

# 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

- **Product Code:**
- **Product Name:** Caro's Oven Cleaner

### 1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE

- **Recommended use:** Follow instructions on label.
- **Restrictions on use:** For use by persons who review, understand, and follow guidance in this document.

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

<b>Company Name:</b> <b>SIERRA CHEMICAL COMPANY</b> 788 NORTHPORT DRIVE WEST SACRAMENTO, CA 95691 <b>Emergency Contact:</b> CHEMTREC: Toll Free 1-800/424-9300/+ 1-703-527-3887 <b>Information:</b> Sales & Information: 916-371-5943	<b>Manufactured For:</b> <b>CARO'S CLEANING PRODUCTS</b> 2955 S. EL DORADO ST. STOCKTON, CA 95206 <b>Information:</b> 415-551-2273
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## SECTION 2: HAZARD IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

- **Classification of the Substance or Mixture:** Skin Corrosion/Irritation (Category 1); Eye Damage/Irritation (Category 1); Aquatic Toxicity, Acute (Category 3)

### 2.2 LABEL ELEMENTS:

#### Hazard Pictograms



**Signal Word** DANGER.

**Hazard Statements** H314: Causes severe skin burns and eye damage. H402: Harmful to aquatic life.

#### Precautionary Statements

**Prevention** P261: Avoid breathing mist, vapors, or spray.  
P264: Wash exposed skin thoroughly after handling.  
P273: Avoid release to the environment.  
P280: Wear eye protection/face protection/protective clothing/protective gloves.

**Response** P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.  
P363 Wash contaminated clothing before reuse.

**Storage** None specified. See Section 7 for specific recommendations for this product.

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

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCES/MIXTURES

CHEMICAL	CAS NUMBER	GHS HAZARD CLASSIFICATION FOR CHEMICAL	% (w/w) <sup>1</sup>
Alkyl Benzene Sulfonic Acid Mixture	68584-22-5/ 27176-87-0	Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1B), Serious eye damage (Category 1); Acute Aquatic Toxicity (Category 2)	10-20
Sodium Hydroxide	1310-73-2	Corrosive to metals (Category 1); Skin corrosion (Category 1A); Serious eye damage (Category 1); Acute aquatic toxicity (Category 3)	1-5
The other components of this product do not contribute physical or health hazards at the concentrations present in this solution.			Balance

## SECTION 4: FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

#### • RECOMMENDED MEASURE BY AREA EXPOSED:

##### AREA EXPOSED

<b>Eye Contact</b>	Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention immediately.
<b>Skin Contact</b>	Flush area with warm, running water for several minutes. Seek medical attention immediately if there is irritation or signs that a chemical burn has occurred.
<b>Inhalation</b>	Obtain fresh air. Blow nose.
<b>Ingestion</b>	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 BY ROUTE OF EXPOSURE:

##### AREA EXPOSED

<b>Eye Contact</b>	Product can cause serious eye damage. Symptoms can include redness and tearing, especially upon prolonged exposure. Tissue damage can occur after prolonged contact.
<b>Skin Contact</b>	Causes skin corrosion. Symptoms can include redness and itching, especially upon prolonged exposure. Burns may occur
<b>Inhalation</b>	Inhalation of this product may be severely irritating to the tissues of the respiratory system. Symptoms may include coughing and sneezing. Tissue damage may occur.
<b>Ingestion</b>	Inhalation of this product may be severely irritating to the tissues of the respiratory system. Tissue damage may occur.

#### • CHRONIC HEALTH EFFECTS: None reported.

#### • TARGET ORGANS: Skin, eyes.

### 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.

<sup>1</sup> The exact percentage of composition has been withheld as a trade secret. All relevant physical and health hazards have been declared, in accordance with regulatory requirements.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

- **RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Water Jet, Dry Powder, Foam, Carbon Dioxide, or any other.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** Not applicable.

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

- **NFPA FLAMMABILITY CLASSIFICATION:**  
NFPA Rating



NFPA Classification      Not flammable.

- **UNUSUAL HAZARDS IN FIRE SITUATIONS:**

**Decomposition**      Generates carbon dioxide, carbon monoxide, sulfur and sodium compounds, 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. Any equipment that comes in contact with this solution 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

- Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

### 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

- Soak up inert absorbent material and dispose of it as hazardous waste. Rinse the area thoroughly. Keep waste generated in suitable, closed containers for disposal. Use proper personal protective equipment as indicated in Section 8.

