CONSUMER COMPACT

THE QUARTERLY CONSUMER PRODUCT PUBLICATION THAT KEEPS YOU INFORMED

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ECODESIGN: GREENER PLANNING FOR GREENER PRODUCTS

SHAPE MEMORY POLYMERS

UNDISCLOSED ALLERGENS: WHAT'S THE RISK?

SGS

IN THIS ISSUE

Dear readers,

Consumers are demanding that their products are not just safe; they want reassurances that the materials used in their manufacture come from sustainable sources. The concept of eco-design goes even further, providing an environmental roadmap through which the product's full lifecycle is evaluated to optimise its design in order to minimise its ecological impact. Eco-design is the lead feature in this issue of consumer compact.

Shape memory polymers get put under the microscope so we can understand how they can enhance apparel performance.

Two regular features continue to educate. Our series on food contaminants covers vet drugs while malcolm dennis's ongoing analysis of toys describes how you can learn from a product recall.

This edition closes with a round up of the most interesting stories making the headlines.

Yours,

The editorial team

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LEADER

RETAILER LAUNCHES SUSTAINABILITY LABEL

Shoppers expect the tags on Wal-Mart items to show low prices. In the future they may also have information about the product's carbon footprint, how much water was used to create it and the air pollution left in its wake. The US retail giant Wal-Mart has recently announced a new environmental labelling scheme for its products.

Wal-Mart is merely responding to consumers who want more information about the entire lifecycle of a product so that they can feel good about buying it. They want to know that the materials in the product are safe, that it was made well and that it was produced in a responsible way. Wal-mart will introduce the initiative in three phases, beginning with a survey of its 100,000 global suppliers using 15 questions designed to help evaluate their sustainability efforts. The questions cover energy and climate, material efficiency, natural resources, and people and community – information that Wal-mart says it hasn't asked for before.

The goal is to create a universal rating system that scores products based on how environmentally and socially sustainable they are over the course of their lives – like a green equivalent to nutrition labels. Rather than a retailer or a product supplier's focusing on only a few sustainability goals — lower emissions or water conservation or waste reduction — the index would help them take a broader view of sustainability by scrutinizing and rating all sorts of environmental and social implications. Did this T-shirt come from a cotton crop that was sprayed with pesticide? Was excessive packaging used to ship these diapers?

Wal-Mart's sheer size has long enabled it to create ripple effects throughout corporate America whenever it introduces new ways of doing business, but as we have seen in the past, where the world's largest retailer leads, other retailers soon follow. If you want to get started, the lead article in this issue of Consumer Compact details the processes involved in Eco-Design and Life Cycle Analysis.

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ECODESIGN: GREENER PLANNING FOR GREENER PRODUCTS

Reducing the environmental impact of products through smarter design and lifecycle analysis

As countries compete to trade more and shoppers consume ever-greater numbers of products, production and the use of natural resources are spiralling in one direction - up. More alarming is that resources are being used up faster than they can be replenished. While the oceans are being emptied of fish and ancient forests are being destroyed, manufacturing and shipping operations are releasing huge quantities of carbon into the atmosphere. A different, more sustainable approach is needed; one that considers the environmental impact of a product, throughout its whole lifetime.

Consider your products as living beings, going through a perpetual life cycle: hatching, living and dying. Regular production, consumption and transportation activities all have a damaging impact on the biosphere, our well-being and the planet's health, as well as using up scarce natural resources. Growing levels of agriculture, forestry, fishing and industrial pollution are killing off more and more of the weaker species. In some areas of the world, scarce resources such as water and fertile land are the big concern. It is clear that economic resources are under pressure.

Industry, people, ecosystems and mineral resources exist in the same system and are all strongly interlinked. In this system there is a fine balance between resources, needs, coexistence and consumption. If you push or take too much from one area, you create imbalance in another. In a consumption-based economy, inventors, designers, industrialists and purchasing departments all have a responsibility to re-balance the system to ensure that it is sustainable.

ECODESIGN & LIFE CYCLE ASSESSMENT

For far too long, products have been designed & marketed on their aesthetic, comfort and functional attributes. Such product characteristics have taken precedence over the impact that the choice of design has on the environment.

Ecodesign is an approach to the design of a product with particular thought for the environmental impacts of the product during its entire existence including raw materials, manufacturing process, retail, usage, waste and recycling. As consideration for the use of the product during its lifecycle is grabbing more importance, so the first steps of the product's conception have taken on more significance. This is driven by ecodesign.

The meaning of ecodesign is to integrate 'environmental constraints in the design of a product or a service in order to decrease the negative environmental impacts'. It is not only about extending the life of a product; the fundamental objective is to ensure that the product has an eco-friendly existence throughout its life or life cycle.

The term 'life cycle' refers to the notion that a fair, holistic assessment requires the assessment of raw material production, manufacture, distribution,

use and disposal including all intervening transportation steps necessary or caused by the product's existence. The sum of all those steps - or phases - is the life cycle of the product. Life Cycle Assessment (LCA) is the investigation and valuation of these environmental impacts in such a way that an objective comparison can be made. Different types of 'open' or 'closed' loop LCA methods include:

CRADLE-TO-GRAVE
Cradle-to-grave is the full Life Cycle Assessment from manufacture ('cradle') to use phase and disposal phase ('grave'). For example, trees produce paper, which can be recycled into low-energy production cellulose fibre insulation then used as an energy-saving device in the ceiling of a home for 40 years, saving 2,000 times the fossil-fuel energy used in its production. After 40 years the cellulose fibres are replaced and the old fibres are disposed of, possibly incinerated. All inputs and outputs are considered for all the phases of the life cycle.

CRADLE-TO-GATE
Cradle-to-gate is an assessment of a partial product life cycle from manufacture ('cradle') to the factory gate (i.e., before it is transported to the consumer). The use phase and disposal phase of the product are usually omitted. Cradle-to-gate assessments are sometimes the basis for environmental product declarations (EPD).

CRADLE-TO-CRADLE
Cradle-to-cradle is a specific kind of cradle-to-grave assessment, where the end-of-life disposal step for the product is a recycling process. From the recycling process originate new, identical products (e.g., glass bottles from collected glass bottles), or different products (e.g., glass wool insulation from collected glass bottles).

