MATERIAL SAFETY DATA SHEET

MSDS Number: 02
January 20, 2009

1. PRODUCT IDENTIFICATION

PRODUCT NAME:	Dry Charged battery (for Motorcycle)
CHEMICAL FAMILY:	Lead and lead components
CHEMICAL NAME:	Dry charged, lead-acid battery
FORMULA:	Not applicable
UN NO.:	Not applicable

Telephone number: +86-571-88144451

2. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	CAS#	WEIGHT %	OSHA PEL	ACGIH TLV	0SHA ACTION LEVEL
Lead and lead compounds	7439-92-1	<95	0.05mg/m^3	0.15mg/m^3	0.03mg/m^3
Antimony	7440-36-0	<1.1	0.50mg/m^3	0.50mg/m^3	Not applicable
Arsenic	7440-38-2	<0.1	0.01mg/m^3	0.02mg/m^3	0.005 mg/m^3
Calcium compound	7440-70-2	<0.1	1.00mg/m^3	0.50mg/m^3	Not applicable
Tin compound	7440-31-5	<0.3	2.00mg/m^3	2.00mg/m^3	Not applicable

3.PHYSICAL DATA

BOILING POINT:	LEAD	3164℉(1740℃)@760 mm Hg
	POLYPROPYLENE	>320℉
MELTING POINT:	LEAD	621℉(327.43℃)
SPECIFIC GRAVITY:	LEAD	11.34
VAPOR PRESSURE (mm Hg @ 20 ℃):	LEAD	NEGLIGIBLE
VAPOR DENSITY:	LEAD	N/A
SOLUBILITY:	LEAD	INSOLUBLE IN WATER
%VOLATILES BY VOL.:		NEGLIGIBLE
%EVAPORATION RATE:	LEAD	N/A

APPERANCE AND ODOR: NO ORDR. BATTERY CASE IS BLACK OR BLACK AND WHITE

4.HEALTH HAZAD INFORMATION

LEAD COMPOUNDS:
HAZADOUS EXPOSURE CAN OCCUR ONLY WHEN PRODUCT IS HEATED, OXIDIZED OR OTHERWISE PRCESSED OR DAMAGED TO CREAT DUST, VAPOR OR FUME.

ROUTES OF ENTRY:

1) INHALATION:
Lead compounds: Inhalation of lead dust or fumes may cause irritation of upper respiratory tract and lungs.

2) INGESTION:
Lead compounds: Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead rapidly to systemic toxicity and must be treated by a physician.

2) SKIN CONTACT:
Lead compounds: Not absorbable through the skin.

3) EYE CONTACT:
Lead compounds: May cause eye irritation.

MEDICAL CONDITIONS WHICH CAN BE AGGRAVATED BY EXPOSURE:
Overexposure to sulphuric acid mist may cause lung damage and aggravate pulmonary conditions. Contact of sulphuric acid with skin may aggravate skin diseases such as eczema and contact dermatitis. Lead and it's compounds can aggravate some of kidney, liver and neurologic diseases.

POTENTIAL TO CAUSE CANCER:
Lead compounds: Lead is listed as a 2B carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is lacking at present.

5.EMERGENCY AND FIRST AID PROCEDURES

1) INHALATION:
Lead: Remove from exposure, gargle, wash nose and lips, consult physician.

2) INGESTION:
Lead: Consult physician immediately.

3) SKIN:
Lead: Wash immediately with soap and water.

1) EYES:
Lead: Flush immediately with large amounts of water for at least 15 minutes, consult physician.

6.FIRE FIGHTING MEASURES

INORGANIC LEAD COMPOUND IS NOT A COMBUSTIBLE MATERIAL, NOR WILL IT EXPLODE UNDER CONDITION OF NORMAL USE.

FLASH POINT:	Not applicable
FLAMMABLE LIMITS:	LEL=4.1% (Hydrogen Gas) UEL=74.2%
EXTINGUISHING MEDIA:	CO_2; foam; dry chemical

SPECIAL FIRE FIGHTING PROCEDURES:
Wear full body protective clothing and self-contained breathing apparatus with positive pressure and full-face piece.

UNUSUAL FIRE AND EXPLOSION HAZARD:
Highly flammable hydrogen gas is generated during charging and operation of batteries. To avoid risk of fire or explosion, keep sparks or other sources of ignition away from batteries. Do not allow metallic material to simultaneously contact negative and positive terminals of cells and batteries. Follow manufacturer's instructions for installation and service.

7. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITION TO AVOID:
Prolonged overcharge; sources of ignition

INCOMPATIBILITY (materials to avoid):
Lead compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen and reducing agents.

