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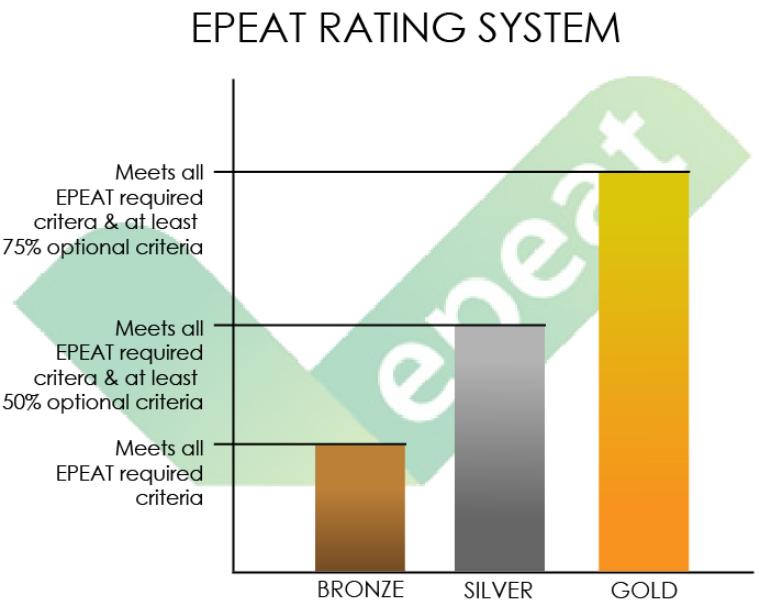
TÜV RHEINLAND'S QUARTERLY NEWSLETTER ON ENVIORMENTALLY FRIENDLY PRODUCTS AND SERVICES

TÜV Rheinland Introduces Full Suite of EPEAT Registration and Verification Services to the North American Markets

TÜV Rheinland, will provide a full suite of services for the Electronic Product Environmental Assessment Tool (EPEAT) rating system. Through an agreement with the Green Electronics Council, TÜV Rheinland can now offer product registration entity (PRE) services to manufacturers that wish to register their products in EPEAT. The company has designed a comprehensive and effective solution package for OEMs and brand owners to list their products in the EPEAT system within a shorter timeframe. TÜV Rheinland will work with manufacturers to identify whether their electronic products are eligible for a Bronze, Silver or Gold EPEAT rating based on their attainment of environmental performance criteria. The Green Electronics Council designed EPEAT as an easy-to-use resource for which purchasers, manufacturers, resellers and others can evaluate, compare and select electronic products based on their environmental attributes. The system addresses the elimination of toxic substances, the use of recycled and recyclable materials, end-of-life design, product longevity, energy efficiency, corporate performance and packaging attributes. The criteria also requires manufacturer to take responsibility for the collection and recycling of all registered devices.

TÜV Rheinland offers manufacturers and brand owners a comprehensive and effective solution towards meeting the EPEAT environmental performance requirements and listing their products on the EPEAT registry. The assessment tool helps manufacturers obtain market recognition for the design and manufacturing of greener electronic products. "Our partnership with the EPEAT PRE family bolsters our commitment to serving the environmental needs of electronics manufacturers," says Geoffrey Bock, Director of Environmental Services. "Manufacturers can now rely on TÜV Rheinland to guide them through the EPEAT registration process and in turn it will translate into new demand and revenue for our clients."

To date, purchasers choosing EPEAT-registered electronics over products that fail to meet the system's criteria have eliminated enough mercury to fill 4.6 million fever thermometers, avoided more than 528,000 metric tonnes of hazardous waste and decreased solid waste by the equivalent of 248,000 US households' annual waste.



Draft Commission Directive amending Annex II to RoHS Directive (2011/65/EU)

On December 17, 2014, the European Commission notified the World Trade Organization (WTO) that it will be adding four additional substances to the EU RoHS Directive (2011/65/EU). This will be done as a Delegated Directive amending Annex II (list of restricted substances) of the RoHS Directive.

Four phthalate substances will be added to the RoHS substance restrictions. Phthalates are primarily used as plasticizers in plastics, particularly in PVC plastic which is commonly used for wires and cables but can also be found on some electronic components or other plastic parts.

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The restrictions take effect beginning on July 22, 2019 and most products will need to comply including medical devices, by July 22, 2021. Click here to read the full release

It is expected that the additional 4 Phthalates added to the RoHS Directive will add stress initially to supply chain management, as new declarations of conformity for their part numbers will be required.

