# **CANDLES AND CANDLE ACCESSORIES**. A BURNING ISSUE RESOLVED WITH SGS.



Ever popular, but potentially dangerous, candles and their accessories are a leading cause of household fires causing damage to property and injuring people, sometimes fatally. Meet applicable standards, reduce product recalls and improve safety for consumers with candle and candle accessory testing from SGS and its global network of testing laboratories.

# **MINIMISE RISKS**

Protect consumers and prove that your products meet or exceed the regulatory safety requirements for candles and their accessories. Developing compliant products from the beginning saves time and money.

The most common causes of candle fires and burn injuries are:

- Excessive flame height
- Secondary wick ignition (e.g. the wick may not be centred correctly)
- Burn through of the side wall
- End of life (what happens at the end of the burning process)
- Instability of the candle, or candle accessory
- Excessive thermal heat on candle holders
- Lack of adequate consumer warnings

# **PRODUCTS COVERED**

# Indoor candles

- Taper candles
- Pillar candles
- Tealights
- Birthday/cake candles
- Gel candles
- Fragranced candles

#### Outdoor candles

- Garden torches
- Oil lamps
- Lanterns

# Accessories

- Candle holders
- Candle rings
- Candle burners
- Potpourri burners
- Oil burners (fragrance and decorative)

# APPLICABLE STANDARDS AND REGULATIONS

# Europe

- General Product Safety Directive (GPSD)
- EN 15493 Candles-Specification for fire safety
- EN 15494 Candles-Product safety labels
- EN 15426 Candles-Specification for sooting behaviour
- EN 14059 Decorative oil lamps
  Safety requirements and test methods
- REACH
- RAL-GZ 041 Candles (Germany)
- Decree 91-1175 (France)

# USA

- ASTM F2058 Standard Specification for Candle Fire Safety Labeling
- ASTM F2179 Standard Specification for Annealed Soda-Lime-Silicate Glass Containers
- ASTM F2417 Standard Specification for Fire Safety for Candles
- ASTM F2601 Standard Specification for Fire Safety for Candle Accessories
- ASTM F2326 Standard Test Method for Collection and Analysis of Visible Emissions from Candles as They Burn
- California Proposition 65
- CONEG (Coalition of North-Eastern Governors)

#### China

- OB/T 2119 Basic Candle
- QB/T 2902 Art Candle
- QB/T 2903 Jar Candle
- GB/T 22256 Jelly Candle





# **ONE STOP ASSURANCE**

Focusing on fire safety, we can offer a one-stop-shop assurance service. Our experts will devise a tailor made programme for your products including:

#### Candle performance testing

- Burn rate, burn speed, melting point
- Candle compositional analysis
- Mass, dimensions
- Wick positioning
- Ash content
- ASITCOILLEIL

- Stability
- Fragrance
- Hydrogenation quality

#### Restricted substances testing (REACH, California Proposition 65, etc.)

- Indoor/Fragranced Candles
  - Ingredient review/Material Safety Data Sheet (MSDS)
  - Toxicological Risk Assessment (TRA), Exposure assessment
  - Polycyclic aromatic hydrocarbons
  - Soot index/smoke release
- Candle Accessories
  - Residual Lead/Cadmium
  - Lead Content in Surface Coatings
  - Cadmium Content in Coatings and other substrate materials (Candle accessories, if applicable)

# Labelling and packaging review

Warning label review

#### Additional testing

- Paraffin/palm oil content
- Lead in metal wick
- Thermal shock (glass candle holders and jar filled candles)
- Liquid flammability (gel candles)
- Resistance to corrosion (metal components)
- Sensory panels (in accordance with ISO 5495 and ISO 8587)

#### Indoor air quality

Soot released from candle burning can be toxic, as can soot from fragrance burners and incense sticks. Our soot testing for indoor candles quantifies emissions to ensure each product meets a reasonable safety level for its intended use. A qualitative analysis is performed if emissions are relevant.

# **ADDING VALUE**

Reducing the hazards and risks associated with candles and their accessories is about more than product testing. You need to be able to ensure compliance throughout the supply chain and be confident that the factory you have selected will be able to deliver products on time and to the required safety and quality standards.

# SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

Value added services go beyond simple product tests

- Supplier sourcing factory quality assessment
- Product development safety/risk assessment, regulatory compliance, labelling
- Inspections Initial Production Check (IPC), During Production Check (DUPRO), Final Random Inspection (FRI), Retail Store Check
- Audits social accountability, environmental conditions, manufacturing processes, capabilities and capacity

# WHY CHOOSE SGS?

Independent and internationally respected, our testing, inspection, audit and consultancy services cover all candles and candle accessories. Our experts help you to ensure compliance with applicable standards and ensure safer candles.

Worldwide, we have candle and candle accessories testing facilities in China, Hong Kong, India, Philippines, Taiwan, Thailand, Vietnam, France, UK and USA. These accredited facilities are equipped with burning chambers.

We continue to develop our expertise and support the development of standards through participation in ASTM F15.45 Subcommittee on Candle Products.

# **CONTACT US**

For more information please contact your local SGS representative or contact our global team consumer.products@sgs.com and visit www.sgs.com/hardgoods.

