

## Annex B (normative)



### Supplier statement of product range test results

1) General product type information								
Product manufacturer			Exide Technologies					
Manufacturing site of tested product			Castanheira, Portugal					
Product name			Marathon					
Product model range			Marathon L/Marathon XL					
Product comprising the above model range			See brochure "Marathon L/XL"					
Product tested			Various, most critical models as representatives for entire range. Type specific data were measured on individual models.					
2) Product test performance information								
Product safe operation in service			IEC 60896-21 test clause result					
6.1	Gas emission (at float voltage and at 2.40 Vpc)		2.27 Vpc: 0.0011 mL/h/cell/Ah; 2.40 Vpc: 0.034 mL/h/cell/Ah					
6.2	High current tolerance		Compliant (>2.0 Vpc; no damage)					
6.3	Short circuit current and d.c. internal resistance		Data published in technical brochure					
6.4	Internal ignition from external spark sources		Compliant					
6.5	Protection against ground short propensity		Compliant					
6.6	Content and durability of required markings		Compliant					
6.7	Material identification		Compliant					
6.8	Valve operation		Compliant					
6.9	Flammability rating of materials		Case UL 94-V0 or HB		Cover UL 94-V0 or HB			
			UL file: MH47338					
6.10	Intercell connector performance		Compliant (max. Temperature 50°C)					
Product performance in service			IEC 60896-21 test clause result					
6.11	Discharge capacity		Data for	C <sub>10</sub> 103,3	C <sub>8</sub> 108,1	C <sub>3</sub> 101,5	C <sub>1</sub> 108,3	C <sub>0.25</sub> 109,0
6.12	Charge retention during storage		Compliant (C <sub>ff</sub> > 80%)					
6.13	Float service with daily discharges		> 1000 cycles (tested Marathon XL)					
6.14	Recharge behaviour		24 h Compliant 1.03		168 h Compliant 1.02			
Product durability in service			IEC 60896-21 test clause result					
6.15	Float service life at 40°C		> 944 days					
6.16	Impact of a stress temperature of 55°C or 60°C		> 500 days @ 55°C					
6.17	Abusive over-discharge		Caod: 0.86		Caoc: 1,01			
6.18	Thermal runaway sensitivity		Compliant < 40°C at 2.6 Vpc					
6.19	Low temperature sensitivity		Cals = 0.98 no damage					
6.20	Dimensional stability at elevated internal pressure and temperature		compliant 0.8% - 1.8mm					
6.21	Stability against mechanical abuse of units during installation		Compliant					
Company name:			Exide Technologies, Lda					
Company officer:			Nuno Alexandre (R&D Manager)					
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Signature/date/place:			Ago 25th, 2014					
Document established as reply for RFI:								

NOTE The data in above Product Range Test Result Supplier Statement must comply with the test methods and degree of detail specified in the requirements 6.1 to 6.21 of the IEC 60896-21 and 60896-22.

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