GATE-TO-GATE
Gate-to-Gate is a partial LCA looking at only one value-added process in the entire production chain

CONSUMER PRODUCTS, LIFE CYCLE MINDSET AND COMPANIES
Companies are required to comply with regulatory and technical constraints linked to the impacts generated by their activities. Indeed, many policies and regulations have been implemented for different product categories and which are pushing companies to adopt a more sustainable approach.

Since 2006, for example, European-based producers or importers of electrical and electronic equipment

have been responsible to collect and recycle their used products according to the Waste Electrical and Electronic Equipment Directive (WEEE). In addition they must implement ecodesign processes to satisfy EuP regulations (Energy Using Products). Further directives, End of Life Vehicles (ELV) and Reuse Recycle Recover (RRR), require that manufacturers prove and improve the recyclability of their products. The packaging industry is also affected, and most industries where chemicals are involved in the process are affected by REACH.

Such measures appear all over the world. The USA Environmental Protection Agency (EPA) promotes a Product Stewardship program to focus on end-of-life considerations as one means of encouraging more environmentally-conscious design and greater resource conservation. More and

more US States are developing take-back mandates for selected products (especially for electronics) and several States have passed legislation to reduce mercury in waste. In this way, battery manufacturers and retailers have increased the collection and recycling of used rechargeable batteries and automotive manufacturers are working to reduce toxic and hazardous materials in their vehicles.

The Japanese '3Rs' initiative (Reduce, Reuse, and Recycle) promotes a zero-waste society internationally, encouraging a more efficient use of resources and substances. From Japan's 3R principle was born the Home Appliance Recycling Law, affecting electronic manufacturers. This law stipulates that electronic manufacturers must meet a recycle rate of 50-60% of home appliances in addition to recovering all CFCs from air conditioners and refrigerators. Automotive and packaging manufacturers are also covered by industry-specific recycling laws. Through dialogue with foreign nations, the Japanese are encouraging others to take concrete actions to reduce waste. They believe their '3Rs' initiative can help Asian countries, such as China, Korea and Singapore, to promote the development of similar national strategies.

There are enough regulatory incentives to urge companies to improve their design processes by implementing sustainable practices during the different steps of product design. In fact many companies have already incorporated ecodesign at the beginning of the product's life.

ECODESIGN IS A COMPLETE DECISION MAKING APPROACH

The holistic approach that is ecodesign provides designers, engineers and buyers with an integrated view of the impacts generated and consequently help identify the best eco-friendly options. While some may seem so obvious, the integration of the whole product life cycle can reveal surprising results such as in the textile industry where cotton, normally perceived as natural fibre, is not as green as we have been led to believe.

Ecodesign and LCA provide a strong stimulus for companies to adopt a more sustainable agenda, where the focus is on all the good that companies can do for the environment, society and economic growth. To succeed requires the highest level of management support as well as a high level of involvement by both the companies' own employees and all the partners in the value chain.

HOW 'GREEN' IS YOUR T-SHIRT

Cotton is cheaper and takes less energy to manufacture than synthetic fibres. But over it's lifetime, a cotton T-shirt requires more than twice the energy than is necessary to manufacture and maintain a polyster blouse. The main difference: polyster garments can be washed at a lower temperature, can hang dry and need no ironing.

Energy used over the lifetime of the garment, in kilowatt hours.*

	Raw material	Manufacturing	Transportation	Use
COTTON T-SHIRT	4	7	2	18
POLYESTER BLOUSE	9	3	1	2

Use assumes 25 washes per garment. The cotton T-shirt is washed at 140 degrees Fahrenheit, followed by tumble-drying and ironing. The polyester blouse is washed at 140 degrees Fahrenheit, hung to dry and not ironed

*The energy of one kilowatt hour will operate a 40-watt lightbulb for a full day or a 19-inch color television for about four hours

Source: University of Cambridge Institute for Manufacturing

BENEFITS OF ECODESIGN APPROACH

Besides the environmental benefits, implementing an ecodesign approach will bring other substantial benefits:

- Competitive advantage
- Cost savings
  - o Optimized material consumption (renewable materials, recycled materials etc.)
  - o Energy savings
  - o Packaging & logistics optimization
- Increasing of quality with higher Life span
- Innovation and therefore new markets

As the advantages are reasonably balanced between both environmental and economical benefits, there are high expectations that ecodesign will be adopted as the benchmark standard by which more and more manufacturers operate.

SGS can help support your implementation of practices and help you to apply LCA techniques at an early stage in your operations. For more information contact : jerome.rathle@sgs.com

UNDISCLOSED ALLERGENS: WHAT'S THE RISK?

It is estimated that 2% of adults and about 5% of infants and young children in the U.S. suffer from food allergies. Every year 30,000 are admitted to hospital and 150 die because of allergic reactions to food. Due to such a high number of cases it is very important that foods be labelled properly. Adults as well as parents of children that have a food allergy take great care in reading labels prior to giving their kids certain types of foods.

Currently, the only way to treat food allergies is to avoid the foods that trigger reactions. Even the most diligent label-readers and ingredient-checkers can, at some point, be inadvertently exposed to proteins that elicit an allergic response. The greatest danger in food allergy comes from anaphylaxis, a violent allergic reaction that simultaneously affects multiple parts of the body. Like less serious allergic reactions, anaphylaxis usually occurs after a person is exposed to an allergen to which he or she was sensitized by previous exposure (that is, it does not usually occur the first time a person eats a particular food). Although any food can trigger anaphylaxis (also known as anaphylactic shock), peanuts, tree nuts, shellfish, milk, eggs and fish are the most common culprits. In the rare case of death, the cause can be as little as one-fifth to one-five-thousandth of a teaspoon of the offending food.

