



**SOLUTIONS FOR THE TOY INDUSTRY**  
**GET READY FOR THE NEW CHALLENGES**

**SGS**

# A GLOBALIZED MARKETPLACE WITH MORE **STRINGENT REQUIREMENTS**

## **APPLICABLE STANDARDS**

Toy products are highly regulated. Toy safety standards are constantly updated and modified as the understanding of risks increases and new products are developed. It is essential to understand the legal requirements that apply to toys (including national deviations) and be up-to-date to avoid non-conforming products and recalls from the market. Toy suppliers also have to comply with retailer and brand requirements.

How does a company know what standards apply? How does a company manage all these requirements and ensure product safety and quality at a minimum cost?

## **ROLE AND RESPONSIBILITIES**

Each different entity in the toy supply chain plays its own distinct role.

How do manufacturers, retailers and buyers know their roles and responsibilities as the supply chain becomes more and more complex?

## **RISK ASSESSMENT**

Children's safety is the top-ranking priority for market surveillance authorities.

The new EU toy directive sets stringent requirements including a safety/risk assessment of all toys to identify potential hazards that a toy may present and the obligation to know exactly what materials and substances go into making the toy.

How do manufacturers, retailers and buyers show that reasonable steps were taken to ensure only safe products reach the users? How can companies control safety issues upstream in the supply chain?

## **PRODUCTION CONTROL**

More than two thirds of the world's toys production facilities are based in China. Risks are then multiplied throughout the supply chain, from concept to store shelves. Recent global toy recalls have brought about quality control concerns related to Chinese exports.

How can companies benefit from low-cost production facilities in China without having their toys withdrawn from the market due to safety/quality concerns?

**SGS HELPS  
MANUFACTURERS,  
RETAILERS AND  
BUYERS MONITOR  
COMPLEX SUPPLY  
CHAINS.**



# PARTNER WITH SGS

To support local manufacturers as well as international buyers and retailers, SGS offers a comprehensive portfolio of safety and quality services to minimize risks for end consumers by improving the safety of toys.

Choosing SGS as a key partner throughout the supply chain brings value to clients' toys and business by:

- Ensuring compliance with worldwide toy regulations and industry standards
- Minimizing the risk of costly toy recalls, returns and complaints
- Enhancing risk management and brand protection

SGS is the world's leading inspection, verification, testing and certification company. Founded in 1878, SGS is recognized as the global benchmark in quality and integrity. With over 64,000 employees, SGS operates a network of over 1,250 offices and laboratories around the world.

## SGS UNIQUE TECHNICAL EXPERTISE

- SGS expertise in all consumer goods (textile, cosmetics, jewellery, food contact, etc) builds our strong expertise in toys. Our toy experts have international as well as local experience and knowledge.
- SGS has established internal technical committees to ensure the coordination regarding protocols, standardisation developments and interpretation issues. Thanks to this sharing of expertise, best practises and continuous training, our global network of toy laboratories and experts is able to offer remarkable technical support to clients.
- SGS has been and remains heavily involved in toy standardization committees in EU, U.S.A. and at global (ISO) level.
- To assist Chinese manufacturers and French clients SGS has located French toy experts in Shenzhen and in Hong Kong.

## SGS WORLDWIDE LOCATIONS AND ACCREDITATIONS

SGS toy labs are strategically located in key manufacturing zones and transit points worldwide in Asia, Europe and Americas.

- **Asia:** China is by far the biggest exporter of toys in the world. SGS has established large-scale toy laboratories in Shenzhen, Shanghai, Qingdao and Hong Kong. In direct response to the toy industry's need for compliance, SGS has also launched toy labs in India, Korea, Malaysia, Sri Lanka, Taiwan and Thailand.
- **Europe:** SGS labs in France, United Kingdom, Netherlands and Germany are Notified Bodies for Toys under the Toy Safety Directive, allowing them to carry out the EC type-examination. SGS has also toy testing capabilities in Finland and Turkey.
- **Americas:** SGS has testing capabilities in the U.S. and in Brazil.

