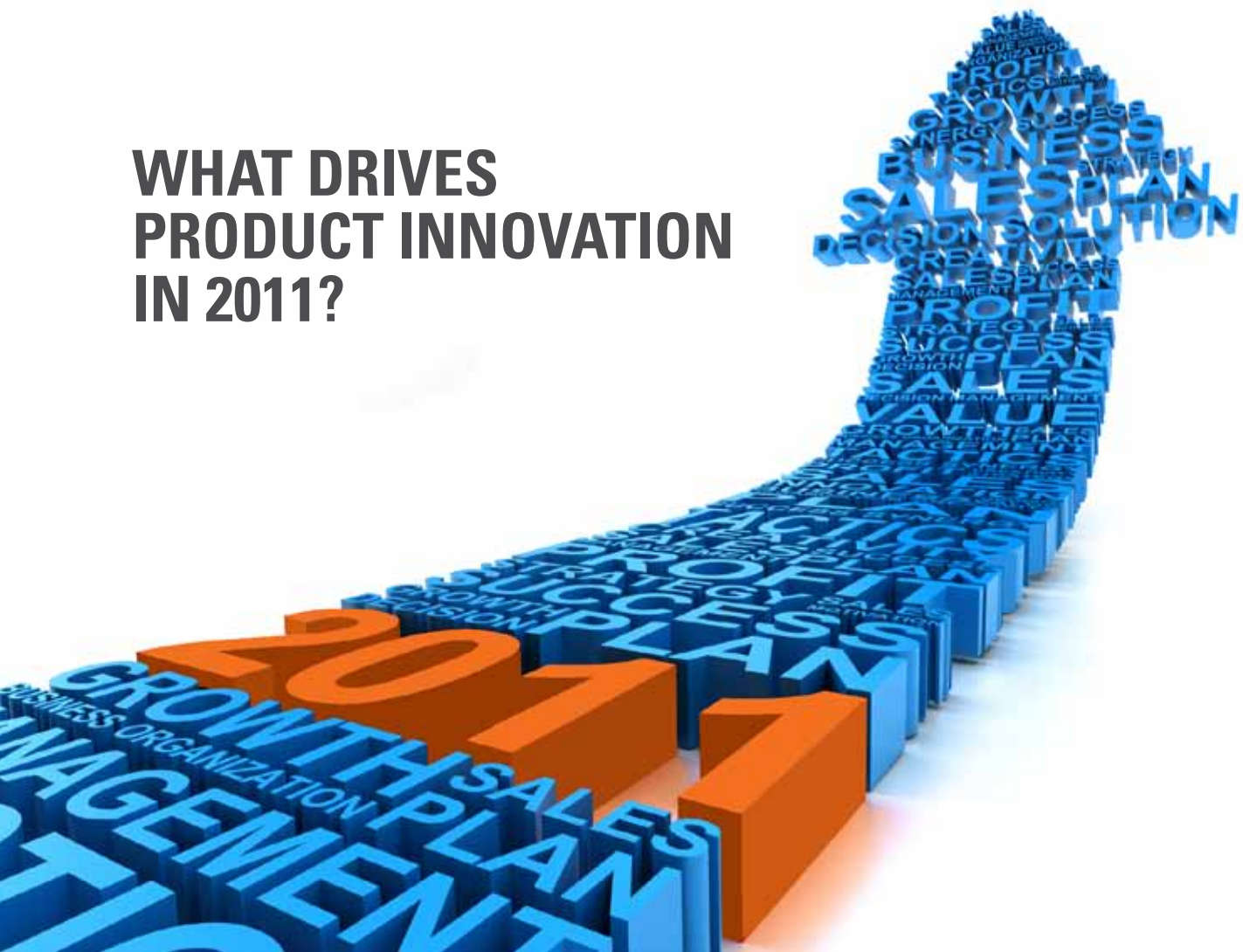


CONSUMER COMPACT

THE CONSUMER PRODUCT PUBLICATION THAT KEEPS YOU INFORMED

FEBRUARY • 2011

WHAT DRIVES PRODUCT INNOVATION IN 2011?



FUNCTIONAL INNOVATIONS IN SPORTSWEAR

RoHS II COMING SOON - FIRST-READING ON DRAFT COMPLETED

CPSC PRODUCT SAFETY INFORMATION DATABASE GOES ONLINE

SGS



DEAR READER,

The constant stream of technological advancements is bound to generate more innovations in consumer products in 2011. But besides technology, do you know what other factors are likely to lead to the implementation of innovative product solutions? In this first 2011 issue of Consumer Compact we look at all types of factors that will influence the consumer products of the future.

Find out how materials innovations lead to the creation of a new generation of sportswear that is both more comfortable and enables better results. New pieces of legislation and the changes they bring, such as the highly anticipated RoHS II, will also require manufacturers to use innovative thinking in their consumer goods. Our latest Consumer Compact issue reveals to you even more sources of innovation and the solutions available to protect your new and innovative products.

You can always rely on SGS to support you with product quality and product safety solutions and much more. For the entire range of SGS services visit: www.sgs.com/cts.

The SGS CTS Marketing Team

IN THIS ISSUE

INDUSTRY NEWS

CONSUMER PRODUCTS

- CPSC Product Safety Information Database Goes Online - [read article](#) Page 3
- The Benefits of External Verification of Bribery Prevention Systems - [read article](#) Page 4
- Introducing the New ISO26000 Standard - [read article](#) Page 5

SOFTLINES

- Functional Innovations in Sportswear - [read article](#) Page 6

HARDLINES

- New EU Toy Directive Demands More Strict Product Documentation - [read article](#) Page 7

FOOD

- Healthy, Hunger-Free Kids Act of 2010 - [read article](#) Page 8
- Is Your Food Free from Dioxin Contamination? - [read article](#) Page 9

ELECTRICAL & ELECTRONICS

- RoHS II Coming Soon - First-Reading on Draft Completed - [read article](#) Page 10
- CB Certifications - One More Way of Protecting PV Systems Investments - [read article](#) Page 12

SGS IN THE NEWS

- New [services](#), new [events](#) and [accreditations](#). Page 13 to 17

SAFEGUARDS

Page 18

SafeGuards, are SGS technical bulletins concentrating on new product standards, regulations and test methods. [See list of featured SafeGuards.](#)

PRODUCT RECALLS

Page 18

SGS Product Recalls is offered for no charge as part of our SafeGuards publication. [See more details.](#)

SGS CONTACTS

- Get in touch with one of our [regional contacts](#) Page 19

CPSC PRODUCT SAFETY INFORMATION DATABASE GOES ONLINE

In March, 2011, the US Consumer Product Safety Commission's (CPSC) new searchable "Publicly Available Consumer Product Safety Information Database" will go live at www.saferproducts.gov. After a series of consultations, the CPSC has recently published the Final Interpretative Rule for the establishment and maintenance of the database, along with public comments and CPSC responses in the Federal Register.¹

Although the "Publicly Available Consumer Product Safety Information Database" (16 CFR Part 1102), will be launched on 11 March 2011 the [final rules](#) became effective on 10 January 2011.