## SECTION 7: HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

- **Hygiene Practices:** 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 areas. 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. Keep containers closed when not in use.

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

- **Storage Practices:** 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
Alkyl Benzene Sulfonic Acid Mixture	NE	NE	NE	NE
Sodium Hydroxide	2 mg/m <sup>3</sup> , Ceiling	TWA - 2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup> , Ceiling	NIOSH IDLH: 10 mg/m <sup>3</sup> CA PEL: 2 ppm, Ceiling

- BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** Not established.

### 8.2 EXPOSURE CONTROLS and PERSONAL PROTECTION

- Engineering Controls:** Use in well-ventilated environment. Ensure eyewash stations and safety showers are readily available. Use adequate ventilation to keep airborne concentrations low.
- Respiratory Protection:** None needed under typical circumstances of use.
- Hand Protection:** Handle with nitrile gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good hygiene practices. Wash and dry hands. Wear appropriate protective gloves to prevent skin exposure.
- Eye Protection:** Safety goggles or safety glasses with side shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Consider the use of face-shields if splashes or sprays could be generated during use.
- Other Protection:** Wear appropriate protective clothing to prevent skin contact. Consider the use of a rubber apron if splashes or sprays could be generated during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- Appearance** Green liquid.
- Odor** Bland.
- Odor Threshold** Not determined.
- pH** 11- 12 (11.5)
- Melting Point/Freezing Point** Not determined.
- Initial Boiling Point/Boiling Range** Not determined.
- Flash Point** Not applicable.
- Evaporation Rate (Water = 1)** Approximately 1.
- Flammability** Not applicable.
- Upper/Lower Explosive Limits** Not determined.
- Vapor Pressure** Not determined.
- Vapor Density** Not determined.
- Relative Density (Water = 1)** Not determined.
- Solubility** Soluble in water.
- Partition Coefficient/n-octanol/water** Not determined.
- Autoignition Temperature** Not determined...
- Decomposition Temperature** Not determined.
- Viscosity** Not determined.

## 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.

## SECTION 10: STABILITY AND REACTIVITY (Continued)

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

- This product is not self-reactive, water-reactive, or air-reactive.

### 10.4 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals and exposure to adverse storage conditions.

### 10.5 INCOMPATIBLE MATERIALS

- Strong oxidizing agents, strong acids.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include oxides of carbon (i.e., carbon monoxide and carbon dioxide), sulfur and sodium compounds, and irritating vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

- **ACUTE TOXICITY:**

- **PRODUCT TOXICITY DATA:**

- Acute Toxicity Estimate (Oral): >2000 mg/kg
- Acute Toxicity Estimate (Dermal): > 2000 mg/kg

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

- **ALYKYL BENZENE SULFONIC ACID MIXTURE**

LD<sub>50</sub> (Oral, Rat) = 500-2000 mg/kg  
LD<sub>50</sub> (Dermal, Rabbit) - > 2,000 mg/kg

- **SODIUM HYDROXIDE**

LD<sub>50</sub> (Oral, Rabbit)= 500mg/kg  
LD<sub>50</sub> (Oral, Rat)= 100mg/kg  
LD<sub>50</sub> (dermal, Rabbit)= 1350mg/kg  
LD<sub>50</sub> (Intraperitoneal, Mice)= 40mg/kg

- **DEGREE OF IRRITATION:** This product can cause serious eye damage and skin burns. Refer to Section 4 (First Aid Measures) for additional information.

- **SENSITIZATION:** No component of the product is reported to be a skin or respiratory sensitizer.

- **CHRONIC TOXICITY:**

- **CARCINOGENICITY STATUS:** None of the components of this product are listed as a carcinogen by IARC/NTP or OSHA.

- **REPRODUCTIVE TOXICITY INFORMATION:** The components of this product are not reported to cause adverse effects on the reproductive system 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:** Not applicable.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 TOXICITY

- The product is rated as: Aquatic Toxicity: Aquatic Toxicity (Acute) Category 3.
- The following data is available to components of this product:
  - **Alkyl Benzene Sulfonic Acid Mixture:** EC50 (algae): 47-48 mg/L, 72 hours; EC50 Daphnia 2-3 mg/l (Daphnia magna), 48 hours; LC50 fish 1-2 mg/l, 96 hours.
  - **Sodium Hydroxide:** LC50 fishes = 28375 mg/l; EC50 Daphnia = 25250 mg/l [Sodium Hydroxide Solution of 1.6g/L]; LC50 fishes = 45.4 mg/l (96 hours; *Salmo gairdneri*, *Oncorhynchus mykiss*); SOLUTION >=50%; EC50 Daphnia = 40.4 mg/l (48 hours; *Ceriodaphnia sp*); LC50 fish = 189 mg/l (48 hours; *Leuciscus idus*); TLM fish = 99 mg/l (48 hours; *Lepomis macrochirus*) TLM fish = 125 ppm (96 hours; *Gambusia affinis*)

### 12.2 PERSISTENCE AND DEGRADABILITY

- No data available.

