



MATERIAL SAFETY DATA SHEET

MOTORCYCLE DRY CHARGED BATTERY ELECTROLYTE-SULFURIC ACID

SECTION 1: PRODUCT IDENTIFICATION

Product Name:	Motorcycle Charged Battery Electrolyte-Sulfuric Acid		
Common Synonyms:	Sulfuric Acid		
DOT Description:	Battery fluid acid		
Chemical Family:	Acid, Corrosive		
Company Name:	FULBAT SPRL		
Address:	ZI DE LA MARTINOIRE BD DE L EUROZONE 7700 MOUSCRON BELGIUM		
Contact:	Website : www.fulbat.com Information contact : +33 6 16 75 04 59		
Emergency Number:	CHEMTREC (US, Canada & Mexico)	Phone: 1-800-424-9300	
	CHEMTREC (International)	Phone: 1-703-527-3887	
Date Issued:	February 1, 2012		

SECTION 2: HAZARDOUS INGREDIENTS/ IDENTITY INFORMATION

COMPONENTS	%(Optional)	CAS Number	Air Exposure Limits ($\mu\text{g}/\text{m}^3$)			LD ₅₀ ORAL (Rat) (mg/kg)
			ACGIH TLV-TWA	OSHA PEL	NIOSH REL	
Sulfuric Acid (H ₂ SO ₄)	30-40	7664-93-9	200	1000	1000	2140
Water(H ₂ O)	60-70	--	--	--	--	--

SECTION 3: PHYSICAL DATA

COMPONENTS	DENSITY g/cm ³	BOILING POINT	SOLUBILITY (H ₂ O)	ODOR	APPEARANCE
Sulfuric Acid (H ₂ SO ₄)	1.28-1.33	105°C-120°C, 221°F- 248°F	100%	Sharp, penetrating, pungent odor	Clear Colorless Liquid

SECTION 4: FLAMMABILITY DATA

COMPONENTS	FLASHPOINT	EXPLOSIVE LIMITS	COMMENTS
Sulfuric Acid (H ₂ SO ₄)	None	None	Water applied to sulfuric acid generates heat and causes acid to splatter. Wear full-cover sulfuric acid resistant clothing. In case of fire: CO ₂ ; foam; dry chemical.

SECTION 5: REACTIVITY DATA

COMPONENT	Sulfuric acid
Stability	Stable
Incompatibility	Contact with metals may produce toxic sulfur dioxide fumes and/or hydrogen gas.
Decomposition products	Sulfur trioxide, carbon monoxide, sulfuric acid fumes, sulfur dioxide
Condition to avoid	Contact with organic materials, combustibles, strong reducing agents, metals, strong oxidizers, water.

SECTION 6: HEALTH HAZARD DATA

Battery is considered as sealed non-spillable one. Under normal operating conditions, the materials sealed inside should not be hazardous to people's health. Only when these materials exposed during production or under case broken condition or being extremely heated (fired), they may be hazardous to people's health.

Routes of Entry: Sulfuric Acid: Harmful by all routes of entry.
Inhalation: Sulfuric Acid: Breathing sulfuric acid vapors and mists may cause severe respiratory problems.
Skin Contact:



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Sulfuric Acid: Severe irritation, burns and ulceration.

Eye Contact:

Sulfuric Acid: Severe irritation, burns, cornea damage, or blindness.

Ingestion:

Sulfuric Acid: May cause severe irritation of the mouth, throat, esophagus, and stomach.

Acute Health Hazards:

Sulfuric Acid: Severe skin irritation, burns, damage to cornea may cause blindness, upper respiratory irritation.

Chronic Health Hazards:

Sulfuric acid: Possible scarring of the cornea, inflammation of the nose, throat and bronchial tubes, possible erosion of tooth enamel.

Medical Conditions Generally Aggravated by Exposure

Contact of battery electrolyte (acid) with the skin may aggravate skin diseases such as eczema and contact dermatitis. Overexposure to sulfuric acid mist may cause lung damage and aggravate pulmonary conditions.