DATABASE TO ENHANCE CONSUMER SAFETY ON VARIOUS LEVELS

This unique database will enable consumers to report any safety issues or incidents that occur when using consumer products. CPSC's goal is for the Database to become a prime source of information for consumers when making product purchase decisions. Increasing public awareness of potential hazards associated with the use of a particular consumer product is expected to significantly enhance consumer safety.

The Database will also provide private labellers and manufacturers of products for which reports of harm have been filed, the opportunity to comment on the reports submitted by consumers. As manufacturers and labellers become engaged in the process, they will be better positioned to address potential product safety issues. Furthermore, through the Database, CPSC's ability to share information with other government agencies will be significantly enhanced, which in turn will ensure a quicker and more thorough enforcement of product safety regulations.

CONCERNS RELATED TO THE DATABASE

Consumer product manufacturers and industry trade associations have raised several concerns about the new

database. One such concern relates to the fact that, as per 16 CFR §1102.10(a), various entities beside consumers can file reports of harm, including: consumers' attorneys, government agencies, health care professionals, child service providers, and public safety entities. With so many "persons" being able to file a report of harm there is a fear that some reports might be insincere, might contain ambiguous information or might be simply filed to enhance the filers' litigation, to damage a product's reputation or for other ulterior motives.

Furthermore, the Final Interpretative Rule does require CPSC to send a notice of a report of harm to retailers even if they are listed as the retailers of a product in question. As a result, retailers may need to change contractual agreements with suppliers to ensure that reports are passed on to them in a timely manner.

The regulation also establishes that reports of harm will be published in the database 10 business days after the company in question has been provided notice of the report of harm. This short time frame might present significant challenges to companies that want to fully investigate and respond to allegations of harm before that information is published in the Database.

DATABASE MONITORING ESSENTIAL FOR CONSUMER INDUSTRIES

Manufacturers, private labellers and retailers of consumer products will need to constantly monitor the database and pay close attention to the "reports of harm" filed with the CPSC for inclusion in the database. As per 16



CFR §1102.6(b)(8), a "report of harm" is "any information... regarding any injury, illness, or death, or any risk of injury, illness, or death ... relating to the use of a consumer product."

Effective immediately companies can register with the CPSC to receive timely notice about any reports of harm filed against their products. This will enable companies to respond quickly to the CPSC with any comments, questions and feedback related to such reports and to evaluate products as necessary to determine whether corrective action is required.

SGS continuously monitors publicly available consumer product safety information in the USA, Europe, Canada, Australia and other major economies, and provides interested parties with the latest developments through our regular SafeGuards publications. Updates on product safety legislation in other countries around the world can be provided upon request.

Fred Mills-Winkler
Technical Director Toys
SGS North America Inc.
fred.millswinkler@sgs.com
t +1 973 575 5252 ext. 22038

¹ CPSC Final Interpretative Rule for the establishment and maintenance of the Publicly Available Consumer Product Safety Information Database

THE BENEFITS OF EXTERNAL VERIFICATION OF BRIBERY PREVENTION PROGRAMS

Corruption of foreign public agents is legally condemned in the OECD Convention on combating bribery of foreign public officials in the signatory countries. Persons and companies are forbidden from offering bribes in their own, as well as in foreign countries – whatever the local legal framework is. As a result, most companies have adopted public commitments to ban corruption. But this is not sufficient anymore. Businesses need to prove they have dedicated programs to prevent bribery. Can you be sure that a specific program is properly designed and in line with international best practices? What guarantees that a program is known, accepted and respected by employees and business partners? Would external verifications help at all?



BENCHMARK INTERNATIONAL BEST PRACTICES

The first benefit of an external verification is that it evaluates if a program is consistent with existing best practices – such as Recommendations of the Council for Further Combating Bribery of Foreign Public Officials in International Business Transactions, Annex 2; the ISO 26 000 norm (section 6.6.3) or TI Business Principles for Countering Bribery. The verification will evaluate that all issues are covered (facilitation payment, gifts, extortions, etc.) but also that the procedures are adapted to the risk identified. Has the company conducted a proper risk assessment? Does the program bring appropriate answers to those risks?

LEGAL CONSTRAINTS

The second reason for a company to perform an external verification of its program is to be able to provide evidence of its best efforts to prevent corruption. Corruption prevention is the type of subject for which a company can't guarantee that no corruption instance has occurred or would not occur. Companies can only provide evidence that they have done their best to avoid corruption.

A parallel with health and safety policy highlights can be done. Managers can't guarantee that they will never face any work accidents within their organizations. Nevertheless a manager should raise awareness of the existing risks; train employees as to the type of

behaviour expected from them; provide employees with sufficient equipment (personal protective equipment, machinery protection, etc.) and control, on a regular basis, so that they know and respect work safety rules. Implementing such programs contributes to significantly reducing the number of accidents; it also mitigates the legal risk for managers have done their best to protect employees.

For corruption issues, companies should similarly be able to demonstrate that everything has been made to avoid acts of corruption. Analyses of US legal cases demonstrate that the implementation of proper programs may reduce penalties in corruption trials. The recently adopted UK bribery Act also tends to promote proper auditing of the system.

Continued on next page

EMPLOYEES' AND PARTNERS' INVOLVEMENT CRUCIAL

One challenge for companies is to ensure their employees and business partners respect the rules and apply them all around the world including in countries where the legal constraints are lax. Verifying through audits that employees and partners know and respect processes helps the management to evaluate the level of understanding and implementation of its program. This allows to decide what action plan to implement when weaknesses are identified.

External verification brings a guarantee of independent evaluation of the program with regard to its consistency and its implementation. This strengthens management's position when measuring the results of its programs.

SGS has put together a dedicated team of compliance experts to conduct such assessments. To go further companies can also apply for a certification of their corruption prevention program with **ETHIC Intelligence** based on an SGS audit. This is an opportunity for companies to engage in a proactive communication on their commitments and initiatives.

Celeste Cornu
Social Responsibility Solutions
Regional Manager EAME South
Anti-Corruption Services Project Leader
SGS SA.
celeste.cornu@sgs.com
t +33 4 42 61 64 41

INTRODUCING THE NEW ISO26000 STANDARD

In November 2010 the long-awaited ISO26000 Standard – Guidance on Social Responsibility was published, immediately generating significant interest amongst a wide range of organisations. The standard is aimed at all organisations interested in ensuring that they are performing in a socially responsible manner by providing guidance on the key aspects they should consider.



ISO26000 is unlike many other ISO standards in that organisations can not be certificated against it. However many organisations have expressed interest in an independent third party assessment of their practices in relation to social responsibility.

