MATERIAL SAFETY DATA

UN №: 1748 *PACKAGING GROUP: II* *CLASS: 5.1*

SECTION I – INDENTIFICATION

CHEMICAL NAME AND SYNONYMS: Calcium Hypochlorite 68%		
CHEMICAL FAMILY: Hypochlorite	**FORMULA:** $Ca(OCl)^2$	**TRADE NAME:** KLORMAN CARTRIDGE
DESCRIPTION: White tablet sealed in plastic.		**CAS №:** 7778-54-3

SECTION II – NORMAL HANDLING PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING ABD STORAGE:

Do not get in eyes, on skin or on clothing. Do not take internally. Avoid breathing dust. Protect against physical damage. Store in a cool, dry, well-ventilated place away from combustible materials.

CORROSIVE ACTION ON MATERIALS: (Metals, Plastics, Rubber, Etc)

PROTECTIVE EQUIPMENT WHEN HANDLING BULK:	**VENTILATION REQUIREMENTS:**
EYES:	
GLOVES:	
OTHER:	

SECTION III – HAZARDOUS INGREDIENTS

BASIC MATERIAL	APPROXIMATE %	OSHA PEL	LD 50	LC 50	SIGNIFICANT EFFECTS

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT METHOD	OSHA CLASSIFICATION	FLAMMABLE EXPLOSIVE LIMITS	LOWER	UPPER
Not Applicable	Class 3 oxidiser			

EXTINGUISHING MEDIA: Not combustible but may ignite combustible materials or organic matter upon contact. Flood with water to keep fire-exposed containers cool.

SPECIAL FIRE HAZARD & FIRE FIGHTING PROCEDURES:
Use NIOSH / MSHA approved self-contained breathing apparatus where this material is involved in a fire. Fires can erupt and spread rapidly. /the hazardous gas chlorine is released.

SECTION V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: None established

SYMPTOMS OF OVER EXPOSURE: Corrosion of all tissue contacted

EMERGENCY FIRST AID PROCEDURES

SKIN:	Flush with water for 15 minutes, call a physician
EYES:	Flush with water for 15 minutes, call a physician
INGESTION:	Give bread soaked in milk, followed by large amounts of water. If person is conscious and vomiting, place face down with head lower than hips. Get immediate medical attention.
INHALATION:	Remove victim to fresh air, call a physician.

SECTION VI – TOXICOLOGY (Product)

ACUTE ORAL LD 50: 850mg/kg (rat)	CARCINOGENIC: Not known to be carcinogenic
ACUTE DERMAL LD 50: >2 g/kg (rabbit)	MUTAGENIC Negative dominant lethal
ACUTE INHALATION LC 50: <20 mg/litre and >2 mg/litre of Inspired air for 1 hour (rat)	EYE IRRITATION: Corrosive mutagen test
PRINCIPAL ROUTES OF ABSORPTION: Oral	PRIMARY SKIN IRRITATION: Corrosive
EFFECTS OF ACUTE EXPOSURE: Corrosive of all tissue contacted.	
EFFECTS OF CHRONIC EXPOSURE: None known other than those secondary to acute effects.	

SECTION VII – SPILL OR LEAKAGE PROCEDURES (Control Procedures)

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Remove all sources of ignition. Wear NIOSH / MSHA respirator approved for dust chloride. Follow OSHA regulations for respirator use (See 29 CFR 1910.134). Wear goggles, coveralls and rubber, neoprene or PVC gloves and boots. Clean up in a manner to minimize contamination with organic material. Do not return material to original container. Place in a fresh container and isolate outside or in a well-ventilated area. Do not seal the container. Flush any residual material with large quantities of water. Wash all contaminated clothing before re-use. In the event of a large spill use the emergency telephone number (011) 921-3111.

WASTE DISPOSAL METHOD:

Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate local regulatory agencies to ascertain proper disposal procedures.

SECTION VIII – REACTIVITY DATA

STABLE: **UNSTABLE:** X AT 170°C 350°F	HAZARDOUS POLYMERIZATION	MAY OCCUR:
		WILL NOT OCCUR: X
CONDITIONS TO AVOID: When heated to 177°C it decomposes rapidly with evolution of oxygen, heat and chlorine.		
INCOMPATABILITY (Materials to Avoid): Solvents, acids, pool chemicals (Isocyanurates), organic materials. Do not mix with anything but water.		
HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine		

SECTION IX – PHYSICAL DATA

MELTING POINT: Decomposes at 170°C	VAPOR PRESSURE:	VOLATILES:
BOILING POINT:	SOLUBILITY IN WATER: 21% at 21°C	EVAPORATION RATE:
SPECIFIC GRAVITY (H^2O – 1.9)	Ph 1% aq soln 10.6 – 11.5	VAPOR DENSITY (Air – 1)