

Material Safety Data Sheet



SEALED LEAD ACID STORAGE BATTERIES UN 2800

Issue Date March 2005

Status ISSUED by DJB

COMPANY DETAILS

Company Name	Battery Energy Power Solutions Pty Ltd (ABN 83 003 325 139)
Address	96 Fairfield Street FAIRFIELD NSW 2165, Australia
Emergency Tel.	1800 819 829
Tel/Fax	Tel: 61 2 9681 3633 Fax: 61 2 9632 4622
Other Information	Victorian Branch 21 Aristoc Road GLEN WAVERLEY VIC 3150 Emergency Tel: 1800 819 829 Tel: (03) 9550 1892 Fax: (03) 9550 1893 Queensland Branch 54 Jephson Street TOOWONG QLD 4066 Emergency Tel: 1800 819 829 Tel: (07) 3371 1622 Fax: (07) 3371 1655

MSDS: SEALED LEAD ACID STORAGE BATTERIES

IDENTIFICATION

Product Name Energel
Shipping Name Energel
Manufacturer Code As listed below

Physical Details of Batteries

B.E. Classification	Dimensions			Mass
	L	W	H	
4EG70	109	184	265	12
4EG100	109	184	265	15
6EG100	184	276	265	28
6EG130	184	276	265	33
6EG160	184	276	265	38
2EG200	187	197	265	18
2EG225	187	197	265	20
4EG225	184	276	265	33
4EG250	184	276	265	38
2EG300	184	197	265	23
2EG350	184	197	265	26
2EG400	184	276	265	33
2EG500	184	276	265	37
2EG550	184	276	265	40
2EG700	145	206	680	52
2EG800	145	206	680	58
2EG900	210	191	680	71
2EG1100	210	191	680	76
2EG1300	210	275	680	89
2EG1500	210	680	680	111
2EG1600	210	275	680	107
2EG2300	212	487	680	188
2EG2600	212	578	680	220
2EG2800	212	578	680	231
2EG3400	212	578	680	250

UN Number 2800
DG Class Class 8 SP 238 Subsidiary Class 6.1 (a)
Packing Group 111 (EPG 8A1)
Hazchem Code 4Y (black on white) E
Poisons
Schedule Not Scheduled
Product Use Sealed lead acid batteries for use in standby and solar/remote area applications.

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Physical Data

Boiling Point	N/A
Vapour Pressure	N/A
Vapour Density	N/A
Solubility In Water	N/A
Appearance and Odour	N/A
Specific gravity	1.260kg per cubic metre. High rate units may contain 1.300kg per cubic metre
Percentage Volatile by Volume	N/A
Evaporation Rate	N/A

Flammability Data

Flashpoint	N/A
Flammable Limits	Hydrogen Lower explosive limit 4% Upper explosive limit 74%
Unusual Fire & Explosion Hazards	Will generate hydrogen and sulphuric acid mist on overcharge. Case material is ABS fire resistant acrylonitrile butadiene styrene and will give off copious amounts of black sooty smoke when ignited in a major fire.

Ingredients

Ingredients Chemical Entity (of grids)	%by Weight	TWA's (mg/m3)	CAS No.
Lead (or compounds)	70-75%	0.5	
Tin	<0.5%		
Silica	<2.0%		
Copper	<1.0%		
Sulphuric Acid	20-30%	1	7664939
Plastic battery case			

HEALTH HAZARD INFORMATION

Health Effects

Acute –	There is no possibility of exposure to lead, etc. unless the battery is destroyed. Sulphuric acid mist causes coughing and will burn eyes and skin.
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First Aid

Swallowed	Drink copious amounts of water
Acute – Eye	Wash immediately with water for 15 minutes – call a doctor
Acute – Skin	Wash immediately with water

PRECAUTIONS FOR USE

Personal Protection

Personal Protection	Acid resistant clothing, made with Neoprene or PVC is recommended, including gloves and aprons. Splash-proof chemical safety goggles or a face shield should be worn for eye and face protection when working with cells. Appropriate respiratory protection should be worn when mist (e.g. following excessive overcharge) exceeds permissible limits.
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SAFE HANDLING INFORMATION

Storage and Transport

Storage Precautions	Keep inside a well ventilated building at moderate temperatures.
Transport Handling	During transport, the batteries are kept in wooden or cardboard/polystyrene packaging. Considerable care should be exercised when handling the batteries due to their weight and the relative fragility of the case. When lifting individual cells the terminals must NOT be used. When supplied, plastic strings should be employed.
Transport	Battery Energy sealed gel products are classified in Australia as non dangerous goods for road transport. For air transport, they are classified as suitable under IATA Dangerous goods regulation Special Provision clause A 67.

Spills and Disposal

Spills & Leaks Disposal	Wash with water and neutralize with sodium carbonate or bicarbonate.
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Special Precautions

Special Precautions	Keep away from sources of ignition during and immediately following charge. Use insulated tools when working with cells. In confined areas place the shroud cover on the intercell connections or on the cell top as soon as is practicable.
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Fire/Explosion Hazard

Fire/Explos. Hazard	Not applicable
Fire Fighting Procedures	LEL = 4.1% (Hydrogen gas in air) U ₂ EL = 74.2%
Extinguishing Media	CO ₂ : foam, dry chemical
Hazardous Reaction	Sulphuric acid is water-reactive if concentrated
Hazchem Code	4Y (black on white) E

CONTACT POINT

Contact	Australia: Business Hours: Dr David Brown Telephone: (02) 9681 3633 After Hours: 1800 819 829 or (02) 9680 1183 IMPORTANT ADVICE: This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Battery Energy Power Solutions Pty Ltd. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.
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End of MSDS