ISO26000 PERFORMANCE ASSESSMENT SERVICES AVAILABLE

SGS has developed a performance assessment methodology aimed at evaluating the extent to which organisations are fulfilling expectations within ISO26000 and thereby grading an organisation's performance in relation to Social Responsibility principles,

fundamental practices and core subjects.

A full SGS Performance ISO26000 assessment will result in a Statement of Performance to demonstrate the grading level achieved. Organisations undertaking this type of assessment will benefit from a detailed review of their systems and processes to identify areas of strength and weakness, enabling enhanced social responsibility and benefits gained from improved relations with their stakeholders.

Rebecca Bowens
Global Product Manager
Sustainability Report Assurance
SGS SA.
sustainable-development@sgs.com

FUNCTIONAL INNOVATIONS IN SPORTSWEAR

In today's competitive market for sportswear apparel, clothing brands are following the trend to develop more and more products with specialized functions.



WEARING FUNCTIONAL, LOOKING SMART AND CASUAL

The concept of "wearing functional, looking smart and casual" is going to be a hot trend in apparel market development. Apparel marketers will evaluate strategies for market penetration and development. They will market products which infuse the outdoor element into ordinary fashion clothing. For instance, camouflage patterns commonly used in battle dress are now widely applied to ordinary fashion clothing. People wearing fashion and functional clothing have the sense of being in the field of outdoor environment. They may wear the clothing during the time of both leisure and outdoor activities.

The functional performance of a garment becomes one of the key elements for a company's marketing strategy. For instance, the sportswear company, Columbia Sportswear, has launched the product line "Omni heat" which provides thermal management. The idea comes from space technology. A heat reflective coating is applied to the inner side of the inner fabric which reflects heat back to the human body.

It is not uncommon that you'll find antibacterial deodorizing socks and

T-shirts at affordable prices in low to middle price range retailers. Reflective prints and piping can be found applied to a Reebok jacket as a gimmick of fashion and function. However, it is worthwhile to note that the price of the garment usually reflects the durability and level of performance of the product.

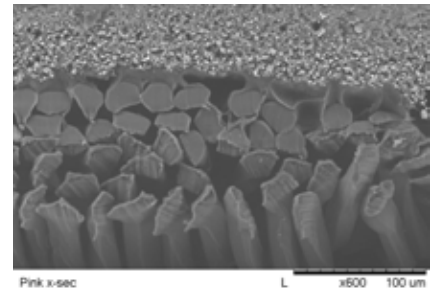
Many sportswear items also may have functional properties such as antibacterial, UV protection, quick dry / moisture management, anti-mosquito, anti-static, windproof, waterproof, breathable, stain resistance, etc. The functional performance is being advertised in popular terms appearing on the hang tags of the garments.

DURABLE FUNCTIONAL FABRIC

Specialty fabric manufacturers put much effort in functional fabric development. The advancement in textile technology and nanotechnology have made significant improvement in the durability and performance of functional fabrics possible. The latest commercialized production technologies can be used to produce fabric with antibacterial deodorizing, moisture management, and stain resistance performance lasting for over 30 household machine washes. High resolution microscopy can be used to analyse the surface of coating after repeated laundering.

SGS has the knowledge and a global network of testing labs through which it can support you with integrating innovative solutions in your outdoor and sportswear garments. Find out more about [SGS Softlines Services](#).

Karen E. Kylo, Ph.D.
Deputy Vice President, Global Softlines
[SGS North America Inc.](#)
karen.kylo@sgs.com
t +1 973 461 7934



Microscopic image of a waterproof breathable fabric

HEALTH & MOISTURE TRANSFER

When performing sporting activities, heat and moisture (i.e. perspiration) build up on your skin. A quick drying moisture management fabric would effectively remove the moisture away from the inner side (skin contact side) to the fabric outer side. This would leave you feeling dry and reduce heat stress. The below properties are facilitated by various factors such as fibre structure, fibre composition, fabric construction, chemical finishing, etc.

- fast wicking : the ability to transfer the moisture through capillary action of fibres
- fast drying : the rate of removal of moisture from the fabric (by natural evaporation process)
- high water vapor permeability: the ability to allow water vapor transfer which would prevent moisture building up
- high air permeability : fabric structure with more air space provide better ventilation
- effective liquid moisture transfer (with one way transport capability) : the ability of providing directional one way moisture transfer (from inner side to outer side of fabric)

NEW EU TOY DIRECTIVE DEMANDS MORE STRICT PRODUCT DOCUMENTATION

Following an EU parliament vote in late 2008 and its entry into force in 2009, the new 2009/48/EC Toy Directive (NTD) will be implemented on 20 July 2011¹. Key aspects of the new directive include stricter requirements for technical documentation and a set of new responsibilities for both toy manufacturers and importers.

NEW OBLIGATIONS FOR MANUFACTURERS

Manufacturers will be required to ensure that documentation for all their new and existing products meets the new technical documentation requirements. A new requirement is that manufacturers will have to draft an EC declaration of conformity (DoC) for each product. This declaration, along with all technical documentation, must now be kept on file by the manufacturer for 10 years after placing the product on the market. Along the DoC, product instructions and safety information must be included.

Additionally, products must be marked with the name and address of the manufacturer and the importer, as well as a relevant product type, batch or serial number, and CE mark.

For manufacturers to comply successfully with the new requirements, it is important that they understand all the requirements of the directive. To assist with compliance, the EU Commission has provided an [EU Explanatory Guidance Document](#). Another guidance document specific to technical documentation is under development.

TECHNICAL DOCUMENTATION

Manufacturers must necessarily ensure that products are designed and manufactured in accordance with safety requirements. Following this, a detailed description of product design and manufacture must be provided. This description must cover the manufacturing process, age suitability and grading and intended product use. A general description and colour picture of the product must be included, along with product manufacturing and storage

addresses. Furthermore, packaging and instructions must be provided, along with test reports and, if relevant, an EC type examination certificate.

Manufacturers will furthermore be expected to ensure that products continue to conform to the requirements of the directive, especially in the case of any changes in toy design.

Essential to compliance with the new technical documentation requirements will be the inclusion of a Bill of Materials (BOM) with the manufacturing documentation for each product. The BOM must specify relevant substances or components for each part or material included in the toy. It must also, where needed under REACH, include Safety Data Sheets (SDS).

SAFETY ASSESSMENT OF ALL TOYS

New is the requirement for a Safety Assessment Procedure. Manufacturers must identify chemical, physical, mechanical, electrical, flammability, hygiene and radioactivity hazards that a toy may present.

IMPORTERS REQUIRED TO VERIFY PRODUCT CONFORMITY AND MARKING

Importers will be required to ensure that appropriate conformity assessment procedures have been carried out by the manufactures of the toys they import. They must also verify that manufacturers have appropriate technical documentation for their products, as well as instructions, safety information and CE marking. Importers now need to ensure that each product carries their company details, including their registered name, trademarks and address, as well as those of the



manufacturer. Importers must ensure that each product is marked with a type, batch or serial number.

