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Introduction on China RoHS 2.0 & China REACH

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**Product Regulations
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Who is CIRIS?



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China RoHS - Regulatory Framework

China RoHS 2.0 (Effective from 1st July 2016)

The Administrative Measures on the Restriction of Hazardous Substances in Electrical and Electronic Products

- **【Limit】** GB/T 26572-2011
- **【Test method】** GB/T 26125-2011, IDT IEC 62321:2008
- **【Test method】** GB/T 29783-2013
- **【Label】** SJ/T 11364-2014
- FAQs about the Measures (Published on 16th May 2016)
- Compliance Management Catalogue (draft)
- Exemption list (draft)
- China RoHS Conformity Assessment Rules (under construction)

China RoHS 2 - Scope

Are my products covered by China RoHS 2.0?

China RoHS 2 - Scope

Entered into force on 1 July 2016

A mandatory regulation for electrical and electronic products

Covers manufacture, sale or import in Mainland China

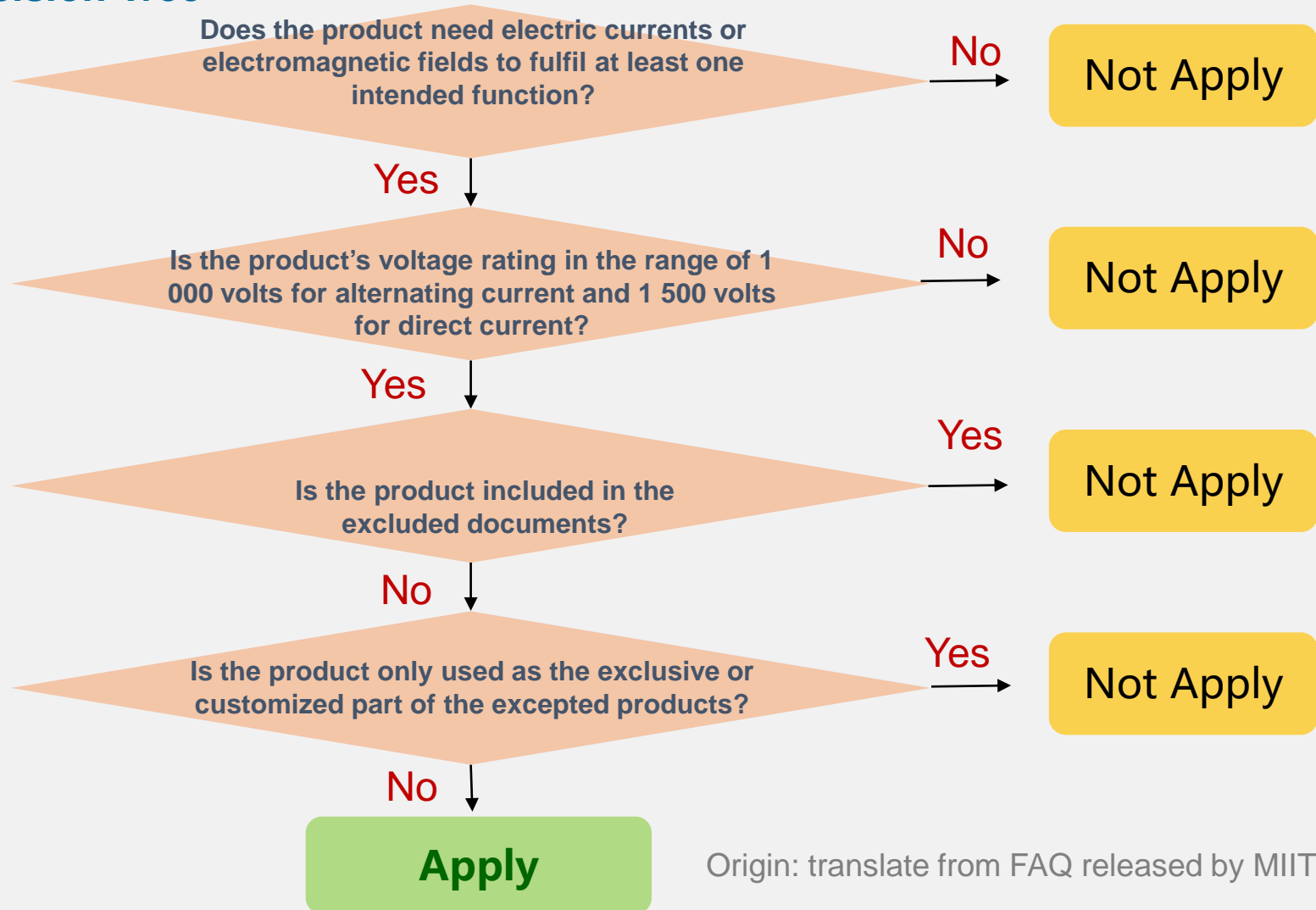
Definition

Electrical and Electronic Equipment or EEE means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1000 volts for alternating current and 1500 volts for direct current; except equipment involved in electric power generation, transmission and distribution.

Accessory equipment products hereof are referred to as components/parts and materials.

China RoHS 2 - Scope

- Decision Tree



Origin: translate from FAQ released by MIIT

China RoHS 2 - Scope

Does not apply to:

- 1 Electrical and electronic products involved in electric power generation, transmission and distribution, including systems or equipment used for power plants, power transmission and distribution stations, and power supply and distribution for buildings
