20<sup>th</sup> floor wellable commercial building,513 hennessy road, causeway, bay, hong kong Tel: (852) 2139 2259 Fax: (852) 2341 9186



## **Material Safety Data Sheet**

Rev 1

Date: Aug 01, 2015 Issued by:

## Section 1 – Chemical product and company identification

Product: dry battery

Sealed Lead Acid rechargeable battery(non spillable)

Model No.

S5059A (HT2V200)

S5062 (HT6V1.3)

S5063 (HT6V3.3)

S5073 (HT6V12)

S5075B (HT12V1.3)

S5080 (HT12V3.3)

S5084 (HT12V4.5)

S5090B (HT12V7.2)

S5098 (HT12V12)

S5100 (HT12V20)

S5104A (HT12V26)

S5113 (HT12V40)

S5124 (HT12V90)

## **Company Information:**

Insistant Power Ltd. (sales office); UL file number MH26335.

Mailing address: 20<sup>th</sup> Floor wellable commercial Building, 513 Hennessy Road, Causeway, Bay, Hong Kong Office address: Xishagang industey, ShiJi town, Panyu, Guangzhou, China

#### **Manufacturer:**

GuangZhou Henda Power Industrial Co., Ltd.

Address located at: Xishagang industey, ShiJi town, Panyu, Guangzhou, China

## **Emergency Phone Number:**

Insistant Power Ltd

852-2139 2259 (office)

852-62256432 (David Li)

Manufacturer Mailing Address:



#### **Emergency Overview:**

Exposure not expected for product under normal conditions of use. In its manufactured and supplied state, the product is non-hazardous. Keep away from flames during and immediately after charge. No significant health effects are associated with the product.





#### Section 2 – Hazards Identification

#### Hazards Rating (HMIS System) for Sealed Lead Acid Battery

Health 0 Flammability 0 Reactivity 0

#### **Potential Health Effects**

None expected for finished product under normal conditions of use.

### Fire and Explosion

The sealed lead acid battery is not considered flammable, but it will burn if involved in a fire. Short circuit can also result in fire. Evacuate area. Self-contained apparatus must be worn to prevent possible inhalation of acid mists, smoke and decomposition products in a fire. Remove all ignition sources. Cool battery(s) to prevent rupture.

**Section 3 – Composition (Hazardous Components)** 

~ · · · · · · · · · · · · · · · · · ·					
Components	% by weight	TLV	LD50	LC50	LC50
			Oral	Inhalation	Contact
Lead (Pb,PbO2,PbSo)	about 70%	N/A	(500)mg/kg	N/A	N/A
Sulfuric Acid	about 20%	1mg/m3	(2140)mg/kg	N/A	N/A
Fiberglass Separator	about 5%	N/A	N/A	N/A	N/A
Styro R478(Polystyrene	about 5%	N/A	N/A	N/A	N/A

### **Section 4 – First-Aid Measures**

## **Sulfuric Acid Precautions:**

Skin contact: Flush with water, see physician if contact area is larger or if blister form. Eye contact: Call physician immediately and flush with water until physician arrives.

Ingestion: Call physician. If patient is conscious, flush mouth with water, have the patient drink milk or sodium

bicarbonate solution.

DO NOT GIVE ANYTHING TO AN UNCONSCIOUS PERSON.

### Section 5 – Fire Fighting Measures

### **Extinguishing Media**

Multi purpose dry chemical or multi purpose CO2.

## Fire fighting procedures

Evacuate area. Self-contained breathing apparatus must be worn to prevent possible inhalation of acid mists, smoke and decomposition products in a fire. Remove all ignition sources. Cool battery(s) to prevent rupture.

### Unusual fire and explosion hazards

Hydrogen gas maybe produced and may explode if ignited. Remove all ignition sources. Ventilate area.

## **Section 6 – Accidental Release Measures**

#### Leakage or Spill

If sulfuric acid is spilled from a battery – Neutralize the acid with sodium bicarbonate (baking soda), sodium carbon (soda ash), or calcium oxide (lime). Flush the area with water and discard to the sewage system.

Do not allow unneutralized acid into sewage system.

### **Waste Disposal**

Neutralized acid may be flushed down the sewer. Spent batteries must be treated as hazardous waste and disposal of according to local State and federal regulations. A copy of this material safety data must be supplied to any scrap dealer or secondary lead smelter with battery.

20<sup>th</sup> floor wellable commercial building,513 hennessy road, causeway, bay, hong kong Tel: (852) 2139 2259 Fax: (852) 2341 9186



## Section 7 – Handling and Storage

### **Handling**

Do not carry battery by terminals. Do not drop battery, puncture or attempt to open battery case. Keep away from flame during and immediately after charge. Avoid prolonged overcharges in confined areas.

### Storage

Store at ambient room temperature. Do not subject product to open flame or fire. Avoid conditions, which could cause arching between battery terminals.

#### Hygiene

Wash hands thoroughly before eating or smoking after handling batteries.