TECHNICAL DOCUMENTATION VALIDATED BY SGS

SGS provides a range of services that can assist toy manufacturers and importers to ensure that their products are compliant. These services include: BOM list review; preparation and review of CLP notification dossiers; preparation of safety data sheets (SDS), SVHC screening (REACH regulation); risk assessment and new toy directive factory audits. Along with these specific services, SGS can provide a full capacity product testing service (and report validation), along with provision of EC type examination certificates.

To register for the SGS webinar on Technical Documentation, on March 17, email us at: consumer.products@sgs.com

Sanda Stefanovic
Senior Toy Expert
[SGS Nederland BV](#)
sanda.stefanovic@sgs.com
t +31 181 694517

¹ Except chemical requirements of the directive that will be implemented on 20 July 2013.

HEALTHY, HUNGER-FREE KIDS ACT OF 2010

On 13 December 2010 President Obama signed into law the Healthy, Hunger-Free Kids Act of 2010.¹ In the US 30 million children receive meals through the school lunch program, 17 million live in food insecure households and one in three children are overweight or obese. This law is designed to improve nutrition in schools and focuses on reducing childhood obesity. It will increase access to food for more children that are living in low income households, while improving the integrity and monitoring of the school food programme.

The new law provides the USDA with the authority to set nutritional standards for all foods regularly sold in schools, increase reimbursement money to schools that meet the updated nutritional standards, ensure more local foods will be used, expand access to drinking water during meals, set basic wellness policies (food education and physical exercise), promote nutrition and wellness in children care settings and expand support for breast feeding.

More students will be eligible for enrollment in the new programme, which will use Medicaid data to certify children who meet income requirements. In addition census data will be used to identify schools in low income communities, where students will be given universal meal access. In order to improve programme monitoring, school districts will be

audited every three years for compliance to nutritional standards. Furthermore, the programme will improve handling of recalls and require school programmes to adopt Hazard Analysis Critical Control Point (HACCP) procedures and other food safety requirements. In order to implement these safety requirements technical assistance and training will be provided to schools.

SIMILAR PROGRAMMES ELSEWHERE

Other countries are already running programmes which are similar to what will be developed in the US. For example the United Kingdom established a National Healthy Schools programme in 1999. The UK programme focuses on four major themes: Personal, Social, Health and Economic (PSHE) Education; Healthy Eating; Physical Activity and Emotional Health and

Well-Being.² Schools meet the National Healthy Schools status by meeting the requirements for the four major themes.

India also provides a hot lunch programme to 140 million children in government-run schools. As a result of the scheme school enrollment has improved, attendance has increased and nutrition levels of children have risen.³

TOOLS TO DEVELOP PROGRAMMES

In 2006 the World Health Organization (WHO) published a tool for development of Food and Nutrition Policy for Schools.⁴ This tool provided a step by step approach for the development of a school programme to reduce obesity, reduce dental caries, increase physical activity, improve eating habits and promote good nutrition.

These programmes are necessary because, as the Global Health Council points out, there are 182 million children under the age of five that suffer from stunted growth which "leaves a legacy of delayed development, impaired cognitive function, poor school performance, and overall reduced productivity".

This is why programmes such as the Healthy, Hunger-Free Kids Act of 2010 and the National Healthy Schools programme are essential in order to provide proper nutrition and nutritional guidance to children in order for them to develop into functioning members of our society.

James Cook
Food Safety Technologist
SGS North America Inc.
james.cook@sgs.com
t +1 973 461 1493



¹ S. 3307 Healthy, Hunger-Free Kids Act of 2010

² Healthy Schools - The Four Themes

³ India Offers Students Free Midday Meals as Incentive to Stay in School

⁴ WHO Food and Nutrition Policy for Schools – Copenhagen 2006

IS YOUR FOOD FREE FROM DIOXIN CONTAMINATION?

Dioxins are persistent organic toxic pollutants. The carcinogenic properties of dioxins are a major cause of health concern around the globe. The recent scare in Germany has once again focused attention on the precautions that need to be taken in order to prevent the release of dioxins into the food chain.



Dioxins consist of 210 components, including Polychlorinated Dibenzodioxins (PCDD's) and Polychlorinated Dibenzofurans (PCDF's), of which 17 are considered toxic. Dioxins are not intentionally manufactured and are an unwanted byproduct of chemical and combustion processes.

RISKS POSED TO FOOD CHAIN

Alongside with the environmental contamination, a lot of attention has arisen in regards to the presence of these components in the food chain through a number of dioxin contamination incidents. Dioxins are persistent chemicals, they break down very slowly and are fat soluble. These two properties cause dioxins to accumulate in the food chain.

Over 90% of a human's intake of dioxins is through their normal diet. Dairy products, meat, poultry, eggs, fish and animal fats tend to have the highest concentrations of dioxin levels. Europe has established strict regulations with respect to dioxins in feed and food. The maximum allowable levels are very low and the matrices in which they

are determined can be quite complex compared to environmental matrices.

Recent dioxin contaminations include:

- The current dioxin crisis in Germany. Fatty acids, intended for technical purposes and contaminated with dioxins, were mixed with fats intended for animal feeding. As a result, dioxins were introduced into various animal feed production lots.
- 2008: Dioxins were discovered in pork meat in Ireland. The contamination source was animal feed consisting of bread crumbs from bakery waste. These were contaminated by direct contact during drying with combustion gases originating from the use of non-food grade oil.
- 2007: In Switzerland guar gum originating from India was found to be contaminated with dioxins and pentachlorophenol.
- 1999: The dioxin crisis in Belgium originated from mixing Polychlorinated biphenyl (PCB) oil with used frying oil for final use in animal feed.

DETECTING DIOXINS

Dioxin analysis is quite complex due to the low levels of regulatory interest and the complexity of the matrices they have to be determined in. This requires a lot of expertise in dealing with trace analysis as well as sophisticated high technology equipment (High Resolution Mass Spectrometry) for instrumental analysis. The expertise also covers the whole sample treatment i.e. transferring all the dioxins resulting from eggs to a one droplet solution or changing a piece of meat into a one droplet solution containing all the native dioxin contamination.

Besides the complexity of the analytical service, this type of work has to be carried out on a routine basis providing turnaround times which fit into the regulatory action time frame.

DIOXIN TESTING

SGS is well established in the field of dioxin testing. Since the dioxin crisis of 1999 in Belgium, SGS was chosen by the Belgian Food Agency for very fast and accurate dioxin analyses allowing authorities to deal with the crisis in the most effective way possible.

With geographical presence, SGS is very well placed to provide dioxin testing anywhere in the world, aiming to deliver the best service on the market.

