



**EVALUATE HOVERBOARD SAFETY**  
**CONFIRM PRODUCT COMPLIANCE FOR THE EU AND USA**



Hoverboards swept across the globe as one of the hottest products in 2015. However, are they safe to use and recharge following reports of fires and explosions?

Hoverboards, the must-have present of 2015, hit trouble after media reports of these gadgets causing fires and explosions during use and recharging. Consumers lost confidence, sales stalled and in some countries, imports were stopped at the port of entry.

### SAFETY INVESTIGATIONS

Also known as electric scooters and self-balancing two wheeled boards, hoverboards have been investigated by the UK's National Trading Standards and the USA's Consumer Product Safety Commission (CPSC), for a number of safety hazards. These investigations revealed a wide range of safety issues, with the main concerns relating to the compliance of rechargeable batteries, plugs, cabling, chargers and cut-off switches used in some of the boards.

As a result, the UK has banned the import and sale of these devices. Following a spate of problems in late 2015, a UK National Trading Standards investigation identified 88% of hoverboards as potentially unsafe, due to the risk of overheating, exploding or catching fire. The components identified as presenting most risk were faulty cut-off switches, lithium batteries and non-compliant plugs.

### SAFETY SOLUTION

In response to the challenges posed by non-compliant products, SGS has developed a new range of testing protocols, to ensure that hoverboard products destined for the EU and USA markets meet, or exceed, the requirements of all relevant regulations, for both adults and children.

While there is not yet a harmonized standard for these products, they do fall within the scope of existing legislation, for the EU and USA.

| IN THE EU   | IN THE USA  |
|---|---|
| <p><b>EU DIRECTIVES</b></p> <ul style="list-style-type: none"> <li>• Machinery Directive 2006/42/EC</li> <li>• Electromagnetic Compatibility (EMC) Directive 2004/108/EC - Directive 2014/30/EU applicable from April 2016</li> <li>• Low Voltage Directive (LVD) 2006/95/EC - Directive 2014/35/EU applicable from April 2016</li> <li>• RoHS Directive 2011/65/EU</li> <li>• REACH Regulation 1907/2006 Annex XVII</li> </ul> <p><b>EU REGULATIONS</b></p> <ul style="list-style-type: none"> <li>• UN38.3: Transportation Testing for Lithium Batteries</li> </ul> | <p>UL 62133, UN 38.3 along with:</p> <ul style="list-style-type: none"> <li>• UL 60335-1: Safety of Household and Similar Appliances, Part 1: General Requirements</li> <li>• UL 1310: Standard for Class 2 Power Units</li> <li>• UL 1012: Standard for Power Units Other Than Class 2</li> <li>• UL 2272: Outline of Investigation for Electrical Systems for Self-Balancing Scooters</li> <li>• ASTM F2641: relevant parts of standard for Recreational Powered Scooters and Pocket Bikes</li> </ul> |

### HOW SGS CAN HELP?

SGS can help you to demonstrate product compliance for both the EU and US markets. Drawing on our extensive consumer goods and electrical and electronic experience, we have put together a comprehensive testing and verification service for hoverboards (mechanical, electrical and electronic) and also for children's hoverboards (products designed for children up to the age of 14 years in the EU, and children 12 years or younger in the USA).

Whether you are designing new products, or want to demonstrate compliance for products that have already shipped, SGS can review technical documentation and identify any gaps or potential issues. In addition, our experts can provide clients with a complete product evaluation service, to include:

- Performance tests
- Critical safety tests
- Construction checks
- Marking and labelling reviews
- Instruction manual reviews

### WHY CHOOSE SGS?

SGS is the world's leading inspection, verification, testing and certification company. We are recognised as the global benchmark for quality and integrity. With more than 85,000 employees, we operate a network of more than 1,800 offices and laboratories around the world.

Independent and innovative, our experts use state-of-the-art facilities and technology to deliver tailor made added value services that help improve your business. We strive to deliver outstanding value at every step in your project by providing:

- Rapid turnaround
- Value-based pricing
- Technical assistance
- Key account management

Our expertise in compliance management will help you make the right choices for different national markets, while carrying out the necessary testing and certification quickly and professionally.

### CONTACT US

For further information, please contact your local SGS representative or email the global team at [consumer.products@sgs.com](mailto:consumer.products@sgs.com)

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WHEN YOU NEED TO BE SURE

**SGS**