Most Material Safety Data Sheets (MSDS) have the following 16 sections that provide important safety information about the chemical or compound. All supervisors should understand what each section provides and be able to explain them to assigned employees.

Section 1: Chemical Product & Company Information - provides the chemical name on the label to the MSDS. Also listed is the name, address and the phone number of the company, manufacturer or distributor who provides the chemical.

Section 2: Composition & Ingredients - identifies all hazardous ingredients, OSHA permissible exposure limits (PEL) & ACGIH (American Conference of Governmental Industrial Hygienists) Threshold Limit Values (TLVs).

Section 3: Hazard Identification - information about the health effects of exposure. Description of the material appearance, potential symptoms & health effects, routes of entry & target organs.

Section 4: First Aid - Provides first aid procedures for each route of entry.

Section 5: Fire-Fighting - information on the explosive & fire properties, extinguishing agents and items and general fire-fighting information.

Section 6: Accidental Release - information on material spill response, containment and required spill response PPE.

Section 7: Handling and Storage - information about chemical storage & handling and measures to prevent over-exposure.

Section 8: Exposure Controls & Personal Protection - engineering controls & personal protective equipment to reduce chemical exposure.

Section 9: Physical & Chemical Properties - this section tells about the physical and chemical properties of the chemical. Characteristics include appearance, odor, physical state, pH, vapor pressure, vapor density, boiling point, freezing/melting point, solubility in water and specific gravity or density.

Section 10: Stability & Reactivity - all potentially hazardous chemical reactions are identified in this section. Includes information on chemical stability, conditions to avoid, incompatibility, hazardous decomposition and hazardous polymerization.

Section 11: Toxicological Information – provides information such as acute data, carcinogen potential, reproductive effects, target organ effects, and other physiological aspects

Section 12: Ecological Information - information concerning the environmental impact if a chemical is released into the environment.

Section 13: Disposal Considerations - information concerning proper chemical disposal, recycling and reclamation.

Section 14: Transport Information - shipping information includes the hazardous materials description, hazard class and the identification number (UN or NA numbers).

Section 15: Regulatory Information - provides information about applicable federal regulations. Examples include OSHA, TSCA (Toxic Substance Control Act), CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act), SARA Title III (Superfund Amendments and Reauthorization Act).

Section 16: Additional Information - provides other information about the chemical such as hazard ratings, preparation and revisions of the MSDS, and label information.