SGS expertise with respect to the analysis of Persistent Organic Pollutants (POP's) is recognized by International organizations like UNEP Chemicals to which SGS has made several contributions in facilitating workshops, focused on installing analytical capabilities in developing regions.

Besides dioxins, testing of other dioxin-like components such as PCB's, Polybrominated Flame Retardants, Polychloronaphtalenes, Polychlorinated diphenylethers, Brominated dioxins and furans etc. underline the expertise present in the SGS Group.

Find out more about [SGS Food Safety Services](#)

Marc Van Ryckeghem
Business Unit Manager I.A.C.,
[SGS Belgium N.V.](#)
marc.vanryckeghem@sgs.com
t +32 3 545 85 90

RoHS II COMING SOON - FIRST-READING ON DRAFT COMPLETED

With the first-reading on the RoHS II draft completed by the European Parliament on 24 November 2010, the RoHS recast process is now on the home stretch. The latest draft, has clarified many of the items previously in question, with no new substances being introduced and with RoHS II becoming a CE mark directive. The new RoHS directive is expected to be published sometime in the first quarter of this year.



COVERING ALL TYPES OF EEE

But for a few explicit exemptions, the new directive is set to cover all types of Electrical and Electronic Equipment (EEE) including some medical devices and monitoring and control equipment which have been exempt in the past. Beside the exemptions phase out, this has been achieved through the introduction in Annex I of a new, 11th product category: "Other electrical and electronic equipment not covered by any of the categories above (categories 1 – 10)". This also means that borderline cases are clarified and products such as electric toys will be covered by the directive in the future.

Previous exemptions to product from categories 8 and 9 will be gradually phased out, with:

- Cat. 8: Medical Devices - 3 years after publication
- Cat. 8: In-vitro-Diagnostics - 5 years after publication
- Cat. 9: Control and monitoring instruments - 3 years after publication
- Cat. 9: Industrial control and monitoring instruments - 6 years after publication

The current draft includes ten types of products exempted:

- equipment which is necessary for the protection of the essential interests of the security of Member States, including arms, munitions and war material intended for specifically military purposes;
- equipment designed to be sent into space;
- equipment which is specifically designed and to be installed as part of another type of equipment that is excluded or does not fall within the scope of this Directive, which can fulfil its function only if it is part of that equipment, and which can be replaced only by the same specifically designed equipment ;
- large-scale stationary industrial tools;
- large-scale fixed installations;
- means of transport for persons or goods, excluding electric two-wheel vehicles which are not type-approved;
- non-road mobile machinery made available exclusively for professional use;
- active implantable medical devices;
- photovoltaic panels intended to be used in a system that is designed, assembled and installed by professionals for permanent use at a defined location to produce energy from solar light for public, commercial, industrial and residential applications;
- equipment specifically designed solely for the purposes of research and development only made available on a business-to-business basis.

¹ First reading of RoHS II draft.

DEFINITION OF "HOMOGENEOUS MATERIAL"

Current understanding of homogeneous materials was largely adapted by a definition given by the Technical Advisory Committee. However, this definition was never part of the RoHS directive as such but from secondary literature. RoHS II introduces a definition which refers to a "homogeneous material" as:

"One material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be mechanically disjointed into different materials, meaning that the materials cannot be separated by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes."

NO NEW RESTRICTED SUBSTANCES

The list of restricted substances remains the same but the new directive introduces a simplified mechanism for reviewing and amending the list in the future. Some new priority substances have been identified for future review:

- Hexabromocyclododecane (HBCDD)
- Phthalates (DEHP, BBP, DBP)
- Nanomaterials

A new substance exemptions process has also been introduced, to ensure coherence with REACH. Exemptions will be granted for periods of 5 to 7 years depending on the product category. Annex III gives an updated list on current exempt application of the regulated substances in all electric and electronic equipment. Additionally to these exemption Annex IV features some more exemptions only applicable for category 8 and category 9 products. Information on the product categories, the list and limits of restricted substances, and applications exempted from restriction are included in [the annexes of the new directive](#).



ROHS II A CE MARK DIRECTIVE

RoHS II will become a CE mark directive, meaning that the CE marking will have to be affixed on the finished products, in accordance with Module A of Annex II of 768/2008/CE. While CE declaration is a manufacturer responsibility, with RoHS II becoming a CE mark directive importers and distributors also share new responsibilities for the products they bring on the EU market. It is important to understand that affixing a CE mark on an electrical or electronic product will require that the product complies not only with applicable regulations such as low voltage directive or electromagnetic compatibility, but also with RoHS. Hence, RoHS must be included in the product conformity assessment process, otherwise affixing the CE mark on a product is a breach of the law.

The European Council is expected to formally adopt the new legislation

in the first quarter of 2011, with the directive entering into force 20 days after publication in the Official Journal of the European Union. Member states will then have 18 months to transpose it into national law. Until then, the current RoHS directive 2002/95/EC and its amendments still apply.

Through its global [restricted substances](#) service offering SGS is capable of supporting you in ensuring your product's compliance with global RoHS regulations (EU, China, Korea, US, etc.), with REACH/SVHC and other relevant international, regional or national pieces of legislation. SGS may also support you with compliance assessments needed to prepare the CE declaration of conformity.

Dr. Udo KRISCHKE
Global Technical Manager RSTS
[SGS Consumer Testing Services](#)
udo.krischke@sgs.com
t +49 6128 744 235



CB CERTIFICATION - ONE MORE WAY OF PROTECTING PV SYSTEMS INVESTMENTS

The photovoltaics market has grown considerably seemingly overnight and the growth is not about to stop anytime soon. This growth has been partially driven by the subsidies offered by governments to those who invest in greener power sources. But to award these subsidies, governments often require that the safety and quality of PV modules be certified. Why, indeed, grant subsidies to poorly performing modules?



Certifications ensure that PV modules that reach the market have a proved life span and are free of defects that could lead, among others, to a loss of performance in the long run. With the worldwide number of PV testing labs constantly growing the certification of photovoltaics modules has never been faster nor more complete.

The benefits of a certification can be further increased through CB certifications which are recognized in all CB Scheme member countries and thus offer a shortcut to national approval marks. Furthermore, the good reputation enjoyed by the CB Scheme around the world will make the market access process much easier for CB certified PV modules.

QUALITY ASSURANCE MEASURES PROTECT INVESTMENTS IN PV SYSTEMS

Beside PV module certification, there are other services that ensure the high quality of PV systems (BOS): quality testing, pre-qualification testing and certification of large systems and facilities.

For manufacturers, pre-qualification testing will help identify any potential design flaws at an early stage. Design flaws can not only cause considerable problems and frustrations for customers but will dent the manufacturer's reputation. For importers and distributors supply chain quality testing will also be a way of covering their liability. Through pre-shipment controls and load- / unload inspections in the manufacturing country, they can ensure that the products to be shipped match the quality of the samples that were certified.