Our laboratories are internationally recognized by major industry associations, accreditation bodies and authorities including China National Accreditation Board for Laboratories (CNAL) in China, Hong Kong Accreditation Services (HOKLAS), Comité Français d'Accréditation (COFRAC) in France, United Kingdom Accreditation Service (UKAS) in UK, American Association for Laboratory Accreditation (A2LA) in the U.S., BIS (Bureau Of Indian Standard) in India, etc.

SGS has been acknowledged or accredited by a number of other organizations including BSCI (Business Social Compliance Initiative), ICTI (International Council of Toy Industries) and ISTA (International Safe Transit Association).

## SGS ONE-STOP FULL SOLUTION

SGS aims to assure toy safety and offers a comprehensive programme including:

- Support for new Product Development (Product specification verification, Technical/Design advice)
- Update and interpretation of legal requirements
- Safety/Risk Assessment (product hazards analysis)
- Product and Materials Testing
- Factory and Social Audits
- Inspections (production control)
- Training (staff, suppliers)

SGS provides manufacturers, retailers and importers with comprehensive customised Quality Assurance Solutions for all toy needs:

- Plush Toys
- Dolls
- Ride-on Toys
- Projectile Toys
- Games
- Decorative Collectibles
- Figurines
- Books
- Construction Toys
- Battery Operated Toys
- "Magnetic toys"
- Creative Art Material
- Puzzles
- Toys in food

SGS services also cover other children's products including Stationery, Bicycle, Jewellery, Cosmetic Sets, Inflatable Swimming Aids and childcare articles including Strollers, Cribs, Cradles, Cots, High Chairs, Baby Walkers, Changing Tables, Baby Bottles and Teats, Dummies and Pacifiers, Feeding and Drinking Equipment, etc.



# SGS TOY TESTING SERVICES

**MAJOR TOY MARKETS SUCH AS EUROPE, U.S., AUSTRALIA, BRAZIL, CANADA, CHINA, AND JAPAN ALL HAVE THEIR OWN REGULATIONS AND STANDARDS THAT INTEND TO IMPROVE TOY SAFETY.**

## MAJOR TOY SAFETY ISSUES INCLUDE

- Choking or aspiration of small parts
- Strangulation
- Entrapment
- Cuts by sharp parts of a toy
- Injury by projectiles
- Flammability
- Electrical safety and waste for electrical toys
- Chemical substances (E.g. Phthalates, Azo Dyes)
- Heavy metals (e.g. Lead, Cadmium, Chromium, Arsenic, Mercury, Selenium, Antimony, Barium)
- Fragrances

Depending on the market where the toy is to be sold, toy suppliers will have to meet specific legal requirements. Our global network of labs can conduct tests against all toy directives, international or national standards (e.g.: EU Toy Safety Directive 2009/48/EC, ASTM F963 ...).

## MECHANICAL/PHYSICAL TESTING

- All toys
- Tests to ensure there are no hazardous sharp edges, sharp points and small parts, or other potential hazards: Strength, fatigue, durability, tensile, torque, static, impact, noise tests, etc

## FLAMMABILITY TESTING

- All toys made from textile fabric, soft toys, plush toys
- Ensure that if a toy does catch fire you can drop it or climb out of it before serious injury occurs. Certain flammable materials, that pose the greatest risk, are prohibited from all toys.

## CHEMICAL TESTING

- All toys made of plastics, wood, textile ...
- Tests to ensure banned or restricted chemicals and dangerous materials are not in the toys as these chemicals could be dangerous if swallowed or chewed by a child.
  - Heavy metals (lead content, cadmium)
  - Phthalates on plastic toys (softeners)
  - Azo dyes on textiles
  - Formaldehyde emission from wooden toys
  - Nickel release when prolonged contact with skin
  - Organic Chemical Compounds
  - Etc

## ELECTRICAL SAFETY TESTING

- Electric toys, radio-controlled toys, battery-powered devices
- Tests to assess electrical safety: Resistance to heat and fire, short-circuit test, labelling, etc