## SECTION 12: ECOLOGICAL INFORMATION (Continued)

### 12.3 BIOACCUMULATIVE POTENTIAL

- This product is not anticipated to bioaccumulate significantly.

### 12.4 MOBILITY IN SOIL

- No data available.

### 12.5 OTHER ADVERSE EFFECTS

- None reported.

## SECTION 13: DISPOSAL CONSIDERATION

### 13.1 WASTE TREATMENT METHODS:

- Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

### 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
UN1760	Corrosive liquid, n.o.s (Sodium Hydroxide, Alkyl Benzene Sulfonic Acid)	III	8	Corrosive	154	Not applicable.

- Limited Quantity Exceptions [49 CFR 173.154(b)]:** Limited quantities for Class 8, Packing Group III materials have inner packagings not over 5.0 L [1.3 gal] (liquids) net capacity each, packed in strong outer packaging.
- 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. Use the following information:

Proper Shipping Name	Passenger and Cargo Aircraft				Cargo Aircraft Only	
	Limited Quantity		Packing Instruction	Max. Qty per PKG	Packing Instruction	Max. Qty per PKG
	Packing Instruction	Max. Qty per PKG				
Corrosive liquid, n.o.s (Sodium Hydroxide, Alkyl Benzene Sulfonic Acid)	Y841	1.0 L	852	5 L	856	60L

- IMO DESIGNATION:** This product is regulated as dangerous goods by the International Maritime Organization. Use the following information:

Proper Shipping Name	Limited and Excepted Quantity Provisions		Packing		EmS
	Limited Quantities	Excepted Quantities	Instructions	Provisions	
Corrosive liquid, n.o.s (Sodium Hydroxide, Alkyl Benzene Sulfonic Acid)	5 L	E1	P001, LP01	--	FA-SB

## SECTION 14: TRANSPORT INFORMATION (Continued)

- 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):** Skin Corrosion/Irritation. Serious Eye Damage/Irritation.
    - **U.S. CERCLA REPORTABLE QUANTITY (RQ):** Sodium Hydroxide = 1000 lb. (454 mg/kg).
    - **U.S. TSCA INVENTORY STATUS:** All components of this product are listed on the TSCA Inventory.
    - **U.S. SARA 313:** Not applicable.
    - **CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS:** Not applicable.
  - **INTERNATIONAL REGULATIONS**
    - **CANADIAN REGULATORY STATUS: CANADIAN REGULATORY STATUS:** The product is classified as hazardous under Hazardous Products Regulations (SOR-2022-272).
      - WHMIS 2015: See section 2.
      - This SDS contains all the information required by the HPR.
    - **CANADIAN DSL/NDSL INVENTORY STATUS:** The components of this product are on the DSL/NDSL 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:** March 24, 2023.
  - **SUPERCEDES:** Not applicable.
  - **CHANGE INDICATED:** New product.
- 16.2 HAZARDOUS MATERIALS CLASSIFICATION SYSTEM**

Health	3
Flammability	0
Physical Hazard	0
Protective Equipment	*

**HMIS Personal Protective Equipment Rating:** Occupational Use situations: See section 8 for guidance on personal protective equipment selection.

**16.3 DISCLAIMER**

THE INFORMATION CONTAINED HEREIN is based upon available information at the time of preparation and is believed to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that the information is current, applicable, and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or any other user proximately caused by the material if misused or if reasonable safety procedures are not adhered to as stipulated in the data sheet and on the product label. Furthermore, vendor assumes no responsibility for injury or damage caused by abnormal use of this material even if reasonable safety measures are followed.

## SECTION 16: OTHER INFORMATION (Continued)

### 16.4 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: LD<sub>xx</sub> or LC<sub>xx</sub>: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designated route of administration. This value is used to assess the toxicity of chemical substances to humans. TD<sub>xx</sub> or TC<sub>xx</sub>: 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 designated 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.