I. PRODUCT IDENTIFICATION

Product Name: Lead Chloride
Formula: $PbCl_2$

CAS Number: 7758-95-4

II. HAZARDOUS INGREDIENTS

Hazardous Component: Lead Chloride
Percent (%): 99-100
OSHA/PEL: 0.05 mg/m³*
ACGIH/TLV: 0.15 mg/m³*
*TLV and PEL are for lead, inorganic dusts and fumes, as Pb.

Potential Acute Health Effects:

Extremely hazardous in case of ingestion. Very hazardous in case of inhalation. Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant). Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Potential Chronic Health Effects:

Extremely hazardous in case of ingestion. Very hazardous in case of inhalation. Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant). CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, the nervous system, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

III. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White, crystalline, odorless powder

Physical state and appearance: Solid. (Crystalline solid.)

Taste: Not available.

Molecular Weight: 278.1 g/mole

Color: White.

pH (1% soln/water): Not available.

Boiling Point: 950°C (1742°F)

Melting Point: 501°C (933.8°F)

Critical Temperature: Not available.

Specific Gravity: 5.85 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Very slightly soluble in cold water.p. 4

IV. FIRE AND EXPLOSION HAZARDS DATA

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Not available.

V. HEALTH HAZARD INFORMATION

Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab coat. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling This product.

Exposure Limits: TWA: 0.15 CEIL: 0.45 (mg/m3) Consult local authorities for acceptable exposure limits.
INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, immediately induce vomiting.

VI. STABILITY AND REACTIVITY DATA

Stability: Stable
Instability Temperature: Not available.
Conditions to Avoid: Heat, flame
Incompatibility (Material to Avoid): None identified
Hazardous Decomposition Products: Pb fumes, Hydrogen chloride
Hazardous Polymerization: Will not occur
Corrosivity: Not available.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.

VII. SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.
Waste Disposal Method: In accordance with Local and State environmental waste disposal Regulations.
EPA Hazardous Waste Number: DOO8 (EP Toxic Waste).

VIII. SPECIAL PROTECTION INFORMATION

Ventilation: Use general or local exhaust ventilation to meet TLV requirements.
Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration exceeds TLV, a high-efficiency particulate respirator is recommended. If concentration exceeds capacity of respirator, a self-contained breathing apparatus is advised.
Eye-Skin Protection: Safety goggles, uniform, apron, and proper gloves are recommended.

IX. TOXICOLOGICAL INFORMATION

Routes of Entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified 2B (Possible for human.) by IARC. The substance is toxic to blood, kidneys, the nervous system, mucous membranes.

Other Toxic Effects on Humans: Extremely hazardous in case of ingestion. Very hazardous in

case of inhalation. Hazardous in case of skin contact (irritant, permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Excreted in maternal milk in animal.

Special Remarks on other Toxic Effects on Humans: Not available.

X: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

XI: TRANSPORT INFORMATION

DOT Classification: CLASS 6.1: Poisonous material.p. 5

Identification: : Lead compound, soluble, n.o.s. (Lead chloride) : UN2291 PG: III

Special Provisions for Transport: Marine Pollutant.