Prior to 2004, there were no strict labelling requirements for foods with allergens. Food producers could note on the labels of the foods that the product may contain the allergenic ingredient such as peanuts. Then in 2004, The Food Allergen Labelling and Consumer Protection Act (FALCPA) was an important amendment to the Federal Food, Drug, and Cosmetic Act requiring that foods which were likely to contain an ingredient that is or contains protein from a "major food allergen" to declare the presence of the allergen in the manner described by the law – on the label. FALCPA identifies eight foods or food groups as the major food allergens. They are milk, eggs, fish (e.g., bass, flounder, cod), crustacean shellfish (e.g., crab, lobster, shrimp), tree nuts (e.g., almonds, walnuts, pecans), peanuts, wheat, and soybeans. The eight major food allergens identified by FALCPA account for over 90 percent of all documented food allergies in the U.S. and represent the foods most likely to result in severe or life-threatening reactions. FALCPA became effective on January 1, 2006.

FALCPA requires food manufacturers to label food products that contain an ingredient that is or contains protein from a major food allergen in one of two ways. The first option for food manufacturers is to include the name of the food source in parenthesis following the common or usual name of the major food allergen in the list of ingredients in instances when the name of the food source of the major allergen does not appear elsewhere in the ingredient statement. See boxed example, below :

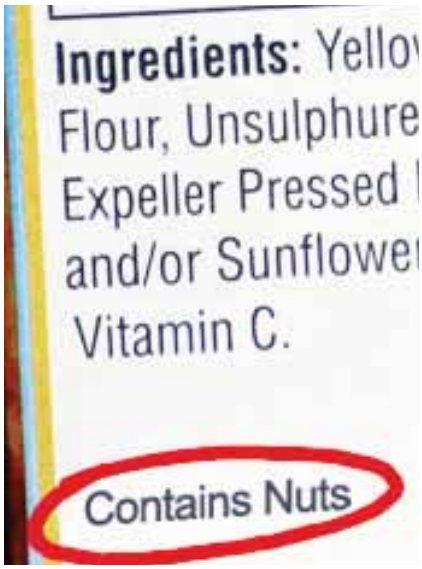
Even with the new regulations, there have been a number of recalls due to

undisclosed allergens. A recent article in the Chicago Tribune gave the following information concerning recalls: 47: Percent of products recalled for hidden allergens since 1998 were not announced to the public; 5: Average number of products recalled each week for hidden allergens; 7: Percent of onsumer complaints that result in mislabelling recalls; One third of all products recalled for hidden allergens are cookies, confectionary, ice cream or snacks; 36: Number of firms with five or more recalls for hidden allergens since 1998; and . 50: Percent of allergen recalls involving undisclosed milk or eggs.

INGREDIENTS:

Ingredients: Enriched flour (wheat flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated soybean oil, and/or cottonseed oil, high fructose corn syrup, whey (milk), eggs, vanilla, natural and artificial flavouring) salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin (soy), mono-and diglycerides (emulsifier).

The second option is to place the word "Contains" followed by the name of the food source from which the major food allergen is derived, immediately after or adjacent to the list of ingredients, in type size that is no smaller than the type size used for the list of ingredients. For Example- Contains Wheat, Milk, Egg, and Soy



How can a food manufacturer avoid a recall due to his product having undisclosed allergens? Many food manufacturers may try to prevent cross contamination through the use of dedicated facilities or dedicated production lines. Also, a variety of advisory statements are used on package labels to indicate possible cross contact. For example, a label might indicate: "Produced in a plant that processes wheat". Cross contact may occur during harvesting, transportation, manufacturing, processing, and storage.

The following steps may be used to control labelling for allergens:

1. The facility must have written allergen control procedures in place to prevent the cross contamination of non-allergic ingredients with allergens. Procedures must address product flow throughout the plant, storage, spills, equipment cleaning, dedicated utensils, changeover, rework, dedicated personnel, personnel clothing, etc.
2. Food allergens & sensitizing ingredients used in the facility should be clearly identified. Allergens include the 8 major allergens of concern. Sensitizing ingredients such as sulphites and Yellow #5 must also be identified if applicable. Allergens and sensitizing ingredients from incidental additives must also be identified.
3. The facility must have a documented label control program to insure the proper labelling of products on production lines. The program must describe the handling of labels including changes during production.
4. The product identification system needs make a provision for clear identification and labelling of those products produced on production lines and equipment on which foods containing allergen-causing agents were manufactured.
5. The product trace system must take into consideration the conditions under which allergen-containing foods are manufactured and ensure full trace back of all ingredients used.
6. Reworking of product containing allergen causing agents must be conducted under conditions that ensure that product safety and integrity is maintained. Reworked product containing allergen-causing agents shall be clearly identified and traceable.

These are only a few of the steps and procedures that can be used to assist a food manufacturer in preventing a product from reaching the consumer without the proper declaration of the ingredients, especially the allergens. These steps are by no means comprehensive.

RETURNING THE FAVOUR: ANALYZING TOY RETURNS CAN CUT COSTS

Next to product recalls and related safety issues, another big challenge facing the toy industry involves product returns. It's a costly problem that is particularly acute in the toy business because of variable play habits and the vulnerability of the toys to be put to rough use. Retailers lose the sale, sales clerks who could be moving more merchandise are tied up and people then need to repackage and restock - all of which adds to labour costs. More worryingly the retailer risks losing consumer goodwill as well as future sales from disgruntled customers. Manufacturers suffer parallel losses.

Dealt with properly, however, toy returns can provide valuable information that can help remove manufacturing problems before they occur, focus attention on potential safety issues and even shape future toy development decisions. This in turn can limit return-related expenses and/or increase sales over the long run. So there is something positive that can come out of a product recall!

In some cases, excessive return rates can be traced to defects in product design, components or assembly. Detecting these problems early provides an opportunity to take corrective action that may save future sales. In my experience, returns associated with defective product can be slashed as much as 70% through rapid intervention leading to quality improvements.

In other cases, a high rate of return may indicate that the market is not interested in the product or that the item itself has not delivered what it promised. Toy designers can respond accordingly.

The first step is to recognize that toy returns can serve as a kind of litmus test for manufacturing flaws, real and potential safety concerns, toy usability and play value. Retailers, suppliers and manufacturers can then work together to mine data on returned merchandise for clues that may point the way to resolving these issues. Be sure to:

1. Track the reasons for product returns. This includes accurately capturing the information from the consumer as well as entering it in your records. There may be an easily identifiable pattern, such as wheels that fall off or motors that break down often, that will help determine a course of action.

