

The Great AA Battery Test by Gough Lui - November/December 2016

Test Conditions: BK Precision 8600 Electronic Load at Constant Power 0.48W, Temperature 21°C, Battery Test Software - Sequence Test with CSV log.

Prices are current retail or at time of purchase. Prices vary significantly depending on source and is only indicative. Yellow lines indicate "reference" results, red lines indicate expired batteries.



Notes: (1) Expired Battery, (2) Carbon-Zinc/Zinc-Chloride Battery, (3) Ni-MH Rechargeable Battery, (4) First Cycle with 24h Dwell, (5) Subsequent Cycle Fresh from Charger, (6) Visible Leakage

Brand	Part Number	UPC/EAN	Supplier	Cat Nr.	\$	n	\$/cell	Batch	Expiry	Made in	n	gm	gs	OCVm	OCVs	mAhm	mAhs	mWhm	mWhs	Vavg	NB
Wincell Super Heavy Duty	5103	9326287005103	Variety Shop	N/A	1.80	10	0.180	N/A	0518	China	4	16.82	0.06	1.632	0.006	279.4	15.6	288.5	18.2	1.033	2
Kodak Max	KAA-4 0800 7395	041778007396	Paxtons	N/A	7.95	4	1.988	N/A	11-2018	China	4	22.91	0.08	1.568	0.002	834.4	37.2	845.8	39.9	1.014	
Eveready Gold	2201495 A91BP4N	6920403163734	Woolworths	N/A	5.99	4	1.498	N/A	12-2025	Singapore	4	23.64	0.34	1.607	0.004	875.7	325.5	914.9	350.6	1.045	
Naccon Alkaline (Exp)	N/A	N/A	eBay	N/A	4.90	4	1.225	MFD 12-2012	12-2015	Unknown	4	23.54	0.17	1.484	0.189	875.1	583.7	924.2	616.5	1.056	1
Fuji EnviroMAX Digital Alkaline (Exp)	ECDAA4	074129501007	Woolworths	N/A	4.49	4	1.123	N/A	JAN 2016	Indonesia	4	23.13	0.06	1.558	0.004	930.4	32.9	1033.4	55.6	1.111	1
Duracell Coppertop (SG,Leak)	99953369	5000394026599	Variety Shop	N/A	3.50	4	0.875	23338495 11/2012	MAR 2018	China	4	23.73	0.06	1.571	0.022	1063.2	148.6	1120.5	171.0	1.054	6
Fuji EnviroMAX Super Alkaline (New)	4300BP4	791058430047	Woolworths	N/A	6.79	4	1.698	N/A	09-2022	Indonesia	4	21.81	0.20	1.605	0.001	1019.6	17.7	1143.0	24.6	1.121	
Duracell Coppertop (Exp)	98553536	041333415017	N/A	N/A	N/A	N/A	N/A	9276455311	MAR 2015	China	2	24.63	0.02	1.563	0.009	1106.9	71.5	1162.4	101.7	1.050	1
Fujitsu Alkaline G	4006	4976680228408	Variety Shop	N/A	3.90	2	1.950	N/A	10-2020	Indonesia	2	22.70	0.06	1.582	0.004	1095.8	41.5	1247.0	37.6	1.138	
Pairdeer Super Alkaline	7151B-4B	6911334344415	eBay	N/A	3.98	8	0.498	N/A	10-2017	China	4	23.31	0.05	1.579	0.001	1168.6	62.0	1272.4	64.6	1.089	
Kodak Xtralife	N/A	N/A	eBay	N/A	2.95	4	0.738	N/A	07-2024	China	4	22.40	0.06	1.602	0.001	1173.9	52.1	1272.5	60.7	1.084	
Venom Alkaline	VEN-1590	873067000760	eBay	N/A	2.99	4	0.748	N/A	03-2019	China	4	23.67	0.11	1.597	0.003	1193.9	94.5	1274.2	89.1	1.067	
Daiso & HZ Alkaline Battery No. 8	KW-13P-80 T052	4549131069495	Daiso Japan	N/A	2.80	6	0.467	N/A	06-2020	China	4	23.23	0.09	1.613	0.002	1145.2	49.9	1281.7	53.0	1.119	