Risk assessments and testing of high risk parts will be required according to EN 50581 (RoHS – Technical Construction File requirements)

Standard Changes to China RoHS

At the start of this year SJ/T 11364-2006 was replaced by SJ/T 11364-2014. The new title of the standard is "Marking for the Restricted Use of Hazardous Substances in Electronic and Electrical Products".

Below is a list of changes:

- Name/Scope Change: "Electronic information products" is now "electronic and electrical products". Also "pollution control" has been changed to "restricted use of hazardous substances".
- An explanation for the reference application in logistics processes has been added.
- Reference to Chinese Standard GB 18455 has been deleted from the standard
- Definitions and terms for "electronic and electrical products", "hazardous substance", and "logistics" have been added.
- Also, digital format options have been added for electronic and electrical products with display functions.
- Deletion of the name labeling requirements for packing materials.
- One should also note that EEP (electronic and electrical products) now have rated working electrical voltages limitations for both AC and DC.
- A section that specifies the conditions that must be met if using the digital format mark.
- The clause 6.2 table has a new reference to the option of adding an explanation of when you choose to add "X" for a particular part name and hazardous substance.

As you might notice, the Chinese standard is starting to look more and more like something you would see as part of EU RoHS. There is discussion of the scope of products may be moving to a similar product scope as seen with EU RoHS. The ministry law has not officially been updated, thus the standard is said to be in abeyance until that time.

Regulation (EU) 1272/2013 REACH amendment of PAH

Polycyclic aromatic hydrocarbons, also known as PAHs (and sometimes polyaromatic hydrocarbons) are a group of over 150 chemicals which are typically produced during the incomplete burning of coal, oil, gas and other organic substances. Some examples of PAHs include: naphthaline, anthracene, phenanthrene and pyrene. Most PAHs are considered carcinogenic, mutagenic and harmful to the reproductive system. They target fat tissues, the kidneys and the liver most often.

PAHs exist in a wide range of petrochemical products such as plastic, rubber, crude oil, lubricant, rustproof oil, form release agents, mineral oil and tar, and in daily chemicals such as pesticides, charcoal, germicides and mosquito-repellent incense. They can also be found in medicines and dyes. PAHs can also be man-made. Grilling or charring food at home, burning a wood fire or even breathing in cigarette smoke can expose you.

PAHs present a problem because they do not burn off easily, leading to a longer stay in the environment. Although some can turn into a vapor in the air, most do not break down easily in water. Exposure to PAHs can occur with skin contact, ingesting of contaminated air or eating/drinking contaminated food or water, and they typically leave the body within a few days through feces or urine.

It's estimated that exposure to 3 mg/day of PAHs will not cause any long-term health issues. However, studies have shown prolonged exposure over a significant amount of time might cause cancer and difficulties with reproduction.

Under the REACH Regulation (EC) No 1907/2006 Annex XVII, Entry 50, eight PAHs have long been restricted in extender oils used in tires. The same eight PAHs are now subject to the new requirements added by two new paragraphs in the new regulation.

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On December 27, 2015 The Commission Regulation (EU) No 1272/2913 will go into effect.

What to Know: Key Amendments

Articles with direct, prolonged, or short-term repetitive contact with the human skin or the oral cavity, made of plastic and rubber shall not contain more than 1 mg/kg (0.0001 % by weight of this component) of any of the listed PAHs.

Such articles can include:

Sport Equipment
Bicycles
Golf clubs
Racquets

Household Utensils
Trolleys
Walking frames

Tools for domestic use

Clothing
Footwear
Gloves
Sportwear

Watch-straps
Wrist-bands
masks
head-bands

Toys*
Activity toys*
Childcare Articles*

*Shall not contain more than 0.5 mg/kg (0.00005 % by weight of this component) of any of the listed PAHs.

Name of PAH	CAS No.
Benzo[a]pyrene	**50-32-8**
Benzo[e]pyrene	**192-97-2**
Benzo[a]anthracene	**56-55-3**
Chrysene	**218-01-9**
Benzo[b]fluoranthene	**205-99-2**
Benzo[j]fluoranthene	**205-82-3**
Benzo[k]fluoranthene	**207-08-9**
Dibenzo[a,h]anthracene	**53-70-3**

For more information about these PAH regulation updates please download our digital flyers.