2. Pay special attention to the first few returns on a new product. Usually any design or manufacturing problem with a toy shows up soon after it gets into children's hands. If so, the problem may be correctable before the next shipment goes out. Since the shelf life of a toy may be only a year or two, early detection can make the difference between the item's market success or failure.

3. Alert manufacturers to returns on each item. Arrange for the manufacturer to examine returns either by sending the returned products back with an

explanation of your findings or having the vendor come to your distribution centre to conduct an analysis on the returned merchandise.

4. Remember that a return problem may also mean a safety problem. A broken part may be just a broken part, or it may be a choking hazard for a younger child. The earlier the problem is identified, the less danger of a serious accident or worse, and the less damage to the industry's reputation. In that sense, the retailer may be the first line of defence on safety issues once a toy has entered the supply chain.
No one likes returns, but understanding why a product is returned can curb future refunds as well as potentially protect children from harm. Those are two big incentives for putting product returns under the microscope.

You're standing in the toy aisle, surrounded by shelf after shelf of the latest character sensation, and trying to find that special toy for your child's birthday party. Above all, you want to make sure that the toy you pick is safe. And with all of the green marketing and green washing going on out there, you can't be sure that a toy is safe just because it claims to be "natural" or "eco-friendly". Here are a few tips to help you chose the safest toys.

HERE ARE A FEW CHECKS YOU CAN MAKE TO KNOW IF A PARTICULAR TOY WILL BE A SAFE FIT FOR YOUR CHILD

Check the age requirement
The most important aspect of buying gifts for children (whether for holidays or birthdays) is to make sure the toy or game is age-appropriate for the child. Nearly every toy or game will list the appropriate age on the box. Buying toys for children that are younger than the indicated age, even though we think a child may grow into it or is capable may lead to inappropriate play patterns and hazards that a child is not yet prepared for.

Look for sharp edges
Children are naturally excited to play with new toys at holiday times, often in a robust and possibly in an overly enthusiastic manner. It is important that parents periodically check their children's toys for any damage or breakage, which could create sharp edges or a choking hazard. If a toy looks damaged, take it away!

Double check the list
While toy shopping during the holidays, check recall notices at the toy or department store to verify that none of the child's existing toys have been recalled and are still in your child's room or toy box.

Ask mother
If you are buying toys for children that you may not know, ask the parents what they think is appropriate for the child, particularly for very young children where maturity can vary significantly. Don't forget that children under the age of three years often still put toys in their mouths, so check to see if the toys have small parts before buying.

Malcolm Denniss is a veteran toy safety expert with over 30 years in the industry.
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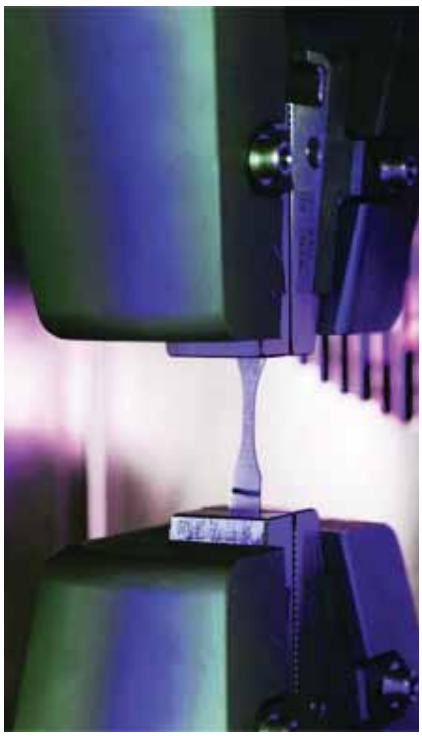
SHAPE MEMORY POLYMERS: ENHANCING APPAREL PERFORMANCE

The use of intelligent materials in textile and clothing is predicted to play a more prominent role in the future. In recent times the textile industry has devoted much effort to improve the functionality and performance of fibres to meet ever demanding customer expectations. Shape memory polymer (SMPs) fibres are one of a range of very smart materials attracting enormous interest. Their innate ability to dynamically respond to changes in moisture and heat levels opens a wide range of applications for clothing, the most important of which are functional performance and comfort sensations.

The first shape memory polymer was developed in France by the CdF-Chimie Company in 1984 and then subsequently commercialized by Nippon Zeon Company of Japan (Subrata et al., 2002) in the same year. From 1998, researchers started to experiment on the potential applications of shape memory polymers for textiles and clothing. The following information provides practical uses that have shown to be feasible in pilot projects. These potential new smart textiles and apparel will offer exciting new products in the near future.

Shape memory polymers are stimuli-responsive materials that de-form into a temporary shape and which then return to their original shape as a result of external stimulus such as temperature, pH or chemicals. A shape memory polymer can achieve a rubbery elastic state when the external temperature is over its glass transition temperature (Tg). When in this state, it can be easily deformed by applying an external stimulus over time. However, should the temperature of the material fall below its Tg, the deformation is fixed and the deformed shape remains unchanged. A return to the original shape can be easily recovered by reheating the material to a temperature higher than the Tg.



In addition to its 'shape memory' properties, the ability to allow water vapour to pass through (permeability) is another favourable property of SMPs. Experiments by Hu et al., 2003, found that when temperatures rose higher than Tg, the moisture permeability of a thin film of shape memory polymer becomes extremely high. The molecular movement of the amorphous polymeric soft segments becomes active at temperatures near or higher than the Tg and forms 'free space' in the soft segment domains. These free spaces allow water vapour molecules to be easily transferred through the thin polymer film to the atmosphere.