There are three standards for PV Systems. IEC 61730 part 1 and 2 is the safety standard for all module technologies, while IEC 61215 is specific for polycrystalline silicon module performance and type qualification. Finally, IEC 61646 covers performance & type qualification of Thin Film modules.

Safety tests for PV modules measure dielectric resistance, as well as resistance to surges and leakage currents. They verify critical elements such as access to elements under tension, grounding, the insulation for humid and for freezing conditions.

Performance tests, meanwhile, focus on power efficiency, UV resistance, resistance to breakage caused by persons, objects or weather conditions such as hail, etc. Compliance with various directives, such as RoHS or REACH is also important and can be certified.

If the solar modules will be deployed in regions with severe weather conditions, customers should look for additional performance certifications, like ammonia resistance, heavy snow load or desert resistance. If the modules will be installed in coastal regions it is recommended to test against salt mist corrosion resistance.

COMPLETE QUALITY ASSURANCE SOLUTIONS UNDER ONE ROOF

SGS is fully prepared to support both manufacturers as well as importers and distributors throughout the **entire life-cycle of PV modules and systems**.

The **SGS Solar Test House** located in Dresden (Germany) and other PV labs located in key markets are ISO 17025 accredited and offer the full range of PV testing and certification services.

Furthermore the SGS-CEBEC division offers safety testing for power inverters, which is covered by IEC 62109-1. For large PV systems, SGS also offers a "connection / disconnection from grid " certification, which ensures that voltage fluctuations remain within acceptable limits when connecting to medium voltage networks.

Finally, through its SSC division (Systems and Services Certification) SGS can verify electrical installations that have undergone major adaptations, such as the addition of a photovoltaic system.

i. A. Jörn Brembach
Business Manager Photovoltaics
CTS Microelectronics & Photovoltaics
Solar Testhouse
joern.brembach@sgs.com
t +49 35203 390 910

SGS TÜV DESIGNATED AS A TECHNICAL SERVICE

The globalization of industry and trade increases the worldwide stream of goods. In the automotive sector manufacturers and suppliers have to cope with a wide variety of legal requirements to get vehicles or parts approved. As type approval of vehicles is a precondition for sales nearly all around the world, there is a high demand for lean approval procedures and synergies for different markets. New emission and safety requirements (e.g. general safety regulation 661/2009) in Europe as well as increasing proportions of driver assistance systems and safety relevant electronics like ESP, lane departure warning systems or emergency braking systems require additional efforts for homologation / type approvals.

Various aspects of international market demands, legal and internal requirements and product liability issues require a great and actual knowledge on applicable standards and procedures over the entire life cycle of the product. New technical achievements like simulation or virtual testing influence design and verification procedures. Testing, verification and certification companies like SGS provide their services to the customers to help them meet the applicable standards and minimize their risks. A huge network with experts of various disciplines helps to use synergies and optimize the efficiency of the whole process.

The SGS group has recently expanded its scope of automotive services. In January 2011 the Homologation department of SGS-TÜV GmbH (a joint venture of SGS group and TÜV Saarland e.V.) in Munich has been designated as a Technical Service by the German Approval Authority Kraftfahrt-Bundesamt

(KBA). The homologation team of SGS TÜV provides services all around the type approval of vehicles and their components and systems worldwide.

The new homologation services comprehend:

- clarification of legal requirements (EC and various worldwide) and the approvability of vehicles and parts in different target markets
- support on manufacturer's documents,
- testing of vehicles and parts (more than 220 designated procedures) in SGS labs around the world or qualified manufacturer's labs
- coordination and execution of the whole Type Approval procedure including the application for type approval certificates (Germany, Europe and several further regions of the world)



Together with the team for electronics and functional safety the experts of the homologation team are also the right partner for type approvals and safety issues of Electric or Hybrid vehicles.

Find out more about [SGS-TUV GmbH Homologation Services](#).

Stefan Teller
Manager Homologation
[SGS-TÜV GmbH](#)

Ein Unternehmen der SGS-Gruppe und des TÜV Saarland e.V.

stefan.teller@sgs.com
t +49 89 787475 370

SGS SEMINAR AT GUANGZHOU AUTO SHOW

The largest Guangzhou auto show ever, the 8th China International Automobile Exhibition, was held from Dec 21 to 27, 2010. More than 600 carmakers and parts manufacturers displayed their products on 16,000m² attracting over 500,000 participants.

From the over 20 seminars and on site activities held simultaneously SGS co-organized the Auto Electronics & Safety Technology Seminar together with China Auto Parts & Accessories Corp. Dr. Stephan Herget, SGS Global Product Manager on Chemical Compliance, delivered a presentation on the "Update of restricted substance legislation for the automotive industry".

The presentation was centred around changes in legislation and common industry practices, with an emphasis on compliance with the latest changes of the EU-ELV (2010/115/EU). Around 100 technical engineers from BYD, Guangzhou Automobile, Dongfeng Honda, SGMW, and other OEMs as well as auto parts manufacturing companies attended the seminar. For more info contact: stephan.herget@sgs.com

SGS BECOMES FIRST ONE-SITE CDMA, GSM AND WCDMA TESTING SERVICE PROVIDER

SGS is expanding its CDMA wireless testing lab in San Diego with the addition of testing capabilities for handsets and smart phones designed to run on GSM and WCDMA networks.

When the new testing services launch in Q2 2011, SGS will have the first lab to provide certification tests for all

cellular technologies under one roof. The expanded testing services will speed time to market for new GSM and WCDMA handsets and smartphones by eliminating the need for device manufacturers and wireless service providers to send new device models to multiple labs for certification. This will also enable our current customers to enjoy the same testing services

benefits for GSM/WCDMA as they do with CDMA and EVDO. The lab will also continue to offer CDMA/EVDO test programs for CTIA CDMA Certification, Safe for Network, CDG Stage 1 and CCF Certification. LTE capability will be added in Q1 2011 to complete the portfolio for the San Diego laboratory. For more info contact: ee.global@sgs.com

SGS ACQUIRES H.K.-BASED INTERNATIONAL ELECTRICAL CERTIFICATION CENTRE LTD.

SGS is pleased to announce the acquisition of International Electrical Certification Centre Ltd., (IECC), in Hong Kong.

Founded in 1995, IECC is a leading independent laboratory providing third-

party testing. IECC testing focuses on Electromagnetic Compatibility (EMC) and Product Safety tests of electronic and electrical products. In addition, it offers services including consultancy and testing for global electronic and electrical certification. IECC partners with several reputable overseas laboratories

and is the sole agent of the German p-k-m electronic GmbH in China and Hong Kong. Accreditations held by IECC include the Hong Kong Laboratory Accreditation Scheme (HOKLAS), FCC (USA), IC (Canada) C-Tick (Australia/New Zealand), CSA (Canada/USA). For more info contact: ee.global@sgs.com

SGS i-manuality® SOLUTION SERVICE

SGS Tesco's i-manuality® Solution is a new concept of user manuals, offering an innovative and completely user-oriented approach to user communication.

