SAFETY DATA SHEET

WAXIE SANITARY SUPPLY

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): 410245
- PRODUCT NAME: **Graffiti Wipes**

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE

- RECOMMENDED USE: For cleaning of surfaces.
- IDENTIFIED USERS: For use by janitorial staff.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

- **MANUFACTURER/ SUPPLIER:** **WAXIE Sanitary Supply**
- **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

- 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 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

Classification of the Substance or Mixture Eye Damage/Irritation (Category 2A); Skin Corrosion/Irritation (Category 2B)

2.2 LABEL ELEMENTS:

Hazard Pictograms

Signal Word Warning.

Hazard Statements Causes serious eye irritation. Causes skin irritation.

Precautionary Statements

Prevention If medical advice is needed, have product container or label at hand. Keep away from children. Read label before use. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Not specifically stated. See Section 7.

Disposal Not specifically stated. See Section 13.

2.3 OTHER PERTINENT HAZARDS NOT OTHERWISE CLASSIFIED

- **OTHER POTENTIAL HEALTH EFFECTS:** Not applicable.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCES/MIXTURES

CHEMICAL	CAS NUMBER	GHS HAZARD CLASSIFICATION FOR CHEMICAL	% (w/w)
The orange towels are moistened with the following formulation:			
Diethylene Glycol Monobutyl Ether	112-34-5	Eye irritation (Category 2A)	7% - 18%
Ethylene Glycol Monobutyl Ether	111-76-2	Flammable liquids (Category 4); Acute toxicity, Oral (Category 4); Acute toxicity, Inhalation (Category 4); Acute toxicity, Dermal (Category 4); Skin irritation (Category 2); Eye irritation (Category 2A)	6% - 14%
Isopropyl Alcohol	67-63-0	Flammable liquids (Category 2); Eye irritation (Category 2A); Specific target organ toxicity - single exposure (Category 3, Central nervous system)	3% - 7%
Water	7732-18-5	Not classified as hazardous.	Balance

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

AREA EXPOSED

Eye Contact — Flush with copious amounts of water. "Roll" eyes during flush. Check for and remove contact lenses. Seek medical attention if irritation persists.

Skin Contact — Flush with copious amounts of water should irritation occur. Check for and remove contact lenses. Seek medical attention if irritation persists.

Inhalation — Obtain fresh air if vapors cause irritation.

Ingestion — If conscious only: Rinse mouth with water. Drink several cups of 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 — Exposure to liquid component can cause serious eye irritation.

Skin Contact — Skin contact can be irritating, especially if it is prolonged.

Inhalation — Prolonged inhalation of vapors may cause mild respiratory tract irritation; symptoms may include coughing and sneezing depending on volume of mist/spray inhaled.

Ingestion — May cause gastrointestinal system irritation; symptoms may include pain, sore throat, nausea and vomiting if large volumes are ingested.

- **CHRONIC HEALTH EFFECTS:** Not applicable.
- **TARGET ORGANS:** Not applicable.

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:** Dry Powder, Foam, Carbon Dioxide, Halon, or any other Class B extinguisher.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- **NFPA FLAMMABILITY CLASSIFICATION:**

NFPA Rating

NFPA Classification Not typically flammable; must be exposed to extremely high temperatures before ignition will occur.

- **UNUSUAL HAZARDS IN FIRE SITUATIONS:**

Decomposition Products	Carbon dioxide, carbon monoxide, and irritating vapors.
Explosion Sensitivity to Mechanical Impact	Not applicable.
Explosion Sensitivity to Static Discharge	Not applicable.

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. Because this is product is a cleaning agent, 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 releases of wipes in which liquid has been released. 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-incidental 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:** Absorb spilled liquid with polypads or other suitable absorbent materials. Rinse area thoroughly.

6.2 ENVIRONMENTAL PRECAUTIONS

- 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 vapors, mists, sprays. Use in well-ventilated area. Avoid contact with eyes and skin.

Handling Practices Employees must be appropriately trained to use this product safely as needed.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Practices Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use.

Incompatibilities See Section 10 (Stability and Reactivity).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:**

COMPONENT	ACGIH TLV	OSHA PEL	NIOSH REL	OTHER
Diethylene Glycol Monobutyl Ether	10 ppm (Inhalable Fraction and Vapor)	NE	NE	NE
Ethylene Glycol Monobutyl Ether	TWA = 20 ppm (Skin)	TWA = 50 ppm (Skin)	TWA = 5 ppm (Skin)	NE
Isopropyl alcohol.	TWA= 200 ppm; STEL = 400 ppm	TWA = 400 ppm	TWA= 400 ppm; STEL = 500 ppm	NE

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

8.2 EXPOSURE CONTROLS

Engineering Controls Use in well-ventilated environment.
Respiratory Protection None needed in normal circumstances of use.
Hand Protection None needed in normal circumstances of use. Neoprene, nitrile, or butyl gloves are recommended in the event of spill response. Ensure gloves are intact prior to use.
Eye Protection Safety glasses are recommended; safety goggles should be worn in the event of spill response.
Body Protection None needed in normal circumstances of use.

