

Material Safety Data Sheet

Sealed Lead Acid – GEL

The information and recommendations below are believed to be accurate at the date of preparation. Ascent Battery makes no warranty of merchantability or any other warranty, express or implied, with respect to such information and we assume no liability resulting from its use. This MSDS sheet provides guidelines for safe use and handling of the product. It does not and cannot advise all possible situations. Your specific use of this product should be evaluated to determine if additional precautions must be taken.

Company	Ascent Battery Supply	Emergency Number	INFOTRAC 800-535-5053
Address	925 Walnut Ridge Drive Hartland, WI 53029	Overseas Emergency Number	INFOTRAC 800-535-5053
Revision Date	07-2011		

SECTION 1 – IDENTITY

Product Name	Valve Regulated Lead Acid Battery
Common	
Synonyms	Gel, Absorbed Electrolyte Sealed, Valve-Regulated Non-Spillable Battery
DOT Description	Battery Non-Spillable 49 CFR 173.159a
Chemical Name	Gel/absorbed electrolyte type lead acid storage battery

SECTION 2 – HAZARDOUS INGREDIENTS

Chemical Name	CAS No.	Percentage %
Lead, Inorganic	7439-92-1	60-75
Sulfuric Acid	7664-93-9	5-15
Antimony	7440-36-0	0-0.1
Arsenic	7440-38-2	<0.1
Tin	7440-31-5	0-0.1
Polypropylene	9003-07-0	2-10

SECTION 3 – PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point	235-240° F (113–116° C) (as sulfuric acid)	Melting Point	NA
Vapor Pressure	10 mmHg	Vapor Density	>1
Specific Gravity	1.27–1.33	Percent Volatile By Volume	None
Solubility in Water	100% (as sulfuric acid)	Reactivity in Water	NA
Appearance and Odor	Industrial/commercial lead acid gel battery. Odorless	Evaporation Rate	>1
Flash Point	675° F (Polypropylene case) Below room temperature (as hydrogen gas)	Flammable Limits in Air % by Volume	LOWER EXPLOSIVE LIMIT (LEL): 4% (as hydrogen gas) UPPER EXPLOSIVE LIMIT (UEL): 74% (as hydrogen gas)
Extinguisher Media	Dry chemical, carbon dioxide, water, foam. Do not use water on live electrical circuits.	Auto-Ignition Temperature	NA
Special Fire Fighting Procedures	Use appropriate media for surrounding fire. Do not use carbon dioxide directly on cells. Avoid breathing vapors. Use full protective equipment (bunker gear) and self-contained breathing apparatus.		

Unusual Fire and Explosion Hazards	Batteries evolve flammable hydrogen gas during charging and may increase fire risk in poorly ventilated areas near sparks, excessive heat or open flames.
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SECTION 4 – PHYSICAL HAZARDS

Stable or Unstable Stable under normal conditions at ambient temperature.

Incompatibility (Materials to Avoid)	Strong bases, combustible organic materials, reducing agents, finely divided metals, strong oxidizers, and water.
(Conditions to Avoid)	Overcharging, sources of ignition
Hazardous Decomposition	Thermal decomposition will produce sulfur dioxide, sulfur trioxide, carbon monoxide, sulfuric acid mist, and hydrogen.
Hazardous Polymerization	Will Not Occur

SECTION 5 – HEALTH HAZARDS

Threshold Limit Value	Permissible Exposure Limit (PEL/TWA)
	Lead, inorganic (as Pb) 0.05 mg/m ³
	Sulfuric acid 1.00 mg/m ³
	Antimony 0.50 mg/m ³
	Arsenic 0.01 mg/m ³
	Tin 2.00 mg/m ³

TWA: 8-Hour Time-Weighted Average; mg/m³: milligrams per cubic meter of air;

Signs and Symptoms of Exposure Repeated exposure to lead and lead compounds in the workplace may result in nervous system toxicity. Some toxicologists report abnormal conduction velocities in persons with blood-lead levels of 50 µg/100 ml or higher. Heavy lead exposure may result in central nervous system damage, encephalopathy and damage to the blood-forming (hematopoietic) tissues.

