Material Safety Data Sheet

ELEKTRO Date of Preparation: 04/90 Revision: 03/16/09

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: ELEKTRO

Chemical Formula: CAS Number: Other Designations:

General Use:

Manufacturer: MIRANDY PRODUCTS, LLC., 1078 GRAND AVENUE, S. HEMPSTEAD, NY 11550

(516) 489-6800

HMIS H # # F # R PPE[†]

†Sec. 8

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt <i>or</i> % vol
PETROLEUM NAPTHA	8052-41-3	
*DICHLOROMETHANE	75-09-02	30%
*PROPYLENE OXIDE	75-56-9	<0.25%

DOT SHIPPING CLASSIFICATION: COMBUSTIBLE LIQUID

Trace Impurities:

	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
PETROLEUM NAPTHA	500ppm	500ppm	500ppm	500ppm	N/A	N/A	N/A
DICHLOROMETHANE	500ppm	500ppm	100ppm	100ppm			75ppm
PROPYLENE OXIDE	100ppm	100ppm	20ppm	20ppm	N/A	N/A	

Toxicity Data:

Section 3 - Physical and Chemical Properties

Physical State:

Appearance and Odor: Clear liquid, characteristic solvent odor

Odor Threshold:

Vapor Pressure N/A Vapor Density (Air=1): >1

Formula Weight:

Density:

Specific Gravity (H₂O=1, at 4 °C): <1

pH:

Water Solubility: Negligible

Other Solubilities: Boiling Point: >200F

Freezing/Melting Point: N/A

Viscosity:

Refractive Index: Surface Tension: % Volatile:

Evaporation Rate: <1

Section 4 - Fire-Fighting Measures

Flash Point:

Flash Point Method: 195F **Autoignition Temperature:**

LEL: **UEL:**

Flammability Classification:

Extinguishing Media: Foam, Dry Chemical, Water or Carbon Dioxide



^{*} DICHLOROMETHANE AND PROPYLENE OXIDE ARE SUBJECT TO SARA, SECTION 313

Unusual Fire or Explosion Hazards: Water may be unsuitable as an extinguishing media, but helpful in cooling containers. Avoid spreading burning liquid with water used for cooling.

Hazardous Combustion Products:

Fire-Fighting Instructions: Fire fighters should wear self-contained breathing apparatus due to thermal decomposition products. Concentrated vapors may be ignited.

Fire-Fighting Equipment:

Section 5 - Stability and Reactivity

Stability: Stable.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Strong alkalis, oxidizers, reducing agents.

Conditions to Avoid: Open flame, ignition sources.

Hazardous Decomposition Products: Hydrogen Chloride, Phosgene, Chlorine, CO, CO2, toxic gases.

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: Inhalation, Ingestion

Target Organs: Acute Effects

Inhalation: If aspirated into lungs, may cause pneumonia and systemic effects.

Eve: Irritating to eyes.

Skin: Irritating to skin and other tissue.

Ingestion: Nausea, dizziness, effects of narcosis.

Carcinogenicity:

Methylene Chloride has been evaluated for possible cancer causing effects in laboratory animals. Inhalation studies at concentrations of 2000 and 4000 ppm increased the incidence of malignant liver and lung tumors in mice. Inhalation studies of rats have shown increased evidence of benign mammary gland tumors in male rats at concentrations of 500 ppm and above and increases in benign mammary gland tumors in male rats at concentrations of 1500 ppm and above. Rats exposed to 50 and 200 ppm via inhalation showed no increase evidence of tumors. Mice and rats exposed to 250mg/kg/day lifetime and hamsters exposed via inhalation to concentrations up to 3500 ppm lifetime did not show an increased evidence of tumors.

Propyene Oxide has caused increased incidence of nasal tumors in rats exposed by inhalation, for stomach tumors in rats exposed by inhalation, for stomach tumors in rats exposed by gavage and injection site tumors when injected under the skin of rats.

IRAC: The International Agency for Research on Cancer has concluded that there is sufficient evidence for the carcinogenicity of Methylene Chloride to experimental animals and inadequate evidence for the carcinogenicity to humans, resulting in a classification as a 2B Animal Carcinogen. IARC has identified Propylene Oxide as an animal carcinogen.

NTP: Has identified Methylene Chloride as an animal carcinogen, but it has not appeared on the NTP list as of September, 1988. NTP has identified Propylene Oxide as an animal carcinogen.

OSHA: Does not list Methylene Chloride or Propylene Oxide as a carcinogen.

Epidemiology studies of humans chronically exposed to Methylene Chloride have concluded that people do not have increased risk of death due to cancer or cardiac problems.

Medical Conditions Aggravated by Long-Term Exposure: Changes in liver, respiratory tract and CNS should be considered during pre-placement or periodic medical examinations. Smoking history should be known; anemia and cardiovascular disease may increase the hazard. Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Effects:

Depresses Central Nervous System. Carboxyhemoglobin levels can be elevated and cause substantial stress on the cardiovascular system.

Emergency and First Aid Procedures

Inhalation: Remove to fresh air. Use artificial respiration if necessary and get medical attention as soon as possible.

Eye Contact: Flush with water. If irritation persists, see physician. Skin Contact: Flush with water. If irritation persists, see physician.

Ingestion: Do not induce vomiting. Contact physician or emergency medical facility immediately. **Note to Physicians:** Never administer Adrenaline to a person over-exposed to Methylene Chloride.

Special Precautions/Procedures:

Section 7 - Spill, Leak, and Disposal Procedures

Spill /**Leak Procedures:** Evacuate the area, ventilate and avoid breathing vapors. Dike area and contain spill. Avoid contamination of ground and surface waters. Clean up area by mopping or with absorbent material and place in closed containers for disposal. If spill occurs indoors, turn off air-conditioning/heating systems to prevent spreading vapors through building.

Small Spills: Large Spills:

Containment:

Cleanup:

Regulatory Requirements:

Disposal: Recovered liquid may be sent to a licensed reclaimer or incineration facility. Contaminated material may be disposed of in a permitted waste management facility. Dispose of according to federal, state and local authorities only.

Disposal Regulatory Requirements:

Container Cleaning and Disposal:

Ecological Information:

Precautions for Storing and Handling: Store in a cool, dry, well-ventilated area out of sunlight. Prevent water or moist air from entering containers.

Other Precautions: Do not cut or weld on empty or full drums.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation:

Administrative Controls:

Respiratory Protection: Wearing approved full-face respirator with organic canister is acceptable. Approved self-contained breathing apparatus or air-line respirators, with full face-piece may be required for spills/emergencies. Explosion-proof ventilation as required to control vapor concentrations.

Protective Clothing/Equipment: Wear solvent resistant gloves. Wear safety glasses or chemical goggles and/or face-shield if splashing may occur. Wear protective clothing, apron, boots, etc. Contact lenses should not be worn.

Safety Stations:

Contaminated Equipment: Launder contaminated clothing before reuse.

Comments: Wash thoroughly after handling.