

Revision Date : 6 April 2015

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1.Product and Company Identification

Trade name: LD1 Product code: Not Applicable Supplier Info: KMG Ultra Pure Chemicals Pte, Ltd. 14 Tuas Ave 20 Singapore 638826 Tel: +65 68651982 Fax: +65 68621985 Recommended use: Use according to manufacturers' directions Emergency contact Mobile: +65 97415009 Mobile: +65 98357459

2.Hazard Identification

Hazard Classification

Classification of the substance or mixture :

Not Classified

GHS label elements : Pictograms



Signal Word: Warning!

Hazard Statements:

H315: Causes skin Irritation

Precautionary Statements:



Prevention:

P280

Response:

P302 + P352	If ON SKIN: Wash with plenty of water
P332 + P313	If skin irritation occurs: Get medical advice/attention
P362 + P364	Take off contaminated clothing and wash it before reuse

Wear protective gloves

3. Composition/Information on ingredients

Chemical Property

Description

Components	CAS No.	% Weight
Inorganic Salts	Non Hazardous	120%
Surfactant	Non Hazardous	1- 10%
Water	Non Hazardous	70-98%

4. First-Aid Measures

The first aid measures for different routes of exposure:

General information:	Immediately remove contaminated clothing. Rinse skin with water/shower
Inhalation:	Wear respiratory protection, as necessary, and remove patient promptly to fresh air. Restore breathing, if required and, if breathing is difficult, give oxygen provided a qualified operator is available. Keep patient warm and at rest. Get medical attention.
Skin contact:	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.
Eye contact:	If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapour exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.
Ingestion:	Do not induce vomiting. If conscious, Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Get medical attention.
Protection for first aiders:	Personal protective equipment.
Indications to physicians:	Pre existing disorders of the following organs (or organ systems) may be



aggravated by exposure to this material : skin, lung (for example, asthma-like conditions).

5. Fire-fighting Measures

FIRE AND EXPLOSION DATA FLASH POINT: NO FLASH POINT FLAMMABLE LIMITS: LOWER: NA, UPPER: NA AUTOIGNITION TEMP.: NA

EXTINGUISHING MEDIA:

Use any standard fire fighting agent (water spray or fog, dry chemical, foam, etc.) as appropriate to surrounding fire conditions.

SPECIAL FIRE FIGHTING PROCEDURES:

Use self-contained, NIOSH-approved, breathing apparatus and full protective clothing, including eye and skin protection.

Use water to keep fire-exposed containers cool or move from fire area if without risk.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Non combustible.

- \cdot Not considered to be a significant fire risk.
- · Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.
- · Heating may cause expansion or decomposition leading to violent rupture of containers.

Decomposition may produce toxic fumes of: hydrogen chloride.

May emit poisonous fumes.

May emit corrosive fumes.

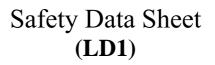
6. Accidental Release Measures

SMALL SPILL:

Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Proper mixing procedures are essential. Trained personnel should conduct this procedure. Untrained personnel should be removed from the spill area.

LARGE SPILL:

Eliminate all ignition sources (flares, flames including pilot lights, electrical spark). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank.



Storage:

Protect from physical damage. Do not store in tin, aluminium, or zinc containers. Sealed or closed the container tightly.

Handling:

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the substance.

Conditions for storage rooms and vessels: Keep in a cool, well ventilated area

8. Exposure Controls and Personal Protection

Engineering controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Ensure that eyewash stations and safety showers are proximal to the work station location

Biological standards: Not Available

Personal protective equipment (PPE):



Respiratory protection:

Wear respiratory equipment with suitable filter or wear a self contained respiratory apparatus.

Hand protection: Protective gloves

Eye protection: Safety goggles

Skin and body protection: Chemical protective clothing Wear splash apron, work uniform and shoes to prevent skin contact.

Hygiene measures: Do not inhale vapor .Avoid contact with skin and eyes. Do not wear contaminated clothing.

9. Physical and Chemical Properties		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odor Threshold:	Not Available	
PH value:	12.5 – 13.5g/ml @25C	
Melting point/Freezing Point:	Not available	



Flashpoint: Test method: **Open cup:** Close cup:

Vapor pressure:

Specific Gravity @ 25°C:

Safety Data Sheet (LD1)

Boiling Point/Boiling Range:

Flammability (Solid, gas): Non-Flammable **Decomposition temperature: Percent Volatile:** Specific Vapor density:

Not available Not available Not available 1.05 -1.10 Soluble in water

Not available

10. Stability and Reactivity

Stability:

Solubility:

Stable under ordinary conditions of use and storage. **Special Remarks on Reactivity:** Reacts with copper, aluminium, zinc and their alloys. **Conditions to avoid:** No information available **Incompatible materials:** Incompatible with strong acids, oxidising agents and halogenated compounds.

Corrosivity Not Applicable

11. Toxicological Information

Toxicity to Animals Not Available

ROUTES OF ENTRY: Not Available.

CHRONIC EFFECTS ON HUMANS:

Not Available.

OTHER TOXIC EFFECTS ON HUMANS: Not Available.

SPECIAL REMARKS ON TOXICITY TO ANIMALS:

Not Available.

SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS:

Not available.

SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMANS: Not Available.



12. Ecological Information

ENVIRONMENTAL FATE: Not available

ENVIRONMENTAL TOXICITY: Not available.

BOD5 AND COD: Not available.

PRODUCTS OF BIODEGRADATION:

Not available.

TOXICITY OF THE PRODUCTS OF BIODEGRADATION: Not available

13. Disposal Considerations

Methods of Waste Disposal:

Waste material shall be disposed of in accordance with the local legislation. Leave chemicals in original containers. No mixing with other waste. Handle unclean containers like the product itself.

Consult Federal, State or Local authorities for proper disposal procedures.

14. Transport Information

Domestic (Land, D.O.T.) Proper Shipping Name: Not Regulated Hazard Class: 8 UN / NA: 1814 Packing Group: II

International (Water, I.M.O.) Proper Shipping Name: Not Regulated Hazard Class: 8 UN / NA: 1814 Packing Group: II

International (Air, I.C.A.O.) Proper Shipping Name: Not Regulated Hazard Class: 8 UN / NA: 1814 Packing Group: II



Follow in accordance with all local, state and federal regulation

16. Other Information

Abbreviations and acronyms:

- GHS: Globally Harmonized System of Classification and Labeling of Chemicals
- **OSHA** : The Occupational Health & Safety Assessment Series (Singapore)
- **NIOSH** : National Institute for Occupational Safety and Health (USA)
- CAS: Chemical Abstracts Service
- UN: United Nations

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