# MATERIAL SAFETY DATA SHEET

PRODUCT NAME - BATTERY ELECTRIC STORAGE WET UN2794

STAAB BATTERY MFG., CO. INC. 931 SOUTH ELEVENTH STREET SPRINGFIELD IL 62703-1799 24-HOUR EMERGENCY TELEPHONE

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## **SECTION 1 PRODUCT IDENTIFICATION**

COMMON NAME - Lead Acid Battery CHEMICAL NAME - Electric Storage Battery

### **SECTION 2 HAZARDOUS COMPONENTS**

				Approximate Air Exp	osure Limits (ug/m3)		
Components	CAS Number	% by Weight	OSHA	ACGIH	NIOSH		
Lead	7439-92-1	60-70	50	50	50		
Antimony	7440-36-0	0.5	500	500	500		
Tin	7440-31-5	0.2	2000	2000	2000		
Arsenic	7440-70-2	0.1	10	10	2		
Electrolyte	7664-93-9	25-40	1000	200	1000		
(Sulphuric Acid/water)							
Polypropylene	9003-07-0	5-10	n/a	n/a	n/a		
THE TANK THE							

HAZARD INDEX Health - 3 Flammability - 0 Reactivity - 2

SECTION 3 PHYSICAL DATA

Boiling Point	230-250 F		Specific Gravity	1.100 to 1.300			
Electrolyte			Water $= 1$				
Soluble in Water	100%		Vapor Pressure	<6 mm Hq			
Evaporation Rate	Slower		Vapor Density	Greater than 1			
Ether $= 1$	(Electrolyte)		Air = 1				

APPEARANCE AND ODOR – Lead: gray metallic solid or liquid.

Acid: clear to pale straw color liquid.

Battery polypropylene: solid.

### **SECTION 4 FIRE & EXPLOSION DATA**

FLASH POINT Not applicable

**AUTO IGNITION TEMP 675 F** 

EXTINGUISHING MEDIA – Dry chemical, carbon dioxide or foam or sand.

SPECIAL FIRE FIGHTING PROCEDURES - If water is used for surrounding area fire, use care as water and sulfuric acid will react with evolution of heat and spattering.

UNUSUAL FIRE & EXPLOSION HAZARDS - When charging and discharging, flammable gases are emitted and these could ignite with considerable violence.

## **SECTION 5 REACTIVITY**

STABLE - Yes

CONDITIONS TO AVOID - Excess heat or prolonged overcharging.

INCOMPATIBILITY (MATERIAL TO AVOID) - Contact of electrolyte with alkali's and water. HAZARDOUS DECOMPOSITION PRODUCTS – Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, hydrogen sulfide.

### SECTION 6 HEALTH HAZARD DATA

ROUTES OF ENTRY – Harmful by all routes of entry.

INHALATION – Breathing of sulfuric acid vapors or mists may cause severe respiratory irritation.

INGESTION – May cause severe irritation of mouth, throat, esophagus, and stomach.

SKIN CONTACT – Severe irritation, burn, and ulceration.

EYE CONTACT – Severe irritation, burns, and ulceration.

### **SECTION 6 HEALTH HAZARD DATA (continued)**

EFFECTS OF OVEREXPOSURE – ACUTE – Severe skin irritation, damage to cornea may cause blindness, upper respiratory irritation.

EFFECTS OF OVEREXPOSURE – CHRONIC – Possible erosion of tooth enamel, inflammation of nose, throat, and bronchial tubes.

CARCINOGENICITY – Electrolyte in batteries is not considered a carcinogenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSE - Any skin condition subjected to corrosive effects of sulfuric acid.

EMERGENCY & FIRST AID PROCEDURES - If fumes of electrolyte are inhaled, remove victim to fresh air and seek medical aid.

EYE CONTACT - Flush with large amounts of water for at least 15 minutes and seek medical aid

SKIN CONTACT - Immediately wash with water. Treat as chemical burn and seek medical aid. INGESTION - Drink large amounts of water. DO NOT induce vomiting, seek medical aid.

### SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

HANDLING AND STORING - Store in a cool dry environment. Do not drop, smash, or invert. Prevent leakage of electrolyte. Keep away from metal objects that could cause a short of the battery terminals.

CHARGING – Batteries generate hydrogen gas when charging. Charging areas should be ventilated. Wear face and eye protection when near batteries being charged.

SPILL OR LEAKS – Use full protective equipment. Neutralize electrolyte spill with lime or soda ash. Absorb neutralized acid with sand, ashes or other non-combustible material. Confer with Federal, State and local official on disposal of absorbent.

WASTE DISPOSAL PROCEDURES – Waste or junk batteries to be disposed of should be returned to secondary lead smelter for recycling.

### **SECTION 8 CONTROL MEASURES**

RESPIRATORY EQUIPMENT – Not needed if concentrations of sulfuric acid mist are below PEL levels.

PROTECTIVE CLOTHING – Chemical goggles and face shield. Acid resistant gloves. OTHER – (Safety showers, Eyewash stations, etc.) For normal use and handling fresh water should be available to neutralize splashes to eye or skin.

### SECTION 9 OTHER REGULATORY INFORMATION

TRANSPORTATION: Proper shipping name – Battery, Wet, Filled with acid

Hazard Class – 8 ID Number – UN2794 Packing Group – III Label Required - Corrosive

RCRA: Spent lead-acid batteries are not regulated as hazardous waste when recycled. CALIFORNIA PROPOSITION 65: "Warning: This product contains lead, a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm."

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