## TOY INDUSTRY ALSO HAS TO TAKE INTO CONSIDERATION THE FOLLOWING LEGISLATION THAT NOT ONLY APPLIES TO TOYS

- Restricted hazardous substances in toys (for EU REACH, RoHS, U.S. CPSIA) such as cadmium, azo dyes and phthalates
- Electromagnetic Compatibility (EMC) and Waste disposal (e.g. EU WEEE) for electrical and electronic toys
- Requirements and waste disposal of batteries
- Restricted hazardous substances in packaging material
- Dangerous food imitations
- Regulations for articles that may come in contact with food
- Cosmetics regulations
- Etc

# SGS'S SOLUTIONS ADDRESS FULL TOY **PRODUC**

## DESIGN & DEVELOPMENT

**Know and understand the legal requirements** applicable to toys early in the design phase

**Design the right product** from the very beginning to minimise the risk of injury associated with the toy and ensure it will pass the tests

**Manufacturers:** Identify producing factories and source the best suppliers that will be able to reach the expected production capacity, meet client's production requirements and comply with Health & Safety Standard, local working laws and child labour policy (Social Responsibility)

**Retailers:** Check suppliers follow measures requiring adequate safety systems in place as a condition of business



## SGS SOLUTIONS

- **Standards & Regulations Services (SRS):** SGS lists applicable regulation, standards, labelling per product category and country. SGS can educate and train manufacturers and retailers (internal buyers and external suppliers of toys) regarding the applicable legislation, standards and guidance (e.g. new EU toy directive, U.S. Consumer Product Safety Improvement Act, etc) to know how toys are affected. Our experts can assist with technical interpretations of the toy legislation and age grading issues.
- **Product Integrity Engineering (PIE) Services:** All hazards in toys may not be covered by standards. There might be grey areas. Recently some recalled products met the requirements laid down in the applicable safety standard, yet were found to present an inherent risk. The **safety/risk assessment** is a new obligation for all toys sold on the EU market (effective on 21 July 2011).

Manufacturers shall, before placing a toy on the market, carry out an analysis of the chemical, physical, mechanical, electrical, flammability, hygiene and radioactivity hazards that the toy may present and an assessment of the potential exposure to them.

SGS Product Integrity Engineering (PIE) Services help identify potential safety or quality issues for specific technologies or products through a **product risk assessment**, a feasibility review and a Product Safety Review.

SGS assesses the prototype/sample by screening potential product safety or quality concerns (including the mandatory and essential safety requirements) and taking into account the foreseeable use of the product.

- **Laboratory Consultancy/Pre-production Testing:** SGS conducts **performance, safety and restricted substances tests**. Raw material testing helps ensure the complete

supply chain is not contaminated from source materials.

- **Supplier Evaluation & Assessment/ Factory & Social Audits:** SGS conducts assessment of production facilities and organization and helps improve suppliers' quality system and production capacity to ensure they will be able to deliver in time. SGS can also assist for the selection of suppliers according to social and ethic criteria through its Social Responsibility Solutions including ICTI, BSI, ICS audits, etc.
- **Quality Control/Inspections:** SGS conducts **Pre-Production Checks (PPC)** to control materials and avoid deviations from the design. Material, components, labels, user manuals and alike are checked before processing, in order to reduce the risk that production is jeopardised by insufficient or sub-standard supply of material and components.

## BENEFITS

- Enter worldwide markets with confidence by complying with international standards
- Invest efficiently time and money from the concept phase and speed time to market
- Minimize the risk of recalls and protect the brand

**SGS HELPS ALL TOY SUPPLIERS ASSESS THE POTENTIAL RISKS AT EVERY STAGE OF THE LIFE CYCLE OF THE TOY AND MANAGE THEM EFFECTIVELY AND EFFICIENTLY.**

# PRODUCTION CYCLE

## PRODUCTION

Check that the production complies with standards and meets client's product quality specifications