8.3 PERSONAL PROTECTION SYMBOLS

Hand Protection 

Eye Protection 

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance Orange wipes moistened with clear liquid.
Odor Citrus.
Odor Threshold Not determined.
pH NA.
Melting Point/Freezing Point Not applicable.
Initial Boiling Point/Boiling Range 104 °C (220 °F)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Continued)

Flash Point	Flash Point at or above 93 C (200 °F).
Evaporation Rate (nBuAc= 1)	0.1 ± 0.1.
Flammability	Not flammable.
Upper/Lower Explosive Limits	Not applicable.
Vapor Pressure	Not applicable.
Vapor Density	Not applicable..
Relative Density	8.51238 lb/gal.
Solubility	Nil.
Partition Coefficient/n-octanol/water	Not determined.
Autoignition Temperature	830 °F.
Decomposition Temperature	Not applicable.
Viscosity	Not applicable.

9.2 OTHER INFORMATION

- **VOC (less water & exempt):** 3.26992 lb/gal.
- **WEIGHT% VOC:** 28.99891%

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.

10.4 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals.

10.5 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition of this product include oxides of carbon (i.e., carbon monoxide and carbon dioxide).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

- **ACUTE TOXICITY:**
  - **TOXICOLOGY DATA:** The following data are available for components of this product.

DIETHYLENE GLYCOL MONOBUTYL ETHER
LD50 (oral, rat) = 7291mg/kg
LD50 (dermal, rabbit) = 2764mg/kg

ETHYLENE GLYCOL MONOBUTYL ETHER
LD_{50} (Oral, Rat) = 470 mg/kg
LC_{50} (Inhalation, Rat) = 4 hours/- 450 ppm
LD_{50} (Dermal, Rabbit) = 220 mg/kg
LD_{50} (Intraperitoneal, Rat) = 220 mg/kg
LD_{50} (Intravenous, Rat) = 307 mg/kg
LDLo (Human, Oral) = 3570 mg/Kg

ISOPROPYL ALCOHOL
LD_{50} (Oral , Rat) = 5,045 mg/kg
LC_{50} (Inhalation – Rat) = 8 hours/ 16000 ppm
LD_{50} (Dermal, Rabbit) = 12,800 mg/kg
LDLo (Human, Unreported) = 2 mL/kg

SECTION 11: TOXICOLOGICAL INFORMATION (Continued)

- **DEGREE OF IRRITATION**: See Section 4 (First Aid Measures) for more details.

DIETHYLENE GLYCOL MONOBUTYL ETHER
Skin, Rabbit = Mild Irritation, 1 hour
Eyes, Rabbit = Irritant

PROPYLENE GLYCOL
Eyes, Rabbit = Mild Irritant, 24 hours

ISOPROPYL ALCHOL
Skin, Rabbit = Mild Irritation
Eyes, Rabbit = Irritant, 24 hours

- **SENSITIZATION:** The components of this product are not reported to have skin or respiratory sensitization effects.
- **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	The liquid can be very irritating to the eyes.
Skin	The liquid can be irritating to skin, especially upon prolonged exposure.
Inhalation	May cause mild respiratory tract irritation and central nervous system effects if vapors are inhaled.
Ingestion	May cause gastrointestinal system irritation and central nervous system effects if ingested.

- **CHRONIC TOXICITY:**
  - **CARCINOGENICITY STATUS:** The following carcinogenicity data are available for components of this product.

CHEMICAL	IARC	NTP	NIOSH	OSHA	OTHER
Ethylene Glycol Monobutyl ether	IARC-3: Unclassifiable as to Carcinogenicity in Humans	NO	NO	NO	TLV-4: Not Classifiable as a Human Carcinogen; EPA – NL: Not Likely to Be Carcinogenic to Humans; MAK-4: No Significant Contribution to Human Cancer Risk
Isopropyl Alcohol	IARC-3: Unclassifiable as to Carcinogenicity in Humans	NO	NO	NO	TLV-4: Not Classifiable as a Human Carcinogen;

  - **REPRODUCTIVE TOXICITY INFORMATION:**
    - **ETHYLENE GLYCOL MONOBUTYL ETHER**: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals. May cause adverse reproductive effects (maternal and paternal fertility, fetoxicity) based on animal data. May cause birth defects (teratogenic) based on animal data
  - **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:** Not applicable.
- **OTHER INFORMATION:**
  - **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
  - **ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

- Based on available data, this product is not anticipated to be harmful or fatal to contaminated terrestrial or aquatic plants or animals.
- The following aquatic toxicity data are available for components of this product:

DIETHYLENE GLYCOL MONOBUTYL ETHER
LC50 (Lepomis macrochirus): 1,300 mg/L - 96 hours
EC50 (Daphnia magna) > 100 mg/l - 48 hours
EC50 [Desmodesmus subspicatus (Scenedesmus subspicatus)] - >100 mg/l - 96 hours
LC50 (Pseudomonas putida): 1,170 mg/l - 16 hours

ETHYLENE GLYCOL MONOBUTYL ETHER
LC50 - other fish: 220 mg/L - 96 hours
EC50 (Daphnia magna): 1,815 mg/L - 24 hours

ISOPROPYL ALCOHOL
LC50 (Pimephales promelas): 9,640.00 mg/L - 96 hours
EC50 (Daphnia magna): 5,102.00 mg/L - 24 hours
IEC50 (Daphnia magna) : 6,851 mg/L - 24 hours
EC50 (Desmodesmus subspicatus) > 2,000.00 mg/L - 72 hours
EC50 - Algae > 1,000.00 mg/L - 24 h

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:

DIETHYLENE GLYCOL MONOBUTYL ETHER: aerobic - Exposure time 28 days; Result: 91.7 % - Readily biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL

- 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.

