

# SAFEGUARDS

## CONSUMER GOODS AND RETAIL

HARDGOODS

NO. 206/13 NOVEMBER 2013

## NEW SUNGLASSES TESTING STANDARDS (EN ISO 12312-1:2013 AND EN ISO 12311:2013)

In June 2013, two new sunglasses testing standards: EN ISO 12312-1:2013 and EN ISO 12311:2013 were published and replace the current standard EN 1836:2005+A1:2007 which will be withdrawn by February 2014.

The current European Sunglasses Standard - EN 1836:2005+A1:2007 provides a means of demonstrating compliance with the Essential Safety Requirements of the New Approach Directive 89/ 686/ EEC – Personal Protect Equipment.

Once the standard (EN ISO 12312-1:2013) has been cited in the Official Journal of the European Union and implemented in member states, compliance with the clauses of the standard given in ZA.1, gives a presumption of conformity with the corresponding Essential Safety Requirements of the PPE Directive and associated EFTA regulations.

Overview of EN ISO 12312-1:2013 Eye and face protection – Sunglasses and related eyewear, Part 1: Sunglasses for general use and EN ISO 12311: 2013 Personal protective equipment — Test methods for sunglasses and related eyewear:

- Construction and materials,
- Transmittance,
- Refractive power,
- Robustness,
- Resistance to solar radiation,
- Resistance to ignition,
- Resistance to abrasion (optional specification),
- Protective requirements,
- Information and labeling.

The following are the main technical changes compared with the superseded harmonized standard (EN 1836) under the PPE directive:

- New luminous transmittance, UV and refractive power requirements,
- Wide angle scattering shall not exceed the value of 3 % at reference point by haze meter (new),
- New optional specification (new):
  - Increased endurance of sunglasses (Technically equivalent to EN ISO 12870),
  - Resistance to perspiration (Technically equivalent to EN ISO 12870),



- Impact resistance of the filter (Strength level 3), by a 6mm nominal diameter steel ball with 0.86g mass, at a velocity of 45m/s,
- Resistance to abrasion (ISO 8980-5),
- Defined protective coverage area shall be provided by adult/ children sunglasses (new),

SGS

- Temporal protective requirement for very dark, special purposes (filter category 4) sunglasses. (new),
- Information to be supplied with each pair of sunglasses, e.g.
- Description of the filter category in the form of a symbol and/ or verbal description,
- Not for direct observation of sun,
- Not for protection against artificial light sources, e.g. solaria (new),
- Not for use as eye protection against mechanical impact hazard (for product not satisfying the strength 1 impact resistance requirement or resistance to perspiration) (new),
- Not suitable for driving and road use (not meeting the necessary requirements for driving and for category 4 filter),
- Not suitable for driving in twilight or at light or Not suitable for driving at night or under condition of dull light (filter with luminous transmittance between 75% and 8%) (new).



Throughout our global network of laboratories, we are able to provide a range of services, including analytical testing and consultancy. Please do not hesitate to contact us for further information.

---

#### FOR ENQUIRIES:

Global Competence Support Centre:  
[gcsc@sgs.com](mailto:gcsc@sgs.com)

HK– Birkoff Chen Tel: +852 2765 3561 or  
[Birkoff.Chen@sgs.com](mailto:Birkoff.Chen@sgs.com)

Asia – Hong Kong,  
Tel: +852 2334 4481,  
[mktg.hk@sgs.com](mailto:mktg.hk@sgs.com)

Australasia – Perth.  
Tel: +61 (0) 3 9790 3418  
[au.cts@sgs.com](mailto:au.cts@sgs.com)

Europe – London – UK.  
Tel: +44(0) 203 008 7860  
[gb.cts.sales@sgs.com](mailto:gb.cts.sales@sgs.com)

Africa & Middle East – Turkey.  
Tel: +90 212 368 40 00  
[sgs.turkey@sgs.com](mailto:sgs.turkey@sgs.com)

Americas – USA.  
Tel: +1 973 575 5252  
[uscts.inquiries@sgs.com](mailto:uscts.inquiries@sgs.com)

[www.sgs.com/cqnr](http://www.sgs.com/cqnr)

© SGS Group Management SA – 2013 – All rights reserved - SGS is a registered trademark of SGS Group Management SA. This is a publication of SGS, except for 3<sup>rd</sup> parties' contents submitted or licensed for use by SGS. SGS neither endorses nor disapproves said 3<sup>rd</sup> parties contents. This publication is intended to provide technical information and shall not be considered an exhaustive treatment of any subject treated. It is strictly educational and does not replace any legal requirements or applicable regulations. It is not intended to constitute consulting or professional advice. The information contained herein is provided "as is" and SGS does not warrant that it will be error-free or will meet any particular criteria of performance or quality. Do not quote or refer any information herein without SGS's prior written consent.