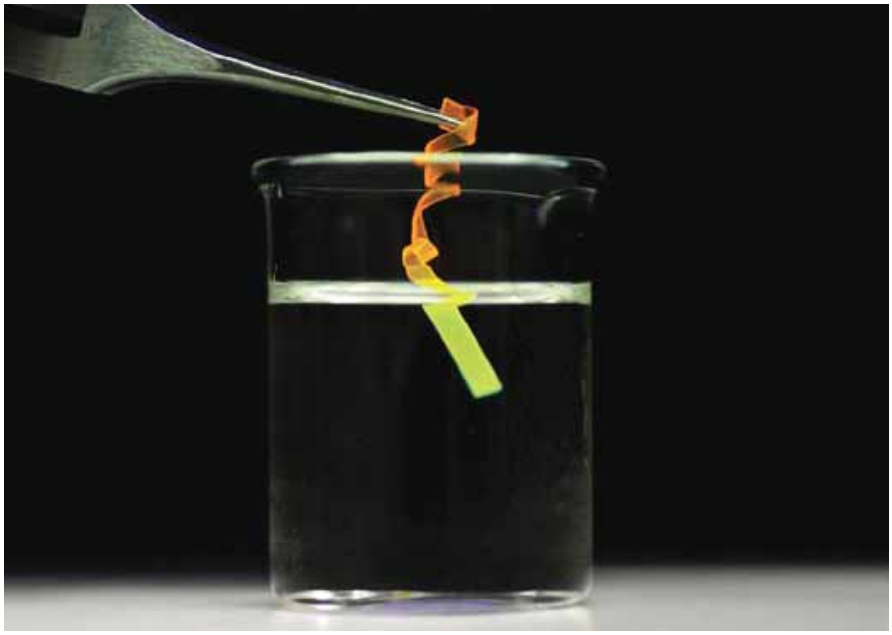
To achieve good shape memory behaviour, it is essential for a polymer to have a sharp transition from glassy state, a long relaxation time and a high ratio of glassy modulus to rubbery modulus. In research experiments fabrics/garments treated with SMPs were endowed with excellent hand, shape retention, dimensional stability, good durability, wrinkle free, flat appearance, bagging recovery, comfort to wear and easy care.

SMP APPLICATIONS

SMPs can be made into fibres which can be used in woven or knitted fabrics or used as film, coating, finishes or laminates in textile and apparel applications. The extraordinary properties of SMPs have created tremendous potential for developing smart textiles.

Textile and garments made using SMPs have good water vapour and air permeability, both of which are ideal conditions for sportswear and outdoor clothing. The shape memory effect can be applied to smart fabrics to provide protection from harsh weather conditions, dissipate perspiration and to create more flexible stretch and recovery properties.

Fabrics coated or laminated with SMPs have higher water vapour permeability at higher temperature and low water permeability at lower temperatures. The reversible temperatures for the shape memory effect to be triggered should be near the body temperature. When the temperature is low, the membrane can reduce permeability so as to prevent heat and sweat from passing through it. This helps retain body heat. When the temperature is high, the membrane can increase permeability which will allow heat and sweat to pass through. This will help release heat away from the body and allow the sweat to evaporate to cool the body. This 'flexible barrier function' allows the garment to intelligently adjust its insulating properties in response to temperature changes. Using a composite film of SMPs as an interlining in multi-layered garments can provide apparel systems with values of thermal insulation to protect the human body against different weather conditions.



Shape memory fabrics can recover their original flat appearance and retain the original creases designed into them, after the fabrics have been immersed in water. This magic shape memory property can be extensively applied to shape recovery clothing including uniforms, suites and shirts. When an SMP based garment becomes creased during wear, and is then washed at a specified temperature, it can recover its original state to have wrinkle-free performance.

The application of Shape memory polymer can also improve the thermo physiological comfort of surgical protective garments, incontinence and bedding products due to the temperature adaptive moisture management property.

Shape memory effect not only offers functional attributes, but also provides aesthetic value to fabrics. Shape memory effect can create a dual and decorative fabric that can demonstrate various aesthetic characteristics within the same cloth. Creases and pleats can be created at a high temperature in apparel products as slacks and skirts. Three-dimension fabrics have also been developed recently.

TRENDS AND FUTURE DEVELOPMENT

Currently, the important achievement and advancement of SMPs in the textile and clothing industry have been made by many Shape Memory Research Groups. The applications of SMPs in the textiles and clothing industry may bring tremendous potentials and values to the fashion world in the near future. However, there are still very challenging technological aspect and much effort is needed conduct extensive research to exploit more applications in this area.

For further information related to this article, please contact : kris.wan@sgs.com

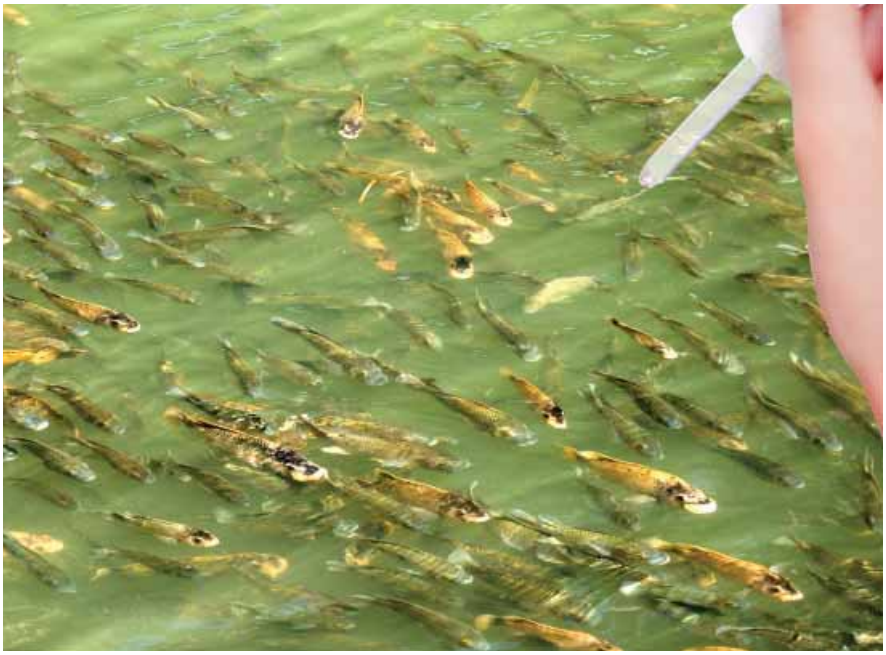
FOOD CONTAMINANTS: VETERINARY DRUGS IN FOOD PRODUCTS OF ANIMAL ORIGIN

The use of veterinary drugs was and still is widespread in animal and fish breeding. Their purpose is simple: to protect and treat animals from disease and thus increase productivity. Yet prolonged and over-use of vet drugs, without respecting the minimum withdrawal periods, has increased the incidence of drug residues in products of animal origin such as meat & fish products, milk, eggs and honey. As these products have been consumed they have entered the human food chain, triggering new regulations by many health authorities to control and even ban their use.