Chevron Alkaline	828327	9300633725648	Woolworths	N/A	2.00	4	0.500	N/A	08-2020	China	4	23.58	0.09	1.623	0.001	1248.2	19.8	1341.9	24.9	1.075	
Simply by Duracell	MN1500 97311628	5000394002241	Variety Shop	N/A	3.00	4	0.750	52168634PN	MAR 2020	Belgium	4	23.59	0.11	1.603	0.001	1219.4	27.8	1378.0	26.2	1.130	
Go Green Alkaline	24001	8153330112114	eBay	N/A	5.35	8	0.669	N/A	12-2021	China	4	22.79	0.08	1.608	0.001	1265.7	43.3	1386.4	39.0	1.095	
Daiso & S Alkaline Battery No. 13	KW-14P-80 T097	4549131069549	Daiso Japan	N/A	2.80	6	0.467	N/A	10-2019	China	4	23.56	0.07	1.603	0.003	1254.3	26.6	1420.4	36.8	1.133	
RS Pro Alkaline	N/A	N/A	RS	7442199	6.77	12	0.564	N/A	02/2021	China	4	23.20	0.03	1.621	0.002	1281.7	53.0	1438.7	52.4	1.123	
Varta PowerOne	4106 693247	4043752138177	element14	5088150	6.39	4	1.598	N/A	JUL-2021	China	4	23.08	0.11	1.588	0.001	1299.5	34.9	1459.8	35.6	1.123	
Energizer Eco Advanced	XR91 RP-4T 2201541	888021205428	Woolworths	N/A	7.96	4	1.990	1014E	12-2027	USA	4	23.99	0.03	1.582	0.002	1291.8	25.3	1459.8	24.5	1.130	
Duracell Coppertop Duralock (TW)	96867585	5000394066120	Variety Shop	N/A	5.50	4	1.375	60047803 6003780302	MAR 2024	China	4	23.88	0.05	1.611	0.000	1353.4	21.4	1466.3	24.7	1.083	
Eclipse Super Alkaline	N/A	9319236943564	Jaycar	SB2333	8.95	12	0.746	N/A	2020	China	4	23.47	0.15	1.595	0.001	1359.5	19.4	1493.8	22.1	1.099	
Performer Ultra	41-999-158	9341102301703	K-Mart	N/A	7.50	18	0.417	29/16	08-2021	China	4	23.34	0.07	1.620	0.001	1341.4	10.7	1493.9	11.7	1.114	
Duracell Coppertop Duralock (US)	92147383	041333415017	Variety Shop	N/A	5.50	4	1.375	4335780302	DEC 2023	China	4	23.85	0.11	1.616	0.001	1369.4	35.9	1514.1	46.3	1.106	
Panasonic Evolta	LR6EG/8B	8887549380174	Jaycar	SB2904	11.45	8	1.431	N/A	08-2026	Thailand	4	23.17	0.05	1.616	0.000	1281.8	33.4	1514.8	39.1	1.182	
Duracell Coppertop Duralock	97497193	041333415017	Coles	N/A	5.50	4	1.375	60467803 02/2016 6033780302	MAR 2025	China	4	23.81	0.08	1.614	0.000	1372.2	18.5	1523.3	19.5	1.110	
Fuji EnviroMAX Super Alkaline (Old)	EC-AA4	074129500956	Variety Shop	N/A	1.50	4	0.375	N/A	11-2020	Indonesia	4	23.07	0.09	1.597	0.003	1358.6	88.9	1525.4	100.7	1.123	
Proelec Ultra	PSG90903	5051259021143	element14	2429528	21.02	40	0.526	N/A	Jul 2020	China	4	23.56	0.18	1.621	0.006	1397.6	81.4	1530.9	91.3	1.095	
Varta Longlife	718153	4008496639236	Bunnings	N/A	9.92	30	0.331	PD0616	12-2026	Germany	4	22.86	0.07	1.608	0.005	1427.3	89.7	1550.5	117.7	1.086	
IKEA Alkalisk (2014)	N/A	N/A	IKEA	21983	3.99	10	0.399	PD2014-12-05	2019-12-05	China	3	23.42	0.02	1.593	0.000	1395.0	46.2	1567.2	54.1	1.123	