12.4 MOBILITY IN SOIL

- It is to be expected this product will have some mobility in soil.

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:** Not applicable to wastes consisting only of this product.

SECTION 14: TRANSPORT INFORMATION

14.1 DANGEROUS GOODS BASIC DESCRIPTION AND OTHER TRANSPORT INFORMATION

- **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
NOT APPLICABLE						

- **IATA DESIGNATION**: This product is not regulated as dangerous goods by the International Air Transport Association.
- **IMO DESIGNATION**: This product is not regulated as dangerous goods by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None described, as related to transportation.

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):** ACUTE: No; CHRONIC: No; FIRE: Yes; REACTIVE: No; SUDDEN RELEASE: No
  - **U.S. CERCLA REPORTABLE QUANTITY (RQ):** Not applicable.
  - **US SARA 313:** Diethylene Glycol Monobutyl Ether and Ethylene Glycol Monobutyl Ether are listed on the SARA Title 313 Chemical Inventor (Glycol Ether category).
  - **U.S. TSCA INVENTORY STATUS:** All components of this product are listed on the TSCA Inventory.
  - **CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS:** Not applicable.
- **INTERNATIONAL REGULATIONS**
  - **CANADIAN REGULATORY STATUS:** The product is classified as hazardous under Canadian Controlled Products regulations (SOR-88-66).
    - **Pre-2015 WHMIS Classification:** D2B – Materials Causing Other Toxic Effects/Toxic. **2015 WHMIS Classification:** See Section 2.
    - This SDS contains all the information required by the CPR.

  - **CANADIAN DSL/NDSL INVENTORY STATUS:** The listed components of this product are on the DSL/NDSL Inventory.
  - **CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:** The components of this product are not on the CEPA Priorities Substances Lists.
  - **GERMAN WATER HAZARD CLASSIFICATION:** 0 (No hazard to waters).

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- **DATE OF REVISION:** June 24, 2015
- **SUPERCEDES**: December 3, 2014
- **CHANGE INDICATED:** Update of OSHA Hazard Communication Standard (29 CFR 1910.1200),

SECTION 16: OTHER INFORMATION (Continued)

16.2 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

- SAFETY DATA SHEETS FOR COMPONENT PRODUCTS.
- Federal OSHA Hazard Communication Standard: 29 CFR 1910.1200.
- TOXNET – http://toxnet.nlm.nih.gov/
- European Chemicals Inventory Classification and Listing: http://echa.europa.eu

16.3 HAZARDOUS MATERIALS CLASSIFICATION SYSTEM

Product as SOLD

Health	1	
Flammability	1	
Physical Hazard	0	
Protective Equipment	B	HMIS Personal Protective Equipment Rating: FOR SPILL CLEANUP ONLY: B - Safety glasses and gloves.

16.4 DISCLAIMER

WAXIE Sanitary Supply 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 Sanitary Supply as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does WAXIE Sanitary Supply 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 Sanitary Supply 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.

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. REACH: European Union regulation, Registration, Evaluation, Authorization and Restriction of Chemical substances.

SECTION 2: 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 (Fl.P.) and boiling point (BP) to classify flammable or combustible liquids. Class IA: Fl.P. below 73°F and BP below 100°F. Class IB: Fl.P. below 73°F and BP at or above 100°F. Class IC: :Fl.P. at or above 73°F and BP at or above 100°F. Class II: : Fl.P. at or above 100°F and below 140°F. Class IIIA: Fl.P. at or above 140°F and below 200°F. Class IIIB: Fl.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 work day); 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; IDLH: Immediately Dangerous to Life and Health Concentrations. *Note*: In July 1992, a court ruling vacated the more protective PELs set by OSHA in 1989. Because OSHA may enforce the more protective levels under the "general duty clause", both the current and vacated levels are presented in this document. Ppm: Parts per Million. mg/m^3: Milligrams per cubic meter. mppcf: Millions of Particles per Cubic Foot. BEI: Biological Exposure Limit. AIHA WEEL: American Industrial Hygiene Association Workplace Environmental Exposure Levels.

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.

SECTION 9 (Continued): 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: LD*xx*or LC*xx*: 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 access the toxicity of chemical substances to humans. TD*xx*or TC*xx*: 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. N/LOEC: No/Lowest Observable Effect Concentration.

SECTION 13: RCRA: Resource Conservation and Recovery Act. The regulations promulgated under this act under 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/NDSL: 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.