Emergency and First Aid Procedures

Inhalation

Sulfuric Acid: Remove to fresh air immediately. If breathing is difficult, give oxygen

Ingestion

Sulfuric Acid: Do not induce vomiting, consult a physician immediately.

Eyes

Sulfuric Acid: Flush immediately with water for 15 minutes, consult a physician.

Skin

Sulfuric Acid: Flush with large amounts of water for at least 15 minutes, remove any contaminated clothing. If irritation develops seek medical attention.

Proposition 65

Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemical known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

SECTION 7: CARCINOGENICITY

Carcinogenicity

Sulfuric Acid: The National Toxicological Program (NTP) and The International Agency for Research on Cancer (IARC) have classified strong inorganic acid mist containing sulfuric acid as a Category 1 carcinogen, a substance that is carcinogenic to humans. The ACGIH has classified strong inorganic acid mist containing sulfuric acid as an A2 carcinogen (suspected human carcinogen). These classifications do not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist (sulfuric acid mist) is not generated under normal use of this product. Misuse of the product, such as overcharging, may result in the generation of sulfuric acid mist.

SECTION 8: PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures

In case the release occurs, stop flow of material: contain/absorb small spills with dry sand, earth, and vermiculite. Do not use combustible materials. If possible, carefully neutralize spilled electrolyte with soda ash, sodium bicarbonate, lime, etc. If use, cautiously dilute with water. Wear acid-resistant clothing, boots, gloves, and face shield. Do not allow discharge of unneutralized acid to sewer.

Waste Disposal Method

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

Handling and Storing

Handle cautiously; avoid contact with skin and eyes. Storage and handling areas should be equipped with proper containment to capture and neutralize spills. In addition, these areas should be equipped with eyewash stations and safety showers.

Precautionary Labeling: POISON-CAUSES SEVERE BURNS
DANGER-CONTAINS SULFURIC ACID

SECTION 9: ECOLOGICAL INFORMATION

Sulfuric acid can pose a threat if released to the environment. See Waste Disposal Method in Section 8.



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SECTION 10: CONTROL MEASURES

Engineering Controls:

Store and handle in well-ventilated area. General dilution ventilation is acceptable.

Respiratory Protection:

None required under normal conditions. When concentrations of sulfuric acid mist are known to exceed PEL, use NIOSH or MSHA-approved respiratory protection.

Personal Protection and Equipment:

- Protective gloves: use rubber or plastic acid-resistant gloves with elbow-length gauntlet.
- Eye protection: use chemical goggles or face shield.
- Other protection: Acid-resistant apron. Under severe exposure or emergency conditions, wear acid-resistant clothing and boots.

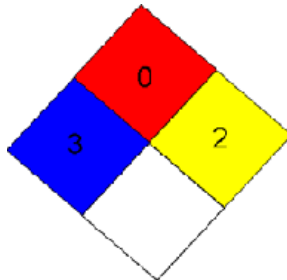
Emergency Flushing: In areas where sulfuric acid is handled in concentrations greater than 1%, emergency eyewash stations and showers should be provided, with unlimited water supply.

SECTION 11: NFPA HAZARD RATING FOR LEAD

A. Not applicable under normal conditions.

B. In case of damage resulting in breakage of the battery container, see section 10, personal protection and equipment.

Flammability (Red)	0
Health (Blue)	3
Reactivity (Yellow)	2



SECTION 12: TRANSPORTATION REGULATIONS (Non-Restricted Status)

TRANSPORTATION INFORMATION**GROUND – US DOT:**

The transportation of electrolyte within the continental United States is regulated by the U.S.DOT through the CFR49. These regulations classify electrolyte as a hazardous material. Electrolyte must be packed according to 173.202 or 173.242 depending upon the nature of the shipment. The shipping information for electrolyte is as follows:

Proper Shipping Name: Battery Fluid, Acid

Hazard Class/Division: 8

ID Number: UN2796

Packing Group: II

Label Required: Corrosive

When battery fluid is shipped in a carton with a dry battery, CFR49, 172.102 special provision N6 states that this combination packaging must conform to either section 173.159 (g) or (h).

