



# ENHANCING BATTERY PERFORMANCE AND QUALITY

## BENCHMARK YOUR BATTERIES' PERFORMANCE

Make sure your customers' first impression of your private label batteries is a lasting one. SGS can provide comparison testing of your batteries against national and international standards to see how well you perform against industry accepted performance criteria.

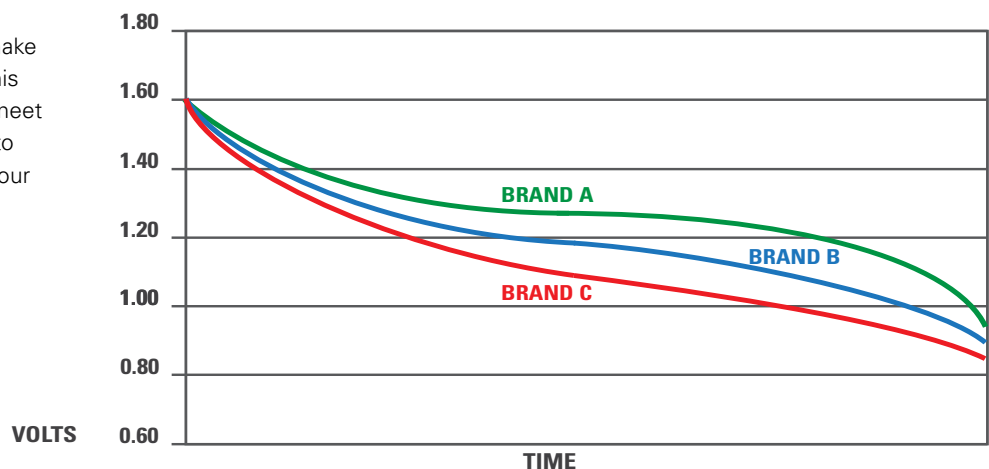
We can also provide side by side comparison data and continued validation on a frequent basis to make supplier selection an easy task. This will prevent batteries that do not meet your expectations from making it to your shelves, and ultimately into your customers hands.

## ENHANCE QUALITY THROUGHOUT THE SUPPLY CHAIN

Need third party verification of packaging, labelling and certifications. Let us manage your supply chain? Our reports provide a front page summary of results to streamline your procurement followed by a detailed report of our findings. SGS offers the following services related to batteries:

- ANSI C18.1M-1, C18.2M-1 and C18.3M-1 performance testing
- IEC 61960-1 performance testing
- Battery directive 2006/66/EC hazardous substance analysis and capacity
- Third party verification of packaging, labeling and certifications

Alkaline AAA Discharge Curves





# ENSURING BATTERY SAFETY

## LITHIUM-ION BATTERIES

Over the years lithium-ion batteries have become the primary source of power for electronics and toys. One of the advantages of lithium-ion batteries is their ability to provide longer operation times when compared to other battery chemistries. This capability can also raise concerns when it comes to safety. Lithium-Ion batteries are more likely to present dangers to the customer when mishandled or not properly manufactured. Two of the primary risks to customers are fire and explosion.

## LITHIUM-ION SAFETY TESTING

SGS offers the following safety testing services related to lithium-ion batteries.

- ANSI C18.3M-2 Safety testing
- IEC 62133 Safety testing
- UL 1642 Lithium cell safety testing
- UL 2054 Battery safety testing
- IEEE 1725 Battery safety in cellular phones
- IEEE 1625 Battery safety in mobile computing devices (laptop and netbook)

## SGS SOLUTIONS FOR BATTERY SAFETY

To support you address battery safety concerns, SGS offers safety testing and factory auditing services to ensure your merchandise meets industry accepted criteria. SGS also supports you specify continued compliance sampling to capture any changes to the qualification lot.

## WHY SGS?

SGS is the world's leading **inspection, verification, testing and certification** company. Recognized as the global benchmark for quality and integrity, we employ **85,000 people**, and operate a network of more than **1,800 offices and laboratories** around the world.

We identify the applicable regulations and standards for each of your specific batteries and target markets. SGS supports you reduce risk, improve efficiency and ensure compliance to contractual or regulatory requirements in all your manufacturing, sourcing, distribution and retailing operations.

- SGS can perform ALL of the discharge applications specified in the ANSI requirements, not just the basic profiles that may be offered by our competitors
- SGS has the capacity to run multiple large testing projects, globally
- SGS has battery specialists that monitor projects throughout the battery testing process
- SGS technical experts are active industry committee members

## CONTACT US

To learn more about how SGS can support you, please visit [www.sgs.com/ee](http://www.sgs.com/ee) or contact [uscts.inquiries@sgs.com](mailto:uscts.inquiries@sgs.com).

**SGS IS THE WORLDS LEADING INSPECTION VERIFICATION TESTING AND CERTIFICATION COMPANY.**