## SGS SOLUTIONS

- **Advanced Testing & Marking:** A design may be conceptually safe, but without control of the production, the design may not be met by the manufacturer. SGS conducts conformity tests according to international standards and national deviations and controls the safety and performance of toys and their packaging. SGS can help getting the country mandatory test marks which are essential passports to some markets, such as CE Mark for Europe, GS Mark for Germany, CCC Toys Mark for China, ST Mark for Japan, etc.
- **Quality Control/Inspections during and after production:** To ensure consistency of production, SGS randomly picks up samples from production lines and checks the general quality of components, materials & finished products and controls conformity to the technical

file. It is a constant scrutiny of the product quality, quantity and labelling:

**At the early stages of production (10%):** SGS conducts **Initial Production Check (IPC)**: it permits timely corrections of any non-conformities detected before full-scale manufacturing.

**At mid way through production (30-50%):** SGS conducts **During Production Check (DUPRO)** to ascertain that initial discrepancies have been rectified and allows evaluation of the average product quality during manufacturing.

**When the production is almost completed (80%):** SGS conducts **Final Random Inspection (FRI)**, a detailed visual inspection on randomly selected finished products: product appearance, workmanship quality, size measurements, functionality assortment, accessories, labelling and packing.

Inspectors can do on-site mechanical tests on samples: strength test for instance can be done on toy push to check the resistance of seams.

SGS follows International Sampling Plan ANSI/ASQZ1.4-2003 accepted worldwide for inspections.

- **Picking of Samples:** SGS can assign a qualified inspector to seal the sample on-site and send it to a customer-appointed spot for testing or reference.
- **Pre-Shipment Testing (PST):** The Pre-Shipment Testing enables to check that no deviation in production happened and that the products actually manufactured comply with toy standards and client's specifications. It is the last stage for product control before toys are displayed on store shelves and bought by parents.

## BENEFITS

- Comprehensive safety and quality controls of toys in the countries of origin across the whole supply chain by an independent third party
- Ensure quality and clients' satisfaction

For further information please contact your local SGS office or email us at  
**CONSUMER.PRODUCTS@SGS.COM, WWW.SGS.COM/TOYS**

### PACKAGING, TRANSPORT & RETAIL/POINT OF SALE

- Packaging: Ensure its performance and develop greener packages
- Transport: Check the production inspected is correctly shipped and still compliant
- Retail/Point of sale: Check the ongoing compliance of products and final consumers' satisfaction



### SGS SOLUTIONS

- **Packaging testing and ecodesign solutions:** To meet global green challenges, SGS offers a wide range of packaging testing services that help achieve performance, safety, and regulatory requirements. SGS also offers end-of-life analysis, including biodegradability testing, as well as ecodesign solutions including ecolabelling, carbon footprint (GHG) analysis, life cycle analysis (LCA).
- **Quantity Control/Inspections before shipment:** SGS conducts Loading Supervision (LS) to ensure that the consignment previously inspected is actually shipped and to check the precise number of loaded shipping cartons/packages.
- **Mystery Shopping:** SGS professional mystery shoppers simulate actual customer behaviour by getting involved in the shopping experience in toy retail stores. They assess display conditions, service awareness, prices, customer complaints... and prepare the reports accordingly.
- **Retail Store Check:** SGS retail store check services cover the visual collection of retail conditions of Brand or Private Label Products. These data can improve the management of the toys on shelf where they are exposed to real life factors and challenged by competitors.
- **Picking of Samples:** SGS can assign an inspector to pick samples in toy retail stores for testing or reference.

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### BENEFITS

Packaging testing and ecodesign solutions:

- Save resources – money, materials, energy, products and improve your sustainability performance

Inspections before shipment:

- Final compliance confirmation before toys are distributed in stores
- Documentation to show due diligence

Mystery Shopping/Retail Store Check/  
Picking of Samples:

- Identify problems and take corrective actions
- Maintain customer satisfaction by proactively addressing the product failures and ensuring the product integrity throughout the supply chain

[WWW.SGS.COM](http://WWW.SGS.COM)