Your products and services are cutting edge. Why should you settle for any less

when it comes to your manuals? Usher in your product manuals to the digital age with SGS Tesco's i-manuality® Solution and realize new possibilities. SGS Tesco's i-manuality® Solution enables you to overcome the limitations of conventional printed manuals and access greater marketing potential

for your products and services. This innovative solution helps you not only boost sales, but also to achieve greater product quality and makes your products and services shine while lowering documentation costs. For more info contact: ee.global@sgs.com

SGS & PANASONIC REACH FORUM IN CHINA

SGS sponsored the "Reach Forums for Chinese Vendors in 2010" hosted by Panasonic in Dalian, Tianjin, Shanghai, Suzhou and Shenzhen, between 6 to 14 December 2010.

The Merchandising unit heads from the Panasonic Group of Companies and Panasonic Corporation of China, as well as Zhang Yu Ying and Li Xin Zhu from SGS Electrical and Electronics held presentations and forum discussions. The Panasonic Group is committed to fulfilling its business vision to

"contribute to a ubiquitous networking society that coexists within a global environment." SGS was appointed by the Panasonic Group to help promote its "Green" vision and comply with the REACH and other sustainability development policies. For more info contact: jessica.yu@sgs.com

PACKAGING ECODESIGN: A GLOBAL TREND

The convergence of our consumer society and the globalization of production give an important place to packaging in our life. Packaging protects our goods, informs us about the use and hazards of products, and even makes them more attractive. The reverse effect? Lots of resources are needed, and our bins are always full.

European directive 94/62/EC, related to packaging and packaging wastes, requires packaging producers to take into consideration the whole life cycle of their products, but overall to be responsible for their end of life treatment.

The "Enlarged Producer Responsibility" has become major principle. It is now applied to various products categories in Europe (ELV, WEEE, etc.), through the framework of the Integrated Product Policy.

For producers it means that packaging must be recycled, and they have to financially contribute to the system. They have to comply with detailed rules and prove the conformity to this directive, a group of standards has been released: EN 13427 to 13432, FD CR 13695-(1&2), and FD CR 14311. This initiative has been replicated worldwide and inspired several other regulations and systems.

SGS is fully involved in this dynamic, as our ecodesign consultants team put on



the market in 2011 two products: the packaging ecodesign diagnosis, that has received the "Pack Innovation 2010" prize. It includes several standards and initiatives of the packaging industry, with a few SGS bonus embedded. The second product is PEAR, a quick LCA based solution designed to reduce cost. For more info on SGS Packaging services contact: Jean-Baptiste.Molet@sgs.com

SGS CHINA FOOD PROFICIENCY TESTING CENTER PASSES UKAS SITE AUDIT

On December 2nd, SGS China Food Proficiency Testing Center passed UKAS (the United Kingdom Accreditation Service) site audit. This center became the first proficiency testing provider accredited by UKAS in China.

This is also the first time worldwide that UKAS do assessment according to the latest standard ISO / IEC 17043:2010. Thus, unlike other recognized institutions, all PT schemes provided by SGS China Food Proficiency Testing Center strictly comply with the new ISO standard.

In addition to serving clients, this center can provide high level proficiency testing to all labs in SGS Group. For more info contact: roy.zhao@sgs.com

SGS IN BRAZIL FIRST TO OFFER ACCREDITED CERTIFICATION FOR RoHS AND REACH

SGS is the first company in Brazil to be accredited to carry out RoHS and REACH audits related to the restriction of use of hazardous substances. INMETRO is also the first accreditation body in the world to register a certification body for these standards.

Applied not only to ee products, but also to components, parts and even raw materials which can eventually be used in ee products, the directives are in force in EU to mitigate contamination of natural resources by hazard substances in these products.

As the first accredited body to carry out accredited assessments for RoHS & REACH, globally, SGS delivers a real

competitive edge to Brazilian exporters, a supportive tool to surpass technical barriers that can eventually be raised against Brazilian products. For more info contact: thiago.doretto@sgs.com



JAPAN TOY ASSOCIATION ACCEPTS SGS HONG KONG TO TEST CHEMICAL PROPERTIES IN TOYS

SGS Hong Kong is pleased to announce that we have been recognized as a designated overseas laboratory to test chemical properties under the ST-2002 standard for toys for children up to the age of 14 for the Japan market.

From January 2011, reports on ST-2002 Part 3 issued by SGS Hong Kong will be accepted by the Japan Toy Association (JTA). The acceptance of these reports by the JTA will assist you in your application for ST Mark certification

for your toy products. The ST standard covers all toys including:

- Driven toys
- Scientific toys
- Handicraft toys such as easy-to-build models intended specifically for children
- Toys uses in the garden
- Toy sports equipment
- Aquatic toys
- Bath toys
- Inflatable vinyl toys intended to be used on the surface of water

- Christmas articles
- Straps for mobile phones
- Video toys / games connected to television sets

As an international leading independent third-party laboratory, we are also an authorized overseas laboratory to conduct tests under Japan's Food and Sanitation Law (JFSL).

For further information about how SGS can help you with testing according to ST 2002 and JFSL, please contact: hk.hardlines.tjpenquiry@sgs.com

SGS EXHIBITS AT THE LARGEST TOY INDUSTRY EVENTS



SGS has signed up to exhibit at all major 2011 toy fairs around the world: Hong Kong, London, Nuremberg, New York, Melbourne and Tokyo.

Our technical experts will update you with the relevant industry developments, the latest regulatory changes in the toy industry and explain SGS services. Visit us and get quick answers to all your questions about the new EU toy directive, CPSIA, technical documentation, risk assessment, etc.

SGS FRANCE IS YOUR QUALITY PARTNER FOR DETERGENTS AND HOME FRAGRANCES

SGS can assist you for all your detergents and home fragrances needs. Armed with a strong expertise, SGS has expanded its capabilities for performance tests in Aix en Provence, France.

We can also help you check the labelling and SDS of your products against applicable regulations. If you want to get the certification of your products, SGS offers audit services to help you comply with the IFS HPC (Home and Personal care) standard for household chemical products. Find out more about our service offering.



THE BEST-IN-CLASS NETWORK OF CPSIA ACCREDITED LABS

The complex CPSIA requires U.S. manufacturers and importers to comply with more stringent testing and certification standards (mainly lead and phthalates requirements) for children's products sold in the United States.