REACH amendment flyer

GS Certification flyer

New PAH Requirements for GS Certification

The GS Mark is a voluntary certification mark that is used by manufacturers of consumer products of various kinds, and is accepted as the benchmark product safety certificate for exports to Germany. Effective 2008, the determination of the presence of Polycyclic Aromatic Hydrocarbons (PAH) in products is required in addition to the required safety tests. Although this is a voluntary standard, it has become the de-facto standard to limit PAH in all products exported to Germany.

A new set of PAH requirements under ProdSG has been implemented for all GS projects. This requirement was published by the German Committee for Technical Equipment and Consumer Products (Federal Institute for Occupational Safety and Health) in August 2014. The new AfPS document will replace the ZEK 01.4-08 as of 1 July 2015.

While the analytical test conditions remain largely untouched, the new requirements offer an entirely new set of specifications for PAHs. The new requirement has implemented the latest REACH Annex XVII (Item 50) Restriction of PAH for toys and other consumer products. The overall limits and categorization rule has been modified to further minimize the possible chemical hazards associated with these chemicals.

A quick look at some of the main changes:

- Change to Scope: Inclusion of all toys with intended or prolonged skin contact
- Increased limits in Category 1 for certain PAH's
- Limits have been strengthened for products under Category 2 and 3.
- Timeline for compliance

Affected Product Categories:

- Electrical and electronic products
- Toys
- Food packaging materials
- Plastic products
- Rubber products
- Machinery
- Timeline

According to the new requirement, GS Mark certificates that are issued before July 1, 2015 will initially retain their validity. However, as a regular control measure to monitor the manufacturing process, if the product does not comply with the latest requirement at its next inspection, then the GS mark will be withdrawn immediately. Example, validity to the old requirement is to be transitioned between 1 year and 2 based on factory inspection frequency.

Green Compliance Webinar - Ask The Experts!

Environmental regulations can change many times per year, which means you need to stay current with the changes and adapt quickly. Our experts can help! Download our On-Demand Webinar to learn more about the following:

- RoHS Directive 2011/65/EU
- RoHS - Commission Directive (EU) 2015/863
- RoHS - Exemptions
- REACH Regulation
- WEEE Directive 2012/19/EU
- China RoHS2

Our experts address questions from the market including:

- Did you know that the EU is considering changing the definition of an "article" according to the REACH Regulation?
- Have you been keeping up with the exemption expiration dates on RoHS?

CLICK HERE TO DOWNLOAD OUR ON-DEMAND WEBINAR

Canada Approves SOR/2014-254 Products Containing Mercury Regulation

Mercury also known as quicksilver is a heavy, silvery-white liquid metal. It is considered a highly toxic element that is found both naturally as well as through manufacturing use or disposal activities. While consumption of fish is considered to be the most significant source of ingestion related to mercury, coal-burning power plants, metal production, waste disposal, chemical production are also known to cause mercury poisoning.

Several countries and government agencies have issued a ban limiting the use of Mercury. In 2008, the United States, ranked the world's top exporter of mercury, introduced the Mercury Export Ban Act, implementation of which would remove a significant amount of mercury from the global market. Several other nations including EU and China has followed suit.

The most recent of such a ban comes from Canada. The Governor General of Canada, approved the SOR/2014-254: Products Containing Mercury Regulations under the Canadian Environmental Protection Act. The effective date of this regulation is November 8, 2015.

According to the SOR/2014-254, subject to section 2, these Regulations apply to any product that contains mercury and its compounds. The new regulation also provides a list of products that are exempt from this regulation, as long as they fall within the categories listed:

- waste
- a product that is at the end of its useful life and that is intended to be recycled
- a food, drug, or cosmetic as defined in section 2 of the Food and Drugs Act
- a veterinary biologic as defined in subsection 2(1) of the Health of Animals Act
- a surface coating material as defined in subsection 1(1) of the Surface Coating Materials Regulations or a surface coating material applied to a toy regulated under the Toys Regulations
- a pest control product as defined in subsection 2(1) of the Pest Control Products Act
- a feed as defined in section 2 of the Feeds Act
- a fertilizer as defined in section 2 of the Fertilizers Act
- an explosive regulated under the Explosives Act
- ammunition and explosives under the direction or control of the Minister of National Defense
- a product, other than a battery, that has a mercury concentration of 0.1% or less by weight in homogeneous materials

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- a battery, other than a button cell battery, that has a mercury concentration of 0.0005% or less by weight in homogeneous materials
- beginning on January 1, 2016, a button cell battery that has a mercury concentration of 0.0005% or less by weight in homogeneous materials
- from January 1, 2016 until December 31, 2019, a button cell battery that is incorporated into a medical device that is intended to remain in the body for at least 30 consecutive days
- ores, concentrates and by-products of metallurgic operations
- an on-road vehicle as defined in subsection 1(1) of the On-Road Vehicle and Engine Emission Regulations that is of the 2016 model year or of a previous model year as determined under section 5 of those Regulations.