In the EU, veterinary drugs are regulated by Council Directive 96/23/EC, April 1996, covering measures to monitor certain substances and residues thereof in live animals and animal products. Only to name the most important:

- Antibacterial substances
- Anthelmintics
- Anticoccidials
- Sedatives
- Non-steroidal anti-inflammatory drugs (NSAID's)

This Council Directive pushed EU member states to set up a monitoring programs and analytical methodologies



to inventory the situation on their market. This resulted in the famous list of European Maximum Residue Limits (MRL's) for veterinary drugs in products of animal origin – produced in both EU and foreign countries.

More recently special attention has been paid to the category of antimicrobial drugs known as sulphonamides and quinolones due to increasing resistance of micro-organisms against some of these drugs, and which are also used in medicines to treat microbial infections in humans. This led to a widespread consensus that prescription of antibiotics, just as in human medicine, should be minimized and where possible banned. The MRL's for this category of drugs are now also fixed for bovine, ovine, swine, poultry, aquaculture, milk, egg and honey products.

The category of antibacterial vet drugs also fall under a different category of chemical substances. The most important representatives in this group of veterinary drugs are:

- Tetracyclines
- Beta-Lactams (former Penicillin's)
- Amphenicols
- Nitrofurans
- Sulphonamides

Each of these subgroups of antibacterial drugs has its proper analytical methodology. But techniques for low detection levels in this concentration range are limited. ELISA and other immuno-assay based techniques can be applied but positive samples always need to be confirmed by the technique of LC-MS/MS for unique identification of the found substance and quantification.

Of course legislation and analytics do not guarantee products of animal origin will comply with the authorised MRL's. This was proven by some recent scares in which the residual concentration of chloramphenicol and nitrofurans detected in milk powder did not conform to the legal requirements.

HUGE INCREASE FOR NUTRITIONAL LABELLING

A new survey by FLABEL indicates widespread listing of nutritional information on food products across the EU and Turkey, with 85% of goods surveyed providing info on back-of-pack and 48% on front-of-pack.

The FLABEL project – Food Labelling to Advance Better Education for Life – is a three-year, EU-funded project set up to provide a better understanding of how labelling information affects consumers' food choices and habits. The information included on labels is a hot topic right now, as new European legislation that aims to unify labelling systems across the Union is working its way through the law-making protocols.

The new survey showed overall good penetration of nutrition labelling practices. Indeed, the organisation said they were "higher than previously reported" even though nutrition info is, for now, voluntary in Europe -except when nutritional claims are made.

SURVEY SCOPE

The FLABEL researchers looked at products in three different kinds of retail stores: major players ranking amongst the top 5; consumer cooperatives or national retailers; and discounters. Overall, some 50 retailers were involved.

The team also looked at a range of different product types: sweet biscuits, breakfast cereals, ready meals, carbonated soft drinks and yogurts. Of these, the breakfast cereals category was seen to make most use of nutritional info, with back of pack info on some 94 per cent of products and front-of-pack info on 70 per cent.

FORMATS

The researchers also looked at the presentation of the information. By far the most common format was tabular or linear listing on the back of back. Calories, protein, carbohydrates and fat values tended to be given, and in some cases lists were extended to give sugar, saturated fat, fibre and sodium as well.

As for information on front-of-pack, the two most common formats were nutrition claims and guidance daily amounts (GDA's) – the scheme developed by the food industry to give values as a percentage of recommended maximums for an average woman.

This survey questioned around 17,300 consumers in six EU countries – France, Germany, Hungary, Poland, Sweden and the UK – each of which uses a different nutritional labelling system.

The researchers reported high levels of awareness of GDA's: generally, over 50 per cent of respondents in each country had heard of it. Moreover, consumers were generally familiar with the labelling system used in their own country.
Professor Klaus Grunert, who conducted the study for EUFIC, said in a recent podcast interview that "consumer have little problem understanding those labelling formats we currently have, such as GDAs and traffic lights."
"If you ask people to use that information to rank products in terms of healthiness, most people are able to do that. But actual use in the shop is relatively low," he added.
"One unresolved question is whether these labels have any impact on the choices people make."

"IF YOU ASK PEOPLE TO USE THAT INFORMATION TO RANK PRODUCTS IN TERMS OF HEALTHINESS, MOST PEOPLE ARE ABLE TO DO THAT. BUT ACTUAL USE IN THE SHOP IS RELATIVELY LOW"

SGS ANNOUNCES COOPERATION WITH FOOD INSTITUTE OF JIANG NAN UNIVERSITY

On May 5th, SGS China announced a three-year strategic cooperation with the Food Institute of Jiang Nan University. The collaboration will cover research, training as well as the exchange of technical information relating to food safety and quality management. For Jiang Nan University, the leading Chinese institute in the field of food science, this is the first time that they have entered into an external cooperation to purely focus on food safety and quality.

As part of the agreement, experienced SGS technical managers and auditors will deliver lectures to improve the student's understanding of food safety. With the Shanghai Expo only 1 year away, such high level teaching will help to increase the level of hygiene knowledge amongst the students.

SGS's Shanghai laboratory will become the student's practice and research base with a number of graduate students encouraged to participate in day-to-day research and development in the facility.

Jiang Nan University is one of the national '211 Project' universities, an exclusive group of academic centres which the government has identified for special financial treatment. It has the only "Food Science and Technology" State Key Laboratory in China. In the field of food safety, Food Institute of Jiang Nan University has the highest level of scientific research and teaching quality and enjoyed a respected reputation in the domestic food industry.

This beneficial cooperation is an effective way to increase the standard of China's food safety and quality systems and provides an important opportunity for SGS to provide something tangible to the local community.