SGS has a variety of services available to help you reach the challenges related to complying with CPSIA. The following SGS laboratories are accredited by the U.S. Consumer Product Safety Commission:

- AMERICAS: U.S. (Fairfield, NJ & Tulsa, OK); Brazil (Santos)
- ASIA: Bangladesh (Dhaka); China (Guangzhou, Qingdao, Shanghai, Shenzhen, Tianjin); Hong Kong; India (Bangalore, Chennai, Gurgaon, Thane, Tirupur); Korea (Anyang); Malaysia (Shah Alam); Philippines (Makati City); Singapore (Singapore); Sri Lanka (Colombo 2); Taiwan (Kaohsiung, Taipei); Thailand (Bangkok); Vietnam (Ho Chi Minh)
- EAME: France (Aix en Provence); Germany (Taunusstein); Mauritius (Phoenix); Turkey (Istanbul); United Kingdom (Bradford)



To know more, contact the SGS CPSC-accredited labs and visit: www.hardlines.sgs.com/cpsia

SVHC SCREEN LITE AVAILABLE FOR SOFTLINE PRODUCTS

Non-Governmental Organizations (NGOs) in the EU have been launching different campaigns recently to assess the product conformity of brands and retailers against REACH.

Detailed information including names of brands, retailers, product names, and SVHCs found in the products were disclosed in their reports.

These studies revealed the lack of awareness in brands and retailers on their responsibility in fulfilling REACH requirements. The image of brands and retailers may then be spoiled as a consequence of being confronted with market surveillance.

In order to help you tackle the risks stemming from NGO scrutiny campaigns, SGS has developed an intelligent and cost effective SVHC

screening programme on targeted high risk SVHC substances. The high risk SVHCs defined in this program are selected based on recent NGO reports and RAPEX notifications in the textile and footwear product categories. These substances are often found in materials such as plastic, leather, textile, prints and coating, etc. For more information on the SGS SVHC Screen Lite Programme contact: ruth.hon@sgs.com

COLLABORATION WITH SDC IN COLOR TRAINING

SGS now delivers SSC ISO Colour Fastness Training Program in China. The program was designed to promote best practices and to provide knowledge in a number of key areas.

Designed to help people work, think and learn more effectively, the training focuses on topics of direct concern when working with ISO Colour fastness test methods. This program can ensure that everyone in the textile supply chain knows how to carry out the tests

more effectively and efficiently and analyse results correctly. The modules are designed for specifiers, designers, buyers, garment technologists, fabric makers, dyers, garment makers, etc. For more info contact: karen.kyllo@sgs.com

SAFEGUARDS

SafeGuards, are SGS technical bulletins concentrating on new product standards, regulations and test methods. They are written by SGS experts and dispatched on a weekly basis. Below you can find a selection of SafeGuards titles from the past weeks. TO STAY ON TOP OF ALL REGULATORY CHANGES WITHIN YOUR INDUSTRY [subscribe to the SafeGuards technical bulletin](#).

CONSUMER PRODUCTS

- Reminder: KC Mark Will Be Fully Implemented by January 1st 2011 - [read the bulletin](#)
- ECHA Updated the SVHC Candidate List to Contain 46 Substances - [read the bulletin](#)
- Canada Reduces Lead Limits for Certain Consumer Products - [read the bulletin](#)

FOOD

- USDA Requires Nutrition Facts on 40 Meat and Poultry Products - [read the bulletin](#)
- U.S. Food Safety and Modernization Act Signed into Law - [read the bulletin](#)

HARDLINES

- Belgium and France Prohibit Formamide in Puzzle Mats - [read the bulletin](#)
- Late Pre-registration & Registration of Substances for EU REACH - [read the bulletin](#)

SOFTLINES

- CPSIA: Recent Developments, November 2010 - [read the bulletin](#)
- Clothing can be a Source of Dermatitis and Irritation - [read the bulletin](#)

Browse the SafeGuards library: www.sgs.com/safeguards



PRODUCT RECALLS

SGS compiles recall cases notified in the EU, US and Australia for consumer goods. They can help you minimize costly recalls by increasing your awareness of recall cases related to your business. SGS Product Recalls is now offered for no charge, and is included twice per month in the SGS SafeGuards publication.

Browse the Product Recalls library: www.sgs.com/productrecalls

[Subscribe to SafeGuards to receive Product Recalls publication.](#)



REGIONAL CONTACTS

AMERICAS

Consumer Testing Services,
a Division of SGS North America Inc
291 Fairfield Ave,
07004 Fairfield, NJ, USA
Tel: +1 973 575 5252
Fax: +1 973 575 7175
E-mail: uscts.inquiries@sgs.com

ASIA

SGS HONG KONG LTD.
5-8/F & 28/F, Metropole Square,
On Yiu Street, Siu Lek Yuen
Shatin, N.T. Hong Kong, SAR
Tel: +852 2334 4481
Fax: +852 21447001
E-mail: mktg.hk@sgs.com

EUROPE

SGS S.A. SGS UNITED KINGDOM LTD.
Saunders House,
52-53 The Mall
W5 3TA Ealing, London
United Kingdom
Tel: +44 (0) 203 008 7860
Fax: +44 (0) 203 008 7870
E-mail: gb.cts.sales@sgs.com

EDITORIAL TEAM

Jennifer Buckley - FOOD
Silke Hilmer -
ELECTRICAL & ELECTRONICS
Stéphanie Meyer-Pionchon -
HARDLINES
Susanne Sun - SOFTLINES
Swati Tyagi - AUTOMOTIVE
Emilie Viengchaleune - SUSTAINABILITY

MIDDLE EAST

SGS SGEKS A.S. ABIDE-I
Hurriyet Cad. Gecit
Sk. No.10 Sisli Istanbul, Turkey
Tel: +90 212 368 40 00
Fax: +90 212 296 47 82/83
E-mail: sgs.turkey@sgs.com

AUSTRALIA

SGS AUSTRALIA PTY.LTD
10 Reid Road, Perth International Airport,
Newburn WA 6105, Australia
Tel: +61 1300 765 725
Fax: +61 8 9373 3556
E-mail: au.cts@sgs.com

SUBSCRIPTIONS

GET THEM WHEN THEY COME OUT!

Subscribe to "Consumer Compact",
and "SafeGuards & Product Recalls"

To subscribe [click here](#).



WWW.SGS.COM/CTS

FOR ENQUIRIES

Please contact:

consumer.products@sgs.com

© 2011 SGS SA. All rights reserved. This newsletter is a publication of SGS SA. It is intended to provide general information on a particular subject or subjects and is not an exhaustive treatment of such subject(s). Accordingly, the information in this newsletter is not intended to constitute consulting or other professional advice or services. This newsletter is provided "as is" and SGS SA does not warrant that the information contained therein will be error-free or will meet any particular criteria of performance or quality. SGS SA expressly disclaims all implied warranties including, without limitation, warranties of merchantability, title, fitness for a particular purpose, non-infringement, security and accuracy. The information may not be quoted or referred to in any other publication or proceeding without the prior written consent of SGS SA.

WWW.SGS.COM

WHEN YOU NEED TO BE SURE

SGS