AIRCRAFT-ICAO-IATA:

The transportation of electrolyte is regulated by the International Air Transport Association (IATA). These regulations classify electrolyte as a hazardous material. Electrolyte must be packed according to IATA Packing Instruction Y809. The shipping information for electrolyte is as follows:



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Packing Group: II
Label Required: Corrosive

VESSEL-IMO-IMDG:

The transportation of electrolyte is regulated by the International Maritime Dangerous Goods Code (IMDG). These regulations classify electrolyte as a hazardous material. Electrolyte must be packed according to IMDG code page 8230. The shipping information for electrolyte is as follows:

Proper Shipping Name: Battery Fluid, Acid
Hazard Class/Division: 8
ID Number: UN2796
Packing Group: II
Label Required: Corrosive

SECTION 13: REGULATORY INFORMATION

RCRA

Spilled sulfuric acid is a characteristic hazardous waste; EPA hazardous waste number 002 (corrosives).

CERCLA (superfund) and EPCRA

- (a) Reportable Quantity (RQ) for spilled 100% sulfuric acid under CERCLA (superfund) and EPCRA (Emergency Planning Community Right to Know Act) is 1,000lbs. State and local reportable quantities for spilled sulfuric acid may vary.
- (b) Sulfuric acid is a listed "Extremely Hazardous Substance" under EPCRA with a Threshold Planning Quantity (TPQ) of 1,000lbs.
- (c) EPCRA Section 302 Notification is required if 1,000lbs. or more of sulfuric acid is present at one site. The quantity of sulfuric acid will vary by battery type. Contact **FULBAT SPRL** for additional information.
- (d) EPCRA Section 312 Tier 2 reporting is required for batteries if sulfuric acid is present in quantities of 500lbs. or more.
- (e) Supplier Notification: This product contains toxic chemicals which may be reportable under EPCRA Section 313 Toxic Chemical Release Inventory (Form R) requirements. If you are a manufacturing facility under SIC codes 20 through 39 the following information is provided to enable you to complete the required reports:

Toxic Chemical	CAS Number	Approximate% by weight
Sulfuric Acid	7664-93-9	30-40

If you distribute this product to other manufacturers in SIC codes 20 through 39, this information must be provided with the first shipment in a calendar year. The Section 313 supplier notification requirement does not apply to batteries which are "consumer products". Not present in all battery types. Contact **FULBAT SPRL** for further information.

TSCA

Ingredients in battery electrolyte are listed in the BCA Registry as follow:

Components	CAS Number	TSCA Status
Sulfuric Acid	7664-93-9	Listed

CANANIN REGULATIONS:

All chemical substances in this product are listed on the CEPA DSL/NDSL or are exempt from list requirements.

CALIFORNIA PROPOSITION 65:

WARNING:

- Electrolyte contains Sulfuric acid, a chemical known to the state of California to cause cancer, or birth defects or other reproductive harm.
- Batteries also contain other chemicals known to the state of California to cause cancer.
- Wash hands after handling.



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ELECTROLYTE-SULFURIC ACID**

DISCLAIMER:

ALL PERSONS USING THIS PRODUCT, ALL PERSONS WORKING IN AN AREA WHERE THIS PRODUCT IS USED AND ALL PERSONS HANDLING THIS PRODUCT SHOULD BE FAMILIAR WITH THE CONTENTS OF THIS DATA SHEET. THIS INFORMATION SHOULD BE EFFECTIVELY COMMUNICATED TO EMPLOYEES AND OTHERS WHO MIGHT COME IN CONTACT WITH THE PRODUCT.

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