SGS China has the largest independent network of food testing capabilities in China. For further information please contact:
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SGS USTC LAUNCHES CERTIFICATION PROGRAM FOR PLUMBING PRODUCTS

SGS USTC (US) has announced a new certification program for plumbing products that extends the company's long-standing testing services for the plumbing industry. SGS can now both test and certify products for their adherence to the Uniform and International Plumbing Codes.

SGS is accredited for testing under ISO 17025 and for certification under ISO Guide 65 by the International Accreditation Association (IAS). Services include on-site quality systems inspections at customers' factories as well as product testing and certification in-house at SGS labs.

The first manufacturer to take advantage of the new program, D'Vontz, has garnered international awards and recognition for the design and development of their fashion plumbing products and accessories. The D'Vontz copper line will be the first to receive the SGS-USTC certificate of compliance, with other clients' brands to follow shortly.

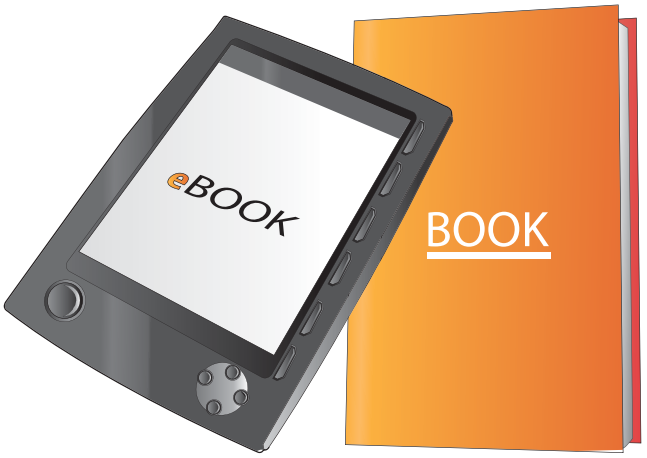
"SGS offers a comprehensive program with upfront pricing, one-stop testing and certification, years of experience in the plumbing industry, and active involvement in industry committees," said John Kellerstrass, Vice President

of D'Vontz. "We expect them to be our quality assurance partner over the long term."

"Over the years, we have talked to many plumbing products manufacturers who have been looking for alternative certification services that can provide a global footprint as well as competitive pricing," said Brian McDonald, SGS Tulsa Operations Manager. "This is a logical extension of our testing services for the plumbing industry and a way for manufacturers to use the same testing and certification service for products produced anywhere in the world."

For the plumbing industry SGS also provides prototype testing, complete production article evaluation, follow-up inspection, listing and labeling, independent test witnessing and liability claim investigation. SGS can perform complete evaluations of fixtures and fittings to comply with numerous plumbing standards. Testing is accepted by the International Association of Plumbing and Mechanical Officials, Inc., American Society of Sanitary Engineers, International Laboratory Accreditation Cooperation Affiliates, National Evaluation Service and other code groups. For further information please contact: brian.mcdonald@sgs.com or scott.parkhurst@sgs.com.

SUSTAINABILITY GUIDEBOOK



Launch of online guidebook to support better sustainability practices for hardline products

In response to mounting environmental-related legislation in the EU and in the U.S. and consumers ever-increasing expectations for greener products, SGS is pleased to offer a new Guidebook on sustainability and green issues for the Hardlines industry.

Green and sustainability practices have the potential to enhance the quality of the product, make manufacturing process and production more efficient and can also help save costs.

Drawing upon SGS's Quality Assurance experience of working across global supply chains, the Guidebook provides the facts regarding Restricted Substance testing and also provides the reader with practical advice on sustainability strategies. Protocols and regulations covered range from Eco-label, Eco-design, green purchasing methods, CPSIA and CARB to the latest quality assurance updates in the Hardlines industry.

The authors of the SGS Hardlines Guidebook to Green and Sustainability Practices include experts from the toy industry with over 25 years of experience, chemical PhD technician with extensive, practical chemical laboratory experience and consultants from the SGS global sustainability team.

The guidebook is the ultimate training and reference material for senior managers working in the quality assurance field. It is written in layman's language so that it can be easily understood and quickly applied to industry practice.

There are 2 options to subscribe :
1. Online Guidebook: USD 20 /Euro 15
2. Online Guidebook + PDF file : USD 50 / Euro 36.

Click here for Online Subscription or contact:
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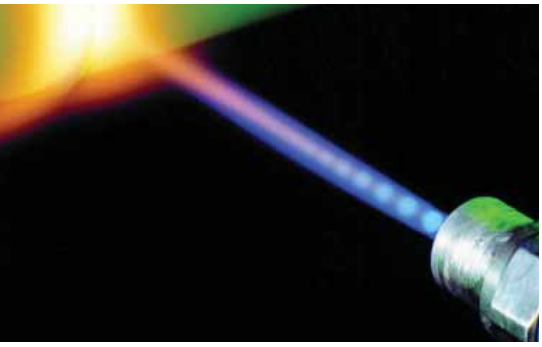
CONSUMER PRODUCTS

EU MEMBER STATES REACH ENFORCEMENT REGIME

The new European Union chemical regulation – REACH (Registration Evaluation and Authorization of Chemicals) has been in force for over one and a half years. While businesses have been preparing for compliance measures, they also want to find out penalties for non-compliance so as to estimate resource allocation. Learn more

E&E



LASER AND LED RADIATION CLASS TEST

As the latest developed lighting technology, LED does not only embody its advantage on luminescence, but also excel incandescence, fluorescence and other traditional light sources in terms of production, manufacturing and usability. Learn more

JAPAN: THE JOINT ARTICLE MANAGEMENT PROMOTION-CONSORTIUM (JAMP) TAKES CHALLENGE

The JAMP consortium established in Japan since September 2006 as an entity body to promote cross-individual activities by creating & promoting specific mechanisms to facilitate disclosure & conveyance of information on chemicals within supply chain products. Learn more.

SOFTLINES

CHINA REVISES THE TEXTILE CARE LABELLING SYSTEM TO USE UPDATED SYMBOLS – GB/T8685-2008

A revised version of the Chinese Textile – Care Labeling Code Using symbols (GB/T 8685-2008) has been approved by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of the People's Republic of China. This revised standard was approved on June 18, 2008 and become effective on March 1, 2009. This is one of the recommended standards cited by GB 5296.4 Instructions for use of products of consumer interest – Part 4: Textile and apparel, which is itself a compulsory standard in China. Learn more.

