MATERIAL SAFETY DATA SHEET

LCD - SH50YA

Date Approved: 20/12/2017
Revision No.: 02

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: LCD - SH50YA
SYNONYM: NA
GENERAL USE: Activation and create the condition for the working of 2430YA

MANUFACTURER

ATP CHEMICAL COMPANY LIMITED
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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

• No application.

POTENTIAL HEALTH EFFECTS:

Hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant, corrosive), of ingestion, of inhalation. 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. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs. 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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.
Alkalis hydroxide	NA	30 – 40	NA
Additive	NA	3 – 5	NA
Water	7732-18-5	57 – 45	NA

4. FIRST AID MEASURES

EYES:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

SKIN:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

INGESTION:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. Serious Ingestion: Not available.

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

NOTES TO MEDICAL DOCTOR: No application

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Flood by water.

FIRE / EXPLOSION HAZARDS: Product is non-combustible.

FIRE FIGHTING PROCEDURES: Any tank or container surrounded by fire should be flooded with water for cooling. Wear full protective clothing and self-contained breathing apparatus.

FLAMMABLE LIMITS: Not applicable.

Fire Hazards in Presence of Various Substances: of metals

Reaction with certain metals releases flammable and explosive hydrogen gas.

Special Remarks on Explosion Hazards:

LCD-SH50 reacts to form explosive products with ammonia + silver nitrate. Benzene extract of allyl benzenesulfonate prepared from allyl alcohol, and benzene sulfonyl chloride in presence of aquesous LCD-SH50YA, under vacuum distillation, residue darkened and exploded. Sodium Hydroxde + impure tetrahydrofuran, which can contain peroxides, can cause serious explosions. Dry mixtures of LCD-SH50YA and sodium tetrahydroborate liberate hydrogen explosively at 230-270 deg. C. LCD-SH50YA reacts with sodium salt of trichlorophenol + methyl alcohol + trichlorobenzene + heat to cause an explosion.

6. ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS: Once touch, use water to wash.

MEASURE FOR ENVIRONMENTAL: Keep dry and cool, out of the sunlight.

SPILLS/LEAKS:

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

If necessary: Neutralize the residue with a dilute solution of acetic acid.

Large Spill:

Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid.

7. HANDLING AND STORAGE

HANDLING:

Keep container dry. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acids, alkalis, moisture.

STORAGE:

Keep container tightly closed. Keep container in a cool, well-ventilated area.
Do not store above 23°C (73.4°F).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS: NA

Chemical Name	ACGIH	OSHA
LCD-SH50	2 mg/m3 (ceiling)	2 mg/m3 (PEL)

EYE PROTECTION: Wear safety glasses with side shields

SKIN PROTECTION: Wear protective clothing. Gloves should be constructed of: impermeable material. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

RESPIRATORY PROTECTION: Where ventilation is inadequate, use a NIOSH- approved air purifying respirator with the appropriate chemical cartridges or positive pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

OTHER EQUIPMENT: The decision whether to clean or discard contaminated clothing should be based on the chemicals contaminating them. Some chemicals can cause skin irritation, sensitization or other health effects if the cleaning process does not remove all traces of them. Consult a safety professional to determine whether clothing contaminated with this product can be safely cleaned and reused.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients in Section 2 below the lowest suggested exposure limit, and LEL below stated limit, as appropriate

clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Odorless
APPEARANCE:	White liquid
AUTOIGNITION TEMPERATURE:	Non-combustible
BOILING POINT:	145°C (293 °F)
COEFFICIENT OF OIL / WATER:	Not available
DENSITY / WEIGHT PER VOLUME:	1.0 ~ 1.5
EVAPORATION RATE:	(butyl acetate = 1) Not available
FLASH POINT:	Non-combustible
FREEZING POINT:	4.4°C (40°F)
ODOR THRESHOLD:	Not available
OXIDIZING PROPERTIES:	Not available
PERCENT VOLATILE:	Not available
SOLUBILITY IN WATER:	Infinite
SPECIFIC GRAVITY:	1.53 @ 15.5°C (60°F) (water = 1)
VAPOR DENSITY:	(Air = 1): Not available
VAPOR PRESSURE:	6.33 mm Hg @ 40 °C (104 °F)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

Contact with acids, flammable liquids, organic halogen compounds, nitro compounds, and amphoteric metals, such as aluminum, magnesium and zinc.

STABILITY: Slightly reactive

POLYMERIZATION: Will not occur

INCOMPATIBLE MATERIALS:

Acids, flammable liquids, organic halogen compounds, nitro compounds, and amphoteric metals, such as aluminum, magnesium and zinc.

HAZARDOUS DECOMPOSITION PRODUCTS: NA

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Severely irritating, corrosive (rabbit)

SKIN EFFECTS: Severely irritating, corrosive (rabbit)

ACUTE EFFECTS FROM OVEREXPOSURE: LCD-SH50YA is corrosive and may produce severe eye, skin and respiratory tract irritation and upper gastrointestinal tract damage. Ingestion of concentrated solutions has caused death in animals and humans.

CHRONIC EFFECTS FROM OVEREXPOSURE: LCD-SH50YA may produce inflammation of the eyes, skin, and mucous membranes. Esophageal carcinoma at the site of a chronic lye stricture has been reported. [Gosselin , Smith & Hodge 1984]

12. ECOLOGICAL INFORMATION

NA

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal environmental rules and regulations. Check the pH of the waste to be disposed, if it is greater than 12.5 it must be handled as a RCRA hazardous waste.

UNCLEAR PACKAGING: Forbidden.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: LCD - SH50

PRIMARY HAZARD CLASS / DIVISION: 8

UN/NA NUMBER: UN 1824

PACKING GROUP: II

LABEL(S): Corrosive

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PROPER SHIPPING NAME: LCD-SH50

OTHER INFORMATION: Cool containers with water if exposed to fire or excessive heat conditions.

15. REGULATION INFORMATION

NA

16. OTHER INFORMATION

NA

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