HAZADOUS DECOMPOSITON PRODUCTS:
Lead Compounds: High temperatures likely to produce toxic mental fume, vapor or dust; contact with strong acid or presence of nascent hydrogen may generate highly toxic arsine gas.

8.CONTROL MEASURES

ENGENIEERING CONTROLS:
Store and handle in well-ventilated areas.

WORK PRACTICES:
Handle batteries cautiously to avoid spills. Make certain vent caps are on securely. Avoid contact with internal components. Wear protective clothing when filling or handling batteries.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:
None required under normal conditions.

PROTECTIVE GLOVES:
Rubber or plastic acid-resistant gloves with elbow-length gauntlet for use when filling batteries.

EYE AND FACE PROTECTION:
Chemical goggles and face shield for use when filling batteries.

OTHER PROTECTION:
Wear coveralls or full-body covering during use. When filling batteries use acid-resistant apron. Under severe exposure or emergency conditions, wear acid-resistant clothing and boots.

9. SAFE HANDLING PRECAUTIONS

SPILL OR LEAK PRECEDURE:

Lead dust should be vacuumed or wet-swept: use controls, which minimize fugitive emissions; do not use compressed air.

SAFE HANDLING AND STORAGE:
Store batteries in cool, dry, well-ventilated areas with impervious surfaces and adequate containment in the event of spills. Batteries should also be stored under roof for protection against adverse weather conditions. Separate from incompatible materials. Store and handle only in areas with adequate water supply and spill control. Avoid damage to containers. Keep away from fire, sparks and heat.

PRECAUTION LABELING:
POISON-CAUSE SEVER BURNS

10. TOXOCOLOGICAL INFORMATION

EFFECTS OF OVEREXPOSURE

ACUTE:
Lead compounds: Acute untreated overexposure to lead may lead to weakness, vomiting, loss of appetite, un-coordinated body movements, convulsions, stupor and possible coma.

CHRONIC:
Lead compounds: Symptoms of toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability.

11. ECOLOGICAL INFORMATION

ANIMAL TOXICITY:
Oral (pigeon) LD_{LO}: 160 mg/kg.

AQUATIC TOXICITY:
Toxic to aquatic life, fish, crustaceans.

BIODEGRADABILITY:
The product has no effect on the environment unless in safely divided form.

BIOACCUMULATION:
Lead is taken from the soil by plants and can be concentrated in the food chain.

MOBILITY:
It is relatively mobile in the aquatic environment and can be concentrated by aquatic organisms.

12. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD:

SPEND BATTERIES:
Send to secondary lead smelter for recycling.

Place neutralized slurry into sealed containers and handle as applicable with state and federal regulations. Large water-diluted spills, after neutralization and testing, should be managed in accordance with approved local, state and federal requirements. Consult state environmental agency and/or federal EPA.

13. REGULATION INFORMATION

RISK PHRASES:
R20/22: Harmful by inhalation and if swallowed.
R33: Cause severe burns.
R58: May cause long term adverse effects in the environment.
R61: May cause harm to the unborn child.
R62: Possible risk of impaired fertility.

SAFTY PHRASES:
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).
S53: Avoid exposure-obtain special instructions before use.

14 OTHER INFORMATION

PROPOSTION 65 WARNING
BATTERY POSTS, TERMINALS AND RELATED ACCESSORIES CONTAIN LEAD AND LEAD COMPOUNDS, CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND REPRODUCTIVE HARM. WASH HANDS AFTER HANDLING.

SATA TITLE Ⅲ
THE CHEMICALS LISTED BELOW ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLEⅢ OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

MATERIAL OR COMPONENT	CAS#	WEIGHT %
Lead and lead compounds	7439-92-1	＜95
Antimony	7440-36-0	＜1.1
Arsenic	7440-38-2	＜0.1

THIS LEAD-ACID BATTERY IS CLASSIFIED AS A MANUFACTURED ARTICLE (10 CFR 372.3) AND THE HAZARDOUS MATERIALS (LEAS, ANTIMONY, ARSENIC AND NICKEL COMPOUNDS) CONTAINED WITHIN ARE NOT RELEASED UNDER NORMAL CONDITIONS OF USE. SICNE THESE CHEMICALS ARE NOT RELEASED DURING NORMAL USE THEY ARE EXEMPT FROM THE REPORTING REQUIREMENTS CONTAINED IN 40 CFR PART 372 SUBPART B. HOWEVER, SULFURIC ACID MAY BE RELEASED INTO THE ENVIRONMENT IF A BATTERY BREAKS AND THEREFORE MAY NOT BE EXEMPT FROM THE REPORTING REQUIREMENTS OF SARA TITLE Ⅲ. SEE EXEMPTIONS, 40 CFR 372.38 (b).

THIS INFORMATION SHOULD BE INCLUDED IN ALL MSDS’S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.