SURGE OF DRAWSTRING RECALLS DUE TO STRANGULATION

CPSC Guidelines for Drawstrings on Children's Garments were developed due to numerous injuries and fatalities from 1985 through 1997. From 1985 through 2000 there were only 2 CPSC recalls for drawstring ban. There were 28 recalls from 2001 - 2007 and there have been 31 recalls from 2008 through June 2009. Learn more.

HARDLINES

ITALY DRAFT REGULATIONS ON FOOD CONTACT STAINLESS STEEL MATERIALS

Italy recently drafted regulations on stainless steel materials and articles intended to come into contact with food. The provisions list the types of stainless steel materials that may be in contact with foods. An effective date has not been set in the draft regulations. Learn more

NEW HARMONISED STANDARD EN 1273:2005 FOR BABY WALKING FRAMES UNDER GPSD

Baby walking frames that help pre-ambulatory children to move around on their own also may result accidents using baby walking frames are mainly due to falling down stairs or tipping over, especially when children try to go over uneven surfaces such as door thresholds or carpet edges. Injuries resulting from such accidents can be very serious, because in the majority of cases they affect the child's head. Learn more

CANADA PROPOSED REGULATORY AMENDMENT TO CRIBS, CRADLES AND BASSINETS

In order to improve the protection and safety of young children using cribs, cradles and bassinets, on April 11, 2009 The Government of Canada proposed regulatory changes of the current "Cribs and Cradles Regulation(SOR/86-962)" of the Hazardous Products Act (HPA), as well as "Standard cribs, portable cribs and cradles" in Item 25 of Part II of Schedule I of the HPA to "Cribs, Cradles and Bassinets", which broadening the definition of a crib to eliminate the distinction between standard and portable cribs, as well as adding bassinets requirements. Learn more

CPSC SOP ON LEAD IN PAINT ALLOWS COMPOSITE TESTING

The Consumer Product Safety Commission (CPSC) recently published a Standard Operating Procedure (SOP) for lead content in paint and other similar surface coating materials. The new method has an option to test different materials in a composite manner. The rules for accreditation for lead in paint for compliance with 16 CFR 1303 remains unchanged and existing accreditations remain valid. Learn more

AUSTRALIA AND NEW ZEALAND BAN TOYS WITH EXCESSIVE MIGRATORY LEAD

In September 2007, Australia and New Zealand announced interim measures to ban toys for children containing excessive levels of migratory lead. These two South Pacific neighbours recently announced a permanent ban on such consumer products if their accessible parts contain more than 90 mg/kg of migratory lead. Learn more

TAIWAN PROPOSES TO FURTHER PROHIBIT PHTHALATES AND TO LIST BPA

The Environmental Protection Agency (EPA) of Taiwan recently proposed to strengthen the existing restriction on phthalates. The use of phthalates DEHP, DNOP, DBP and BBP would be completely prohibited in toys. Bisphenol-A is proposed to be listed as Class 4 in the List of Announced Toxic Chemicals. Learn more

EN 71-1:2005 +A8 HARMONISED

New amendments to the toy safety standard EN 71-1: 2005 have been published and harmonised 1. The standard was harmonised on 30th of April by publication in the Official Journal of the EU. The harmonisation by EU Commission has been done by a fast track procedure in order to include important requirements for magnets in toys. Learn more

IS THE UK THE WORST ELECTRICAL RECYCLER IN THE EU?

A recent research study on the recycling of electrical equipment by Computer manufacturer, Dell, found that less than half of Britons regularly recycled old computer hardware, compared with more than 80% of Germans. It is thought the UK creates enough electrical waste each year to fill the new Wembley Stadium six times over.

In a related study, commissioned in May by mobile phone operator O2 it was, found that the average number of electrical equipment inside a typical home was 2.4 TVs, 1.6 computers, 2.4 games consoles, 3 mobile phones, and 2.2 MP3 players.

Though the Waste Electrical and Electronic Equipment Directive (WEEE) was introduced in 2002 to reduce the amount of electrical and electronic equipment being produced and to encourage everyone to reuse, recycle and recover, it only came into force in the UK in 2007.

Environmental consultant Tony Juniper said that a lack of awareness was the issue in the UK. "Governments in every country need to make the disposal of old electrical equipment as accessible and commonplace as recycling old paper, plastics and glass," said the former Friends of the Earth director.

EU SCRAPS BAN ON MISSHAPED FRUIT & VEGETABLES

Less food waste and more choice will result from the EU's decision to completely remove its 20-year ban on misshaped fruit and vegetables.

Under the new rules effective since 1st July, 26 types of fruit and vegetables will no longer have specific marketing standards relating to classification, size, shape, development, variety and labeling details. Produce such as cabbage, onions, cherries, avocados and zucchini can now be sold without restriction. But specific marketing standards will apply to the 10 most popular fruit and vegetables, including apples, citrus fruit and tomatoes. These will have to be labeled as non-standard. "In practical terms, this means that an apple which does not meet the standard may still be sold in the shop, as long as it is labeled 'product intended for processing' or equivalent wording," according to an EU commission statement.

The decision would reduce waste and allow farmers to sell more of their crop and widen the choice available for consumers. Previously such produce has been sold to food processors which pulp them into sauces and soups.

UK food and farming minister Jim Fitzpatrick welcomed the EU's decision: "The new marketing regulations will help supermarkets and greengrocers label their fruit and vegetables correctly, and will provide more choice for people who aren't bothered by what shape their fruit & vegetables.

The UK National Farmers Union (NFU) said in a statement: "It is good to hear that people will be given the chance to

buy odd-shaped fruit and veg and see they taste just as good. It will help eliminate waste, which has to be good news for consumers and British growers."

UK supermarket Sainsbury's called for the restrictions to be lifted last year after it was prevented from selling a range of twisted vegetables for Halloween.

The rules for bananas, which are grown mainly outside the EU, remain unchanged because different legislation applies to them.

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