The regulation prohibits the manufacture or import of any product that contains mercury, unless the product belongs to the list of products specified in Column 1 of the schedule (see above bullets), the amount of mercury contained is within the specified limits, if the product is manufactured or imported before the end date set, or if the person holds a permit issued under subsection 5(1).

Labeling Requirements

All products containing mercury or its compounds must be listed and should be clearly visible on the product and packaging.

- The statement "Contains mercury / Contient du mercure"
- Safe handling procedures and the measures to be taken in case of accidental breakage, the address of a website where that information is available, or contact information for a person who can provide that information
- The options available for the disposal and recycling of the product in accordance with the laws of the jurisdiction where the disposal or recycling is to take place, the address of a website where that information is available, or contact information for a person who can provide that information
- A statement to the effect that the product should be disposed of or recycled in accordance with the applicable laws.

The information must also appear in both official languages, and must be presented in a font size of at least 10 points with character that are at least 3mm in height, legible, indelible and are impressed, embossed or in a color that contrasts the label background or the color of the product.

If the product is too small, or is not packaged, a notice must be attached to the product or the manual that accompanies the product with the relevant information.

Products containing mercury must ensure that the symbol Hg is indicated in the clearly specified font and size requirements in addition to it being legible and indelible.

Testing Requirements

Any determination of total quantity of mercury made for the purposes of these Regulations must be conducted by a laboratory that is accredited by a Canadian Accrediting body under International Organization for Standardization standard ISO/IEC 17025:2005 or a laboratory that is accredited under the Environment Quality Act, R.S.Q., c. Q-2.
Other significant features of this regulation include:

Any person that manufactures or imports a product that contains mercury other than the ones excluded, must submit a report to the Minister starting 2016 calendar year and every third calendar year after that year, on or before March 31 of the calendar year following the year in respect of which the report is prepared.

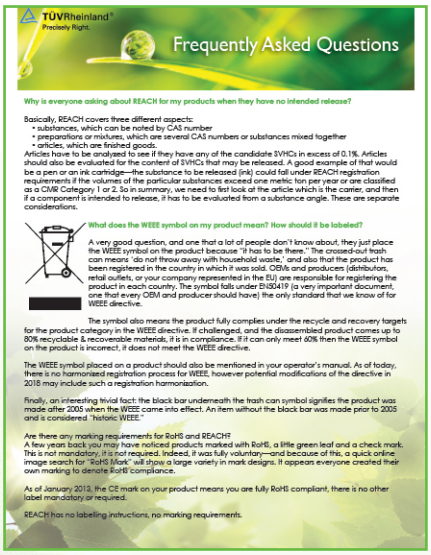
The new regulation will go into effect later this year, giving very little time for manufacturers or importers to comply. TUV Rheinland of North America is an ISO/IEC 17025:2005 accredited laboratory that can assist with determining total mercury in your product and developing a compliance path to comply with the requirement.

Whitepaper: Regulatory Changes in European Union (EU) Environmental Compliance

In the last two years, various regulatory bodies have made impactful changes to extant environmentalprotection regulations in regards to potentially hazardous materials in products offered on the open market.

Environmental compliance testing and certification is part of TÜV Rheinland's comprehensive service portfolio available to manufacturers. The company tests and certifies all types of electrical and electronic products, including home appliances, lighting, telecommunication, and medical devices, as well as heavy industrial and large-scale energy production equipment. This overview is designed to help manufacturers understand what such directives as RoHS 2, RoHS 3, and REACH will require of them.

CLICK HERE TO DOWNLOAD OUR WHITEPAPER



Frequently Asked Green Questions

Download our FAQ document and find the answers tho these commonly asked Green questions:

- Why is everyone asking about REACH for my products when they have no intended release?
- What does the WEEE symbol on my product mean? How should it be labeled?
- Are there any marking requirements for RoHS and REACH?
- What is the REACH restriction list and what does it apply to?
- How long will they continue to add REACH SVHCs to the candidate list?
- How do I get REACH compliance documentation on a Custom part?
- Does California Prop 65 apply to all products?
- Why do I have to do REACH SVHC testing for my products?
- Regarding REACH...Is it .01% of the article - or each individual part?

CLICK HERE TO DOWNLOAD OUR FAQ

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