutant Status
This product is packaged in Limited Quantity volumes. Follow requirements in 49 CFR 173.306				Limited Quantity	Not Applicable	Marine Pollutant; Except from requirements due to Limited Quantity status.

- CANADIAN TRANSPORTATION INFORMATION:** This product is regulated by Transport Canada as dangerous goods under Canadian transportation standards. Refer to above information.
- IATA DESIGNATION:** This product is regulated as dangerous goods by the International Air Transport Association. Refer to the following information for preparation of packagings.

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Labels	Packing Instruction	Max. Net Qty per PKG
UN1950	Aerosols, flammable	Not Applicable.	2.1	Flammable Gas Limited Quantity	Y203	30 kg G

- IMO DESIGNATION:** This product is regulated as dangerous goods by the International Maritime Organization. Follow guidance in IMO International Maritime Dangerous Goods Code, Section 3.4.

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Label	Max. Qty per PKG	EM-S
This product is packaged in limited quantity volumes. Follow the instructions in the IMO International Maritime Dangerous Goods Code, Section 3.4.				Limited Quantity	1L	FD-SU

### 14.2 ENVIRONMENTAL HAZARDS

- Marine Pollutant: Exempt from requirements due to limited quantity status.

### 14.3 SPECIAL PRECAUTIONS FOR USERS

- Not applicable.

### 14.4 TRANSPORT IN BULK

- Not applicable.

## SECTION 15: REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE PRODUCT

- OTHER IMPORTANT U.S. REGULATIONS**

- U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21):** Flammable; Aspiration Hazard; Skin/Respiratory System Sensitization; Hazardous Not Otherwise Classified.
- U.S. CERCLA REPORTABLE QUANTITY (RQ):** Not applicable.
- U.S. TSCA INVENTORY STATUS:** All components of this product are listed on the TSCA Inventory.
- U.S. SARA 313:** Permethrin is subject to the reporting requirements of SARA Title III Section 313.
- CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS:** Not applicable.



## SECTION 15: REGULATORY INFORMATION (Continued)

- **INTERNATIONAL REGULATIONS**

- **CANADIAN REGULATORY STATUS: CANADIAN REGULATORY STATUS:** The product is classified as hazardous under Hazardous Products Regulations (SOR-2015-17).
  - WHMIS 2015: See section 2.
  - This SDS contains all the information required by the HPR.
- **CANADIAN DSL/NDL INVENTORY STATUS:** The listed components of this product are on the DSL/NDL Inventory.
- **CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS:** The components of this product are not on the CEPA Priority Substances Lists.

## SECTION 16: OTHER INFORMATION

### 16.1 **INDICATION OF CHANGE**

- **DATE OF REVISION:** July 18, 2022
- **SUPERCEDES:** Not applicable.
- **CHANGE INDICATED:** New product.

### 16.2 **KEY LITERATURE REFERENCES AND SOURCES FOR DATA**

- SAFETY DATA SHEETS FOR COMPONENT PRODUCTS.
- Federal OSHA Hazard Communication Standard: 29 CFR 1910.1200.

### 16.3 **HAZARDOUS MATERIALS CLASSIFICATION SYSTEM**

Health	1	HMIS Personal Protective Equipment Rating: Occupational Use situations: See Section 8 for guidance on personal protective equipment.
Flammability	4	
Physical Hazard	1	
Protective Equipment	-	

### 16.4 **DISCLAIMER**

Waxie's Enterprises, LLC, an Envoy Solutions Company (WAXIE), makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of their own use, handling, and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by WAXIE as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does WAXIE assume any liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. WAXIE does not recommend blending this product with any other chemicals. All information, recommendations and data contained herein concerning this product are based upon information available at the time of writing from recognized technical sources.

## SECTION 16: OTHER INFORMATION (Continued)

### 16.5 ABBREVIATIONS AND ACRONYMS

**ALL SECTIONS:** OSHA: U.S. Federal Occupational Safety and Health Administration. WHMIS: Canadian Workplace Hazardous Materials Standard. GHS: Globally Harmonized System of Classification of Chemical Substances.

**SECTION 3:** CAS Number: Chemical Abstract Service Number, which is used by the American Chemical Society to uniquely identify a chemical.

**SECTION 5:** NFPA: National Fire Protection Association. NFPA FLAMMABILITY CLASSIFICATION: The NFPA uses the flash point (F.P.) and boiling point (BP) to classify flammable or combustible liquids. Class IA: F.P. below 73°F and BP below 100°F. Class IB: F.P. below 73°F and BP at or above 100°F. Class IC: F.P. at or above 73°F and BP at or above 100°F. Class II: F.P. at or above 100°F and below 140°F. Class IIIA: F.P. at or above 140°F and below 200°F. Class IIIB: F.P. at or above 200°F. NFPA HAZARDOUS MATERIALS RATING: This is a rating system used to summarize physical and health hazards to firefighters. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.

**SECTION 8:** NE: Not established. ACGIH: American Conference of Government Industrial Hygienists; TWA: Time-Weighted Average (over an 8-hour workday); STEL: Short-Term Exposure Limit (15-minute average, no more than 4-times daily and each exposure separated by one-hour minimally); C: Ceiling Limit (concentration not to be exceeded in a work environment). PEL: Permissible Exposure Limit. NIOSH: National Institute of Occupational Safety and Health; REL: Recommended Exposure Limit. ppm: Parts per Million. mg/m<sup>3</sup>: Milligrams per cubic meter. mppcf: Millions of Particles per Cubic Foot. BEI: Biological Exposure Limit. CA: California - TABLE AC-1 Permissible Exposure Limits for Airborne Contaminants

**SECTION 9:** pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, pH of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition. ≈: Approximately symbol. VOC: Volatile Organic Compound.

**SECTION 11:** CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. REPRODUCTIVE TOXICITY INFORMATION: Mutagen: Substance capable of causing chromosomal damage to cells. Embryotoxin: Substance capable of damaging the developing embryo in an overexposed female. Teratogen: Substance capable of damaging the developing fetus in an overexposed female. Reproductive toxin: Substance capable of adversely affecting male or female reproductive organs or functions. TOXICOLOGY DATA: LDxx or LCxx: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designate route of administration. This value is used to assess the toxicity of chemical substances to humans. TDxx or TCxx: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designate route of administration.

**SECTION 12:** EC50: Effect Concentration (on 50% of study group); BOD: Biological Oxygen Demand. COD: Chemical Oxygen Demand. ThOD: Theoretical Oxygen Demand. TLM: Median Tolerance Limit.

**SECTION 13:** RCRA: Resource Conservation and Recovery Act. The regulations promulgated under this Act are found in 40 CFR, Sections 260 ff, and define the requirements of hazardous waste generation, transport, treatment, storage, and disposal. EPA RCRA Waste Codes: Defined in 40 CFR Section 261.

**SECTION 15:** CERCLA: Comprehensive Environmental Response Compensation and Liability Act (a.k.a. "Superfund") and SARA: (Superfund Amendment and Reauthorization Act). The regulations promulgated under this Act are located under 40 CFR 300 ff. and provide "community right-to-know" requirements. TSCA: Toxic Substances Control Act: Rules regulating the manufacture and sale of chemicals found in 40 CFR 700-766. DSL/NDL: Canadian Domestic Substances and Non-Domestic Substances Lists.

**SECTION 16:** HAZARDOUS MATERIALS IDENTIFICATION SYSTEM RATING: This is a rating system used by industry to summarize physical and health hazards to chemical users and was originally developed by the National Paint and Coating Association. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.