



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

MANUFACTURER YACHT BATTERY CO., LTD 4F-5, NO, 123, SEC. 3, TAICHUNG PORT ROAD, TAICHUNG, TAIWAN R.O.C. Tel: +886 4 23580578	CHEMICAL/TRADE NAME : Storage Battery - Dry CHEMICAL FAMILY/ CLASSIFICATION : Storage Battery
FOR EMERGENCY INFOTRAC TEL: 1-352-323-3500	DATE ISSUED: Apr. 09, 2008

2. INFORMATION ON INGREDIENTS

This product is not considered to be hazardous.

3. HAZARDS IDENTIFICATION

Symptoms relating to use

- Skin contact: Not expected to present a significant skin hazard under anticipated conditions of normal use.
- Eye contact: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
- Ingestion: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

4. FIRST AID MEASURES

First aid

- Inhalation : Not expected to require first aid measures.
- Skin contact: Wash skin thoroughly with mild soap and water.
- Eye contact : Rinse immediately with water.
- Ingestion : Rinse mouth. Spit.

5. 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.

6. 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.

7. HANDLING AND STORAGE

Storage : Store in dry, well-ventilated area.

Handling: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

8. EXPOSURE CONTROLS/PERSONAL 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	

9. 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

10. 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.

11. TOXICOLOGICAL & 12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Disposal: Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION**Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. 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

PREPARED BY:

YACHT BATTERY CO., LTD
4F-5, NO. 123, SEC. 3,
TAICHUNG PORT ROAD,
TAICHUNG, TAIWAN R.O.C.
Tel: +886 4 23580578

16. OTHER REGULATORY INFORMATION

VENDEE AND THIRD PERSONS ASSUME THE RISK OF INJURY PROXIMATELY CAUSED BY THE MATERIAL IF REASONABLE SAFETY PROCEDURES ARE NOT FOLLOWED AS PROVIDED FOR IN THE DATA SHEET, AND VENDOR SHALL NOT BE LIABLE FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY ABNORMAL USE OF THE MATERIAL EVEN IF REASONABLE PROCEDURES ARE FOLLOWED.

ALL PERSONS USING THIS PRODUCT, ALL PERSONS WORKING IN AN AREA WHERE THIS PRODUCT IS USED, AND ALL PERSONS HANDLING THIS PRODUCT SHOULD BE FAMILIAR WITH THE CONTENTS OF THIS DATA SHEET. THIS INFORMATION SHOULD BE EFFECTIVELY COMMUNICATED TO EMPLOYEES AND OTHERS WHO MIGHT COME IN CONTACT WITH THE PRODUCT.

WHILE THE INFORMATION ACCUMULATED AND SET FORTH HEREIN IS BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, YACHT BATTERY CO., LTD MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE FOR THEIR PARTICULAR CIRCUMSTANCES.