ACUTE HEALTH HAZARDS:

Repeated or prolonged contact may cause mild skin irritation.

CHRONIC HEALTH HAZARDS:

Lead poisoning if persons are exposed to internal components of the batteries. Lead absorption may cause nausea, vomiting, weight loss, abdominal spasms, fatigue, pain in the arms, legs and joints. Other effects may include central nervous system damage, kidney dysfunction, and potential reproductive effects. Chronic inhalation of sulfuric acid mist may increase the risk of lung cancer.

Medical Conditions Generally Caused by Exposure	Respiratory and skin diseases may predispose the user to acute and chronic effects of sulfuric acid and/or lead. Children and pregnant women must be protected from lead exposure. Persons with kidney disease may be at increased risk of kidney failure.
Routes of Entry	Inhalation, Eyes, Skin, Ingestion
Emergency and First Aid Procedures for	Lead, Sulfuric Acid
1. Inhalation	If breathing difficulties develop, remove person to fresh air. If symptoms persist, seek medical attention.
2. Eyes	Flush eyes with large amounts of water for at least 15 minutes. Seek immediate medical attention if eyes have been exposed directly to acid gel.
3. Skin	Flush affected area(s) with large amounts of water using deluge emergency shower, if available, shower for at least 15 minutes. Remove contaminated clothing. If symptoms persist, seek medical attention.
4. Ingestion	If swallowed, give large amounts of water. Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death.

SECTION 6 – SPECIAL PROTECTION INFORMATION

Respiratory Protection	Not required for normal conditions of use. See also special firefighting procedures (Section 3).		
Ventilation	General dilution ventilation is acceptable.		
Skin Protection	Wear chemical resistant gloves as standard procedure to prevent skin contact.	Eye Protection	Wear protective glasses with side shields or goggles.
Other Protective Clothing or Equipment	None required under normal-use conditions for gel/absorbed electrolyte-type batteries Wash hands after handling.		

SECTION 7 – SPECIAL PRECAUTIONS – SPILL AND LEAKAGE PROCEDURES

Storing Procedures	<ul style="list-style-type: none">• Keep containers tightly closed when not in use.• If battery case is broken, avoid contact with internal components.• Do not handle near heat, sparks, or open flames.• Protect containers from physical damage to avoid leaks and spills.• Place cardboard between layers of stacked batteries to avoid damage and short circuits.• Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire.
Other Precautions	Keep away from combustible materials, organic chemicals, reducing substances, metals, strong oxidizers and water.
Steps if chemicals are spilled	<p>Personal Precautions: Avoid Contact with Skin. Neutralize any spilled electrolyte with neutralizing agents, such as soda ash, sodium bicarbonate, or very dilute sodium hydroxide solutions.</p> <p>Environmental Precautions: Prevent spilled material from entering sewers and waterways.</p> <p>Spill Containment & Cleanup Methods/Materials: Add neutralizer/absorbent to spill area. Sweep or shovel spilled material and absorbent and place in approved container. Dispose of any non-recyclable materials in accordance with local, state, provincial or federal regulations.</p>
Waste Disposal	Lead acid batteries are recyclable when sent to a secondary lead smelter. Following local, State/Provincial, and Federal/National regulations applicable to end-of-life characteristics will be the responsibility of the end-user.

SECTION 8 – TRANSPORTATION INFORMATION

GROUND – US-DOT/CAN-TDG/EU-ADR/APEC-ADR:

Proper Shipping Name Not regulated as a Hazardous Material

AIRCRAFT – ICAO-IATA:

Proper Shipping Name Not regulated as a Hazardous Material

VESSEL – IMO-IMDG:

Proper Shipping Name Not regulated as a Hazardous Material

Additional Information

- Each battery and the outer packaging must be plainly and durably marked “Non-spillable” or “Non-Spillable Battery”
- Non-Spillable Battery complies with the provisions listed in 49 CFR 173.159a; therefore, must not be marked with an identification number or hazardous label and is not subject to hazardous shipping paper requirements.
- Transport requires proper packaging and paperwork, including the Nature and Quantity of goods, per applicable origin/destination/customs points as-shipped.