- 2 Electrical and electronic products for military use
- 3 Electrical and electronic products under special or extreme environment
- 4 Electrical and electronic products intended for export
- 5 Electrical and electronic products for temporary import or entry for maintenance but not offered for sale
- 6 Equipment for the purposes of research and development or test
- 7 Samples and showpieces for trade fairs and exhibitions but not offered for sale

China RoHS 2 - Scope

Electrical and electronic products in China RoHS 2

Including but not limited to:

1

• Communication equipment

2

• Broadcast and TV equipment

3

• Computer and office equipment

4

• Household appliances

5

• Electronic instruments for monitoring and control applications

6

• Industrial electrical and electronic equipment

7

• Power tools

8

• Medical electronics and devices

9

• Lighting products

10

• Sports, stationery and entertainment products

China RoHS 2 - Requirements

What requirements should my products comply with?

China RoHS 2 - Requirements

RoHS 2 Scope

Marking is required (SJ/T 11364-2014)

Compliance Management
Catalogue (draft)

Comply with the hazardous substance
restriction limits set out in national standard
GB/T 26572-2011
China RoHS Conformity Assessment Rules
(draft)

The exemption list
(draft)

Implement the details of
the exemption list

China RoHS 2 - Scope

Draft Compliance Management Catalogue (draft)

Issued on 29 June 2017

There are 12 Categories

- Refrigerators
- Air conditioners
- Washing machines
- Electrical water heaters
- Printers
- Copiers
- Fax machine
- Television set
- Monitor
- Microcomputer
- Mobile telecommunication handset
- Telephone set

公开征求对《电器电子产品有害物质限制使用达标管理目录（第一批）》（征求意见稿）及《达标管理目录限用物质应用例外清单》的意见

发布时间：2017-06-29 来源：节能与综合利用司

China RoHS 2 - Scope

Draft Compliance Management Catalogue (draft)

