



MATERIAL SAFETY DATA SHEET

Revision Date: July
2001

WP1020P

Section I : Product and Manufacturer Identity

Product Identity:

Sealed Lead-Acid Battery

Telephone:

Manufacturer's Name and Address:

Emergency Telephone Number:

+886-2-25810413

**Kung Long Batteries Industrial Co., Ltd.
No.6, Tzu-Li 3 Rd., Nantou
Taiwan, R.O.C.**

Customer Service Telephone Number:

+886-2-25810413

Internet: www.klb.com.tw

Section II: Hazardous Ingredients / Identity Information

<u>Components</u>	<u>CAS #</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>% (By weight)</u>
Lead	7439-92-1	0.05 mg/m ³	0.15 mg/m ³	45 ~ 60%
Lead Dioxide	1309-60-0	0.05 mg/m ³	0.15 mg/m ³	15 ~ 25%
Sulfuric Acid Electrolyte	7664-93-9	1.00 mg/m ³	1.00 mg/m ³	15 ~ 20%
Non-Hazardous Materials	N/A	N/A	N/A	5 ~ 10%

Section III: Physical / Chemical Characteristics

Boiling Point: Electrolyte 110°C ~ 112°C

Vapor Pressure: Electrolyte 11.7 mm Hg. At 20°C

Vapor Density (AIR = 1): Electrolyte 3.4

Solubility in Water: Lead and Lead Dioxide are insoluble in water. Sulfuric Acid is 100% soluble in water.

Appearance and Odor: Manufactured article consisting of an opaque plastic case; no apparent odor. Sulfuric Acid is a liquid.

Specific Gravity (H₂O = 1): Electrolyte 1.270 ~ 1.330



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Chronic: Inhalation of mists may cause upper respiratory irritation.

Signs and Symptoms: Irritation and burning of exposed tissues.

Medical Conditions: Respiratory disorders may be aggravated by prolonged inhalation of mists.

Emergency and First Aid Procedures:

Battery Electrolyte:

Inhalation: Remove to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical attention.

Eye Contact: Flush with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Remove contaminated clothing and flush affected areas with plenty of water for at least 15 minutes.

Ingestion: Do not induce vomiting. Dilute by giving large quantities of water. If available give several glass of milk. Do not give anything by mouth to an unconscious person. Give CPR if breathing has stopped. Get immediate medical attention.

Section VII: Precautions for Safe Handling and Use

Steps to be Taken in Case of Broken Battery Case or Electrolyte Leakage:

Avoid contact with acid materials. Use soda ash or lime to neutralize. Flush with water. Dispose of clean-up materials as a hazardous waste.

Waste Disposal Method :

Dispose of in accordance with Federal, State and Local Regulations. Do not incinerate. Batteries should be shipped to a reclamation facility for recovery of the metal and plastic components as the proper method of waste management. Contact distributors for appropriate product return procedures.

Precautions to be Taken in Handling and Storage:

Store in cool, dry area away from combustible materials. Do not store in sealed, unventilated areas. Avoid overheating and overcharging.

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Other Precautions:

Do not charge in unventilated areas. Do not use organic solvents or other than recommended chemical cleaners on battery.

Section VIII: Control Measures

General:

Normal room ventilation is sufficient during normal use and handling.

Personal Protective Equipment (in the Event of Battery Case Breakage):

Always wear safety glasses with side shields or full-face shield.

Use rubber or neoprene glove.

Wear acid resistant boots, apron or clothing.

Work/Hygienic Practices:

Remove jewelry, rings, watch and any other metallic objects while working on batteries. All tools should be adequately insulated to avoid the possibility of shorting connections. Do not lay tools on top of battery. Be sure to discharge static electricity from tools and individual person by touching a grounded surface in the vicinity of the batteries, but away from cells. Batteries are heavy. Serious injury can result from improper lifting or installation. Do not lift, carry, install or remove cells by lifting or pulling the terminal posts for safety reasons and because terminal posts and post seals may be damaged. Do not wear nylon clothes or overalls as they can create static electricity. Do keep a fire extinguisher and emergency communications device in the work area.

Section IX: Other Regulatory Information

NEPA Hazard Rating for Sulfuric Acid:

Flammability (Red) = 0 Health (Blue) = 3 Reactivity (Yellow) = 2

Transportation Information

Identification and Proper Shipping Name:

Kung Long Batteries Industrial Co., Ltd. Batteries conform in the UN2800 classification as “Batteries, Wet, Non-Spillable, Electric Storage”

U.S. DOT:

Batteries meet the requirements of 49 CFR 173.159(d). They do not have an assigned UN number nor do they require additional DOT hazard labeling.

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IATA/ICAO:

Batteries meet the requirements of Special Provision A67. They are exempt from hazardous goods regulations, and classified as a “nonspillable battery”.

For all modes of transportation, each battery and outer package must be labeled: “Non-Spillable” or “Non-Spillable Battery”. This label must be visible during transportation.

California Proposition 65:

The State of California has determined that certain battery terminals contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. **IMPORTANT: WASH HANDS THOROUGHLY AFTER WORKING WITH BATTERIES AND BEFORE EATING, DRINKING OR SMOKING.**

Section X: Additional Information

The Material Safety Data Sheet is supplied for informational purposes only. The information and recommendations contained herein have been compiled from sources believed to be reliable and represent current opinion on the subject. No warranty, guarantee, or representation is made by Kung Long Batteries Industrial Co., Ltd. as to the absolute correctness or sufficiency of any representation contained herein and Kung Long Batteries Industrial Co., Ltd. assumes no responsibility in connection therewith, nor can it be assumed that all acceptable safety measures are contained herein, or that additional measures may not be required under particular or exceptional conditions or circumstances.