Battery Builders Inc. • Mfg. Of Industrial Batteries

Material Safety Data Sheet

Section 1. IDENTITY OF MATERIAL

Product Name or Number: **Lead/Acid Storage Battery**	
Synonyms: **Lead/Acid Storage Battery**	
Formula: **Lead/Acid** CAS Number: **N/A** Chemical Family: **Toxic and Corrosive Material**	
Regulated Identification	Shipping ID Number: **UN 2794 NA 2794** EPA Hazardous Waste ID Number: **N/A** DOT Proper Shipping Name: **Batteries, Electric Storage, Wet Filled with Acid**

HAZARDOUS INGREDIENTS	%	CAS Number
Lead/Lead Oxide/Lead Sulphate T.L.V. = 0.05 mg/m^3	60	
Antimony Compounds T.L.V. = 0.5 mg/m^3	1-5	
Sulfuric Acid T.L.V. = 1.0 mg/m^3	10-30	7664-93-9
Under normal conditions of use only the electrolyte and hydrogen gas generated during charge pose a hazard.		

Section 2. HAZARDOUS SPECIFICATIONS

KNOWN HAZARDS UNDER 29 CFR 1910.1200						T.L.V. (see above)	
	YES	NO		YES	NO	PEL ppm mg/ml	
Skin Hazard	X		Combustible Liquid		X	NFPA Hazard Signal	
Eye Hazard	X		Flammable Material*		X	Health	3
Toxic Agent	X		Pyrophoric Material		X	Flammability	0
Highly Toxic Agent		X	Explosive Material*		X	Stability	0
Sensitizer		X	Unstable Material		X	Reactivity	2
Carcinogen		X	Water Reactive Material	X		DOT Hazard Class: **Corrosive Material (8)**	
Reproductive Toxin		X	Oxidizer	X			
Blood Toxin		X	Organic Peroxide		X		
Nervous System Toxin		X	Corrosive Material	X		EPA Hazard Waste Class: **D002 Corrosivity Characteristics**	
Lung Toxin	X		Compressed Gas		X		
Liver Toxin		X	Irritant	X			
Kidney Toxin		X					

*Hydrogen gas during charging is flammable and explosive.

Section 3. SAFE USAGE DATA

Protective Equipment Types	Eyes: **Goggles or face shield** Respiratory: **Sulfuric Acid Mist—half mask with dust and acid mist filter** Gloves: **Rubber Gloves** Other: **Rubber or plastic apron**
Ventilation	General Mechanical: **Acceptable at 1 to 4 air changes per hour** Local Exhaust: **Preferred**
Precautions	Handling & Storage: **Keep away from flames during and immediately after charging** Other: **Avoid prolonged overcharging**

♣ Most states require by law that old batteries be recycled.

Section 4. EMERGENCY RESPONSE DATA

Fire	Extinguishing Media: Special Procedures: **Water, Water Fog**, **Halon or dry chemical** Unusual Hazards: **Hydrogen gas and sulfuric acid vapors are generated upon overcharging. Ventilate charging areas.**
Exposure	First Aid Measures: **Eyes: Wash the eyes with large quantities of running water for 15 minutes. Seek medical attention. Skin: Remove contaminated clothing. Flush area at least 15 min. with large amounts of running water. Ingestion: If sulfuric acid has been swallowed and the person is conscious, give him large quantities of water immediately to dilute. Do not attempt to make the exposed person vomit. Seek medical attention.**
Spills	Steps to Be Taken: **If possible, stop flow of material. Wash with water or neutralize with sodium carbonate or bicarbonate.** Waste Disposal Method: **Neutralize with sodium carbonate of bicarbonate. Dispose of waste water with all proper discharge laws.**

Section 5. PHYSICAL HAZARD DATA

Flammability in Air	LFL: **4.0%** UFL: **74.2%**		Flash Point: **N/A** Method Used:
Stability	Stable Unstable	**X**	Conditions to Avoid: **Avoid overcharging and smoking, or sparks near battery surface**
Hazardous Polymerization	May occur Will not occur	**X**	Conditions to Avoid:
Incompatibility	Materials to Avoid: **Combustibles, organic materials, and strong reducing agents**		

Section 6. HEALTH HAZARD DATA

Effects of Exposure: **Eyes: Severe burns, cornea damage and blindness. Skin: Severe irritation, ulceration. Inhalation: Breathing of vapors or mists may cause respiratory damage. Ingestion: Burns of mouth, throat, and intestinal track.**

Entry Route: Inhale **X** Ingest **X** Skin **X** Eye **X**

Emergency Treatment: **(See First Aid Measures above)**

Section 7. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point: **approx. 203°F**	Vapor Density (AIH 1): **Greater than 1**	Volatile Components: **Hydrogen gas during charging.**
Vapor press.: **10mm mercury at 18% H_2SO_4**		pH: **Less than 1**
Solubility in H_2O: **100%**	Will dissolve in:	Evaporation Rate (= 1)
Appearance: **Clear liquid**	IS Material: Paste: Powder:	
Odor: **Sharp, penetrating, pungent odor**	Solid: Liquid: **XXX** Gas:	

Section 8. MANUFACTURER & RECYCLER

Manufacturer's Name: **Battery Builders Inc.**	Emergency Telephone Number: **1-800-535-5053 INFOTRAC**
Address: **31W238 91st Street** **Naperville, IL 60564**	Telephone Number for Information: **(630) 851-5800** Date Prepared: **REVISED JULY 2007**
Signature of Preparer (optional):	