## **Section 8 – Exposure Controls/Personal Protection**

#### Lead

The toxic effects of the lead are accumulative and slow to appear. It affects the kidneys, reproductive nerve system. The symptoms of lead over exposure are anemia, vomiting, headache, stomach pain (lead colic), dizziness, loss of appetite and muscle and joint pain. Exposure to lead from battery most often occurs during lead reclaim operations through the breathing or ingestion of lead dust and fumes.

Lead compounds exposure limits is 0.05 mg/m3 OSHA.

THIS DATA MUST BE PASSED TO ANY SCRAP DEALER OR SMELTER WHEN BATERRY RESOLD.

#### **Sulfuric Acid**

Sulfuric acid is a strong corrosive. Contact with acid can cause severe burns on the skin and eyes. Ingestion of sulfuric acid will cause GI tract burns. Acid can be released if the battery case is damaged or if the vents are tampered with. Sulfuric Acid Electrolyte exposure limits are 1.00 mg/m3 OSHA.

### **Fiberglass Separators**

Fiberglass is an irritant of the upper respiratory tract, skin and eyes. For exposure up to 10F/CC, MSA Comfoll with type H filter. Above 10F/CC up to 50F/CC use ultra twin type H filter. NTP or OSHA does not consider this product carcinogenic.

## **Personal Protection**

Eye: Not necessary under normal conditions of use for finished product.

Not necessary under normal conditions of use for finished product.

Not necessary under normal conditions of use for finished product.

Not necessary under normal conditions of use for finished product.

Not necessary under normal conditions of use for finished product.

Not necessary under normal conditions of use for finished product.

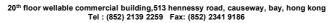
Not necessary under normal conditions of use for finished product.

## Section 9 – Physical and Chemical Properties

#### **Physical Data**

Component	Density	Melting Points	Solubility(H2O)	Odor	Appearance
Lead	11.34	327.4 °C (boiling)	None	None	Silver-gray material
Lead Sulfate	6.2	107 °C (boiling)	40mg/l (15 °C)	None	White powder
Lead Dioxide	9.4	290 °C (boiling)	None	None	Brown powder
Sulfuric Acid	about 1.3	about 114 °C (boiling)	100%	Acidic	Clear colorless liquid
Fiberglass Separator	N/A	N/A	Slight	Toxic	White fibrous glass
478 Polystyrene	N/A	N/A	None	No odor	Solid
Flammability Data					
	T21 1 1 1	TO 1 1 T 1 1	α .		

Component	Flashpoint	Explosive Limits	Comments
-----------	------------	------------------	----------





Lead	None	None	
Sulfuric Acid	N/A	None	
Hydrogen		4% - 74.2%	Sealed batteries can emit hydrogen only if over charged
			(float voltage >2.4VPC)
Fiberglass Separator	None	N/A	Toxic vapors may be released. In case of fire wear, self-
			contained breathing apparatus.
478 Polystyrene	None	N/A	Temperatures over 300C (572F) may release combustible g
			In case of fire, wear positive pressure self-contained breath
			apparatus.

### Section 10 – Stability and Reactivity

Stability: Stable

Conditions to avoid: Avoid shorting, use only approved charging methods. Do not puncture battery case.

Hazardous reactions: N/A
Decomposition products: N/A

Hazardous Polymerization Will not occur



## Section 11, 12 – Toxicological and Ecological Information

## **Threshold Limit Value**

Not applicable for finished product.

## **Route of Entry**

Not applicable for finished product under normal conditions of use.

#### **Signs of Symptoms of Acute Exposure**

None expected for finished product under normal conditions of use.

## Chronic Exposure

None expected for finished product under normal conditions of use.

#### **Medical Conditions Aggravated by Exposure**

None expected for finished product under normal conditions of use.

### Effects of Overexposure, Conditions to Avoid

No exposure expected for finished product. However, do not puncture or open battery case. Acid electrolyte may be released. Use only standard charging methods. If overcharged, battery may release gases (Hydrogen and Oxygen).

#### **Carcinogen Listing**

NTS: no IARC: no OSHA regulated: N/A for finished product under normal conditions of use.

### **Section 13 – Disposal Considerations**

Send to a lead recycling facility that follows applicable Federal, State and Local regulations for routine disposition of spent or damaged batteries. The distributor/user is responsible to know that "spent" and/or "damaged" batteries (scrap batteries) are disposed of in an environmentally sound way in accordance with all applicable Federal, State and Local Environmental Regulations.

"Henda" batteries are 100% recyclable by any licensed reclamation operation.

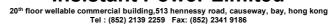
#### Section 14, 15 – Regulatory and Transportation Information

According to the OSHA Hazard Communication Standard, Sealed Lead Acid Battery in its manufactured and supplied state is considered non-hazardous.

Sealed Lead Acid Battery is not a DOT hazardous material.

## **Section 16 – Supplemental Information**

"Henda" batteries comply with the regulations for dangerous goods. As per IMCO and IATA Dangerous Goods Regulations, 42<sup>nd</sup> Edition, Section 4.4, Special Provision A48 and A67.





Non-spillable batteries are considered to be non-dangerous if the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow at a temperature of 55 degrees C (130 degrees F), and if the terminals are protected from short-circuit when packed for transportation.

this battery is non-dg according to IMDG code

"Henda" batteries do meet all the above criteria.

