

**YACHT BATTERY CO., LTD.**

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LOT A_9H_CN, BAU BANG INDUSTRIAL PARK, BEN CAT DISTRICT, BINH DUONG PROVINCE, VIETNAM

TEL: 84 650 381 8548 FAX: 84 650 381 8557

PRODUCT NAME: Storage Battery-Dry

FOR CHEMICAL EMERGENCY SPILL, LEAK, FIRE, EXPLOSION, OR ACCIDENT CALL INFOTRAC: 1-800-535-5053

MATERIAL SAFETY DATA SHEET**HAZARDOUS COMPONENTS**

| COMPONENTS | % WEIGHT | TLV | LD 50 | LC 50 | LC 50 |
|--|-----------|-----|-------------|------------|---------|
| | | | ORAL | INHALATION | CONTACT |
| Lead (Pb, PbO ₂ PbSO ₄) | About 90% | N/A | (500) mg/kg | N/A | N/A |
| Fiberglass Separator | About 5% | N/A | N/A | N/A | N/A |
| Styron R 478 (Polystyrene) | About 5% | N/A | N/A | N/A | N/A |

PHYSICAL DATA

| COMPONENT | DENSITY | MELTING POINTS | SOLUBILITY (H ₂ O) | ODOR | APPEARANCE |
|-----------------|---------|-------------------|-------------------------------|---------|---------------------|
| Lead | 11.34 | 327.4°C (Boiling) | None | None | Silver-gray Metal |
| Lead Sulfate | 6.2 | 1070°C (Boiling) | 40 mg/l (15°C) | None | White Powder |
| Lead Dioxide | 9.4 | 290°C (Boiling) | None | None | Brown Powder |
| Fiberglass Sep. | N/A | N/A | SLIGHT | TOXIC | WHITE FIBROUS GLASS |
| 478 Polystyrene | N/A | N/A | NONE | NO ODOR | SOLID |

FLAMMABILITY DATA

| COMPONENT | FLASHPOINT | EXPLOSIVE LIMITS | COMMENTS |
|-----------------|------------|------------------|--|
| Lead | None | None | |
| Fiberglass Sep. | N/A | N/A | Toxic vapors may be released. In case of fire: wear self-contained breathing apparatus. |
| 478 Polystyrene | None | N/A | Temperatures over 300°C (572°F) may release combustible gases. In case of fire. Wear positive pressure self-contained breathing apparatus. |

REACTIVITY DATA

| | |
|------------------------|---|
| COMPONENT | Lead |
| STABILITY | Stable at all temperatures |
| POLYMERIZATION | Will not polymerize |
| INCOMPATIBILITY | N/A |
| DECOMPOSITION PRODUCTS | N/A |
| CONDITIONS TO AVOID | Prohibit smoking, sparks etc. from battery charging area. |

PROTECTION

| EXPOSURE SITE | PROTECTION | COMMENTS |
|---------------|-----------------------------|---|
| SKIN | Rubber Gloves, Apron | Protective equipment must be worn if the battery is cracked or otherwise damaged. A respirator should be worn during reclaim operations if the TLV is exceeded. |
| RESPIRATORY | Respirator (for lead) | |
| EYES | Safety Goggles, Face Shield | |

ELECTRICAL SAFETY

Due to the battery's low internal resistance and high power density, high levels of short circuit current can be developed across the battery terminals. Do not rest tools or cables on the battery. Use insulated tools only. Follow all installation instructions and diagrams when installing or maintaining battery system.

HEALTH HAZARD DATA

LEAD: The toxic effects of lead are accumulative and slow to appear. It affects the kidney reproductive, and central nervous system. The symptoms of lead overexposure are anemia, vomiting, headache, stomach pain (lead colic), dizziness, loss of appetite, and muscle and joint pain. Exposure to lead from a battery most often occurs during lead reclaim operations through the breathing or ingestion of lead dusts and fumes.

THIS DATA MUST BE PASSED TO ANY SCRAP DEALER OR SMELTER WHEN A BATTERY IS RESOLD

FIBERGLASS SEPARATOR: Fibrous glass is an irritant of the upper respiratory tract, skin and eyes. For exposure up to 10F/CC use MSA Comfoll with type H filter. Above 10F/CC up to 50F/CC used Ultra-Twin with type H filter. This product is not considered carcinogenic by NTP or OSHA