Issued on 29 June 2017

S.N	Product name	Range and definition of product	Description for application scope
1	Refrigerators	A thermal-insulating box composed of one or more chamber(s), capable of controlling the temperature at a specified level, equipped with appropriate volume and structure, adopting natural convection or forced convection and consuming one or more energies to obtain cooling capacity (volume \leq 800L).	Refrigerators can be classified as standing, portable, wall-mounted and embedded types, etc. Where classified according to purpose, refrigerators include fridge-freezers, freezing closets, cold closets (cabinets), deep freezers, chest freezers, display freezers, wine coolers, etc. To determine the linear dimension and volume measurement methods for refrigerators, refer to GB/T 8059-2016 Household and Similar Refrigerating Appliances.
2	Air conditioners	A kind of equipment directly providing processed air to an enclosed space, room or area, including room air conditioners and unitary air conditioners (with rated refrigerating capacity \leq 14000w).	An air conditioner is mainly composed of a refrigerating system used for refrigeration and dehumidification, air circulation and a purification device and/or a heating and ventilation device (they may be assembled in a box case or designed as a component system where they are used together). Air conditioners include room air conditioners and unitary air conditioners (with rated refrigerating capacity \leq 14000w). They cover: 1. room air conditioners, which are mainly composed of refrigerating systems used for refrigeration and dehumidification, as well as air circulation and purification devices. It

Translated by Chemical Watch

China RoHS 2 - Scope

- Draft exemption list

No.	Application	Maximum allowable limits
Mercury (Hg)		
1	Single-capped (compact type) fluorescent lamp for general lighting service	Mercury content in each lamp tube must not exceed:
	Power < 30W	2.5mg
	30W ≤ Power < 50W	3.5mg
	50W ≤ Power < 150W	5mg
	Power ≥ 150W	15mg
	Lamp tube is of circular or square shape, with tube diameter ≤ 17mm	7mg
	For those used for special purpose	5mg
	Power < 30W; service life ≥ 20000h	3.5mg
2.1	Double-capped straight-tube fluorescent lamp with trichromatic phosphor powder, which is used for general lighting service	Mercury content in each lamp tube must not exceed:

Translated by Chemical Watch

China RoHS 2 - Requirements

RoHS 2 Scope

Marking is required (SJ/T 11364-2014)

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(draft)

Implement the details of
the exemption list

China RoHS 2 - Requirements

- China RoHS 2 Marking SJ/T 11364-2014



- This product does not contain any hazardous substances or they are not exceeding the concentration limits(GB/T 26572).



According to SJ/Z 11388

- This product contains certain hazardous substances.
- This product can be used safely during its environmental protection use period.

China RoHS 2 - Requirements

- **China RoHS 2 Marking** SJ/T 11364-2014



If the products need to be marked as orange, manufacturers and importers shall provide the names and contents of hazardous substances in product instructions and mark them on the parts where they are contained by using the table below:

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)

At Least

China RoHS 2 - Requirements

产品中有害物质的名称及含量

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
耳机外壳组件	0	0	0	0	0	0
金属部件	X	0	0	0	0	0
麦克风/耳机线	X	0	0	0	0	0
包装	0	0	0	0	0	0

本表格依据 SJ/T 11364 的规定编制。

0 : 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X : 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

注: ① 本产品大多数的部件采用无毒无害的环保材制造, 含有有毒有害物质或元素的部件皆因全球技术发展水平限制而无法实现有毒有害物质或元素的替代。

② 环保使用期限的参考标准取决于产品正常工作的温度和湿度等条件。

环保使用期限 Environmental Protection Use Period, 此标识指期限(十年, 从生产日期算起), 电子信息产品中含有的有毒有害物质或元素在正常使用的条件下不会发生外泄或突变, 用户使用该电子信息产品不会对环境造成严重污染或对其人身、财产造成严重损害的期限。

0 : The hazardous substance in the unit complies with the limitation in GB/T 26572.

X : At least one raw material has the hazardous substance which exceeds the limitation.

China RoHS 2 - Requirements

- **China RoHS 2 Limit** GB/T 26572-2011

6 substances

- Lead (0,1 %)
- Mercury (0,1 %)
- Cadmium (0,01 %)
- Hexavalent chromium (0,1 %)
- Polybrominated biphenyls (PBB) (0,1 %)
- Polybrominated diphenyl ethers (PBDE) (0,1 %)

- **EU: 6 + 4 phthalates (added in 2015)**

**Homogeneous
Materials**

Important differences between China RoHS 2.0 and EU RoHS

Items	China RoHS 2	EU RoHS
Scope	Hazardous substances limit: Products listed in Compliance Management Catalogue, except products in the exemption list	Hazardous substances limit: EEE products except those in exemption list
	Batteries are included	Batteries should comply with Batteries Directive(2006/66/EC).
Restricted substances	Pb、 Cd、 Hg、 Cr6+、 PBB、 PBDE	Pb、 Cd、 Hg、 Cr6+、 PBB、 PBDE+4 phthalates
Marking	<ul style="list-style-type: none"> • Green/Orange marking • Declaration of contents of hazardous substances 	<ul style="list-style-type: none"> • CE Marking • WEEE Marking

China RoHS 2 - Violations



Product: **Jacuzzi**

Date: September, 2017

Executive : Suzhou CIQ

The way of import : General trade

Violation: As the products were not tested for their content of hazardous substances, the importers were unable to complete their rectification and the products were finally destroyed.

Reason : **The lack of marking and the declaration of the hazardous substances content.**

Other News from AQSIQ

- Inspection and Quarantine Bureau of Zhenjiang has continuously intercepted four batches of Korean **medical ultrasound products without label of hazardous substances** which valued \$329000.
- Inspection and Quarantine Bureau of Suzhou, an industrial city in Jiangsu province, intercepted 54 **webcams** in a company who imported them **without compliance label**.
- Inspection and Quarantine Bureau of Wuxi, a city close to Suzhou, checked out a batch of **electrical and electronic equipment without labels of hazardous substances** which were imported from the US.

 [Know more about the news](#)



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◆ China REACH (Restriction of Chemical Hazards in Consumer Products)

◆ Experience in practice

Safety requirements for hazardous chemicals in consumer products



The screenshot shows the homepage of the China National Institute of Standardization (CNIS). The header features the CNIS logo and the text '中国标准化研究院 CHINA NATIONAL INSTITUTE OF STANDARDIZATION'. Below the header is a navigation menu with various categories such as '首页', '本院概况', '本院介绍', '机构设置', '新闻动态', '综合新闻', '标准化动态', '党建文化', '科技工作', '科研领域', '国内技术委员会', '科研管理', '合作与交流', '国际技术委员会', and '博士后科研工作站'. A search bar is located in the top right corner. The main content area displays a notice titled '关于《消费品化学危害 限制要求》国家标准征求意见的函' (Notice on the public consultation for the national standard 'Restriction Requirements for Chemical Hazards in Consumer Products'). The notice is dated 2017.03.30 and is from the Quality Management Branch. The text of the notice states that the standard is being developed by the SAC/TC 508 and is open for public consultation. It mentions that the standard will include 103 kinds of chemical substances.

On 28 March 2017, the China National Consumer Products Safety Standardization Technical Commission sought public opinions for **the Chinese standard Restriction of Chemical Hazards in Consumer Products** (also known as “China REACH”). The standard includes 103 kinds of chemical substances.

Safety requirements for hazardous chemicals in consumer products

● Background

- 1. Draft (Now); Maybe finished by the end of this year; Publishing time: unknown
- It will be a **recommended** standard(GB/T)
- For the chemical safety of consumer products which are not required by domestic standards, this standard refers to some regulations in other regions, like: EN71-9, Oeko-tex100-2017, REACH and so on.

● Important differences between China REACH and EU REACH

- 1. China REACH only restricts certain chemicals but imposes no requirements for registration, evaluation, authorization and notification as those set forth in EU REACH Regulation.
- 2. EU REACH Regulation regulates all chemicals accessing the EU market while China REACH only targets hazardous substances regarding consumer products.
- 3. EU REACH Regulation does not overlap with other product regulations but China REACH tends to be a consolidation of restrictions in existing standards.

Safety requirements for hazardous chemicals in consumer products

5 安全要求 Safety Requirement

Restriction

Remark

序号	化学危害	CAS 号	限制要求	备注
No.		CAS No.		
1	铅	7439-92-1	<ol style="list-style-type: none"> 婴幼儿安抚奶嘴中, 该物质的迁移量应≤ 25 mg/kg。 儿童牙刷中该物质的迁移量应≤ 90mg/kg。 婴幼儿纺织品中, 非纺织附件以及涂层和涂料印染织物中该物质总含量应≤ 90 mg/kg; 婴幼儿及儿童纺织产品的面料、里料、附件所用织物中该物质总含量应≤ 90 mg/kg。 指画颜料中该物质的迁移量应≤ 25mg/kg, 造型黏土和其它玩具材料(除造型黏土和指画颜料)中该物质的迁移量应≤ 90 mg/kg。 饰品中该物质的总含量应≤ 1000 mg/kg; 儿童首饰中该物质 	<p>GB 28482-2012 婴幼儿安抚奶嘴安全要求, 条款 8.4。</p> <p>GB 30002-2013 儿童牙刷, 条款 4.2.3。</p> <p>GB 31701-2015 婴幼儿及儿童纺织产品安全技术规范, 条款 4.2。</p> <p>GB 6675.4-2014 玩具安全 第4部分 特定元素的迁移, 条款 8.4。</p> <p>GB 28480-2012 饰品 有害元素限量的规</p>

5.Safety Requirement

EU REACH Annex XVII

No.	Chemicals	CAS No.	Restriction	Remark
				Referenced Standards

Safety requirements for hazardous chemicals in consumer products

103 kinds of chemical substances

Heavy metals :

Lead(Pb)、Mercury(Hg)、Chromium(Cr)、Cr(VI)、Nickel(Ni)、Tin、Antimony(Sb)、Cadmium(Cd)、Barium、Selenium、Organic tin compounds、Cobalt(Co)、Arsenic(As)、Copper(Cu)

Other organic hazardous chemicals :

SCCP、PAHs、BPA、Benzene、Phthalates、NP、NPEO、Formaldehyde、Methanol、Chlorinated phenols、PBBs、Toluol、Methylbenzene、OPP、DEGME、DEGBE、PFOS、TDI、MDI、VOC、TVOC、Arylamines、Formamide、Carcinogens、MBT...

Content



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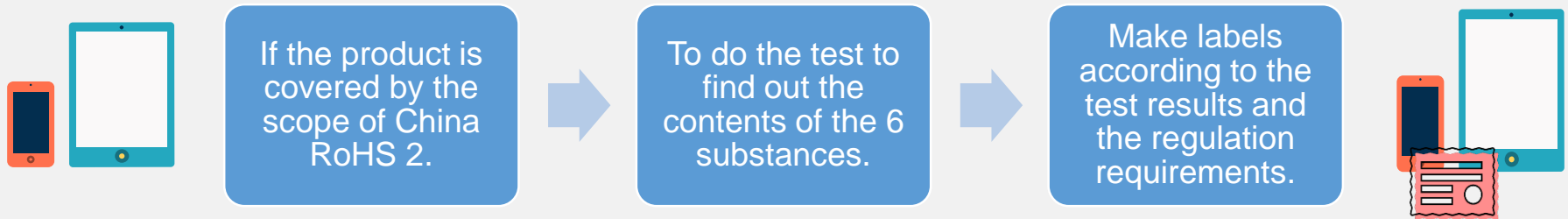
- ◆ Violations

◆ China REACH (Restriction of Chemical Hazards in Consumer Products)

◆ Experience in practice

Experience in practice

- **China RoHS 2**



Tips:

- Scope identification is quite complex.
- Label must be in simplified Chinese language.
- Encouraged to use the test methods as regulation.
- It will be better to send your products to China located lab to confirm, the CMA certificated lab will be a good choice.
- The test report might be required by customers.
- After the Compliance Management Catalogue becomes effective, the products listed in this catalogue must comply with the limitation.

Experience in practice