GP Ultra Plus	GP15AUP-2U4	4891199100277	element14	1715541	9.34	4	2.335	N/A	01-2022	China	4	23.80	0.11	1.590	0.001	1402.4	71.5	1573.4	75.2	1.122	
Toshiba Alkaline	LR6G C BP-2	4904530589003	Variety Shop	N/A	3.90	2	1.950	N/A	09-2020	China	2	23.02	0.04	1.615	0.000	1419.7	25.5	1585.3	50.4	1.117	
Activ Energy Super Alkaline	40465	26181158	Aldi	N/A	2.30	4	0.575	UPP	11-2020	China	4	24.10	0.13	1.598	0.001	1444.6	28.8	1591.9	28.7	1.102	
Eunicell	N/A	6957046511745	eBay	N/A	4.95	12	0.413	N/A	12-2019	Unknown	4	22.81	0.09	1.621	0.003	1479.7	23.8	1616.7	23.3	1.093	
Varta Industrial	728999	4008496882076	RS	8038429	11.18	10	1.118	PD0715 ED0625	2025	Germany	4	23.29	0.12	1.597	0.001	1444.7	63.8	1626.9	75.6	1.126	
Energizer Industrial	LR6DP10 638469	7638900361056	element14	2075712	21.89	10	2.189	1115	12-2025	Singapore	4	23.60	0.04	1.617	0.002	1463.4	28.8	1629.5	37.1	1.113	
IKEA Alkalisk (2016)	AA-296995-4	502.405.02	IKEA	18862	3.99	10	0.399	1626 PD2016-02-27	2021-06-27	China	4	23.19	0.07	1.621	0.001	1478.4	17.0	1638.8	8.6	1.109	
Coles Advance+	6878674 DA0711	9300601374144	Coles	N/A	2.50	4	0.625	N/A	12-2021	China	4	23.87	0.05	1.620	0.000	1475.2	18.0	1640.4	23.3	1.112	
Energizer Advanced	X91 RP-4T 2202929	888021201819	Woolworths	N/A	7.80	4	1.950	0416E	12-2026	USA	4	24.07	0.06	1.602	0.003	1509.4	14.9	1688.5	15.4	1.119	
Energizer Max (Old)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0814	12-2024	Singapore	4	23.46	0.09	1.595	0.001	1543.3	53.7	1688.9	56.1	1.094	
Industrial by Duracell	97311999	5000394079779	element14	2433045	12.01	10	1.201	614086340J	2022	Belgium	4	24.41	0.10	1.610	0.000	1501.8	14.5	1690.3	18.2	1.126	
Winmax Extra Alkaline	5516	9326287005516	eBay	N/A	5.99	10	0.599	N/A	01-2021	China	4	23.36	0.12	1.604	0.002	1512.5	25.2	1698.4	22.2	1.123	
Winmax Super Alkaline	5455	9326287005455	Variety Shop	N/A	3.00	4	0.750	N/A	01-2021	China	4	24.06	0.12	1.603	0.001	1503.2	10.2	1718.8	10.1	1.143	
Energizer Max + Powerseal	E91 BP4+2T 2202322	6920403163765	Woolworths	N/A	7.51	6	1.252	0716	12-2026	Singapore	4	23.52	0.14	1.619	0.001	1571.5	25.3	1725.2	34.4	1.098	
Duracell Ultra with Powercheck	96832982	5000394003682	Priceline	N/A	6.79	4	1.6975	53317803 11/2015 5330780303	MAR 2024	China	4	25.56	0.14	1.623	0.001	1662.0	58.4	1856.3	73.1	1.117	
Sanyo eneloop Colours 2000mAh	HR-3UTGB8UTM	4994334291264	eBay	N/A	31.04	8	3.880	2013-04 13-040H	N/A	Japan	4	25.98	0.12	1.385	0.002	1760.6	16.8	2112.9	20.3	1.200	3,4
Ansmann 2850mAh Rechargeable	5035202	4013674352029	element14	1748929	31.39	2	15.697	N/A	N/A	China	4	30.34	0.09	1.446	0.002	2485.3	116.5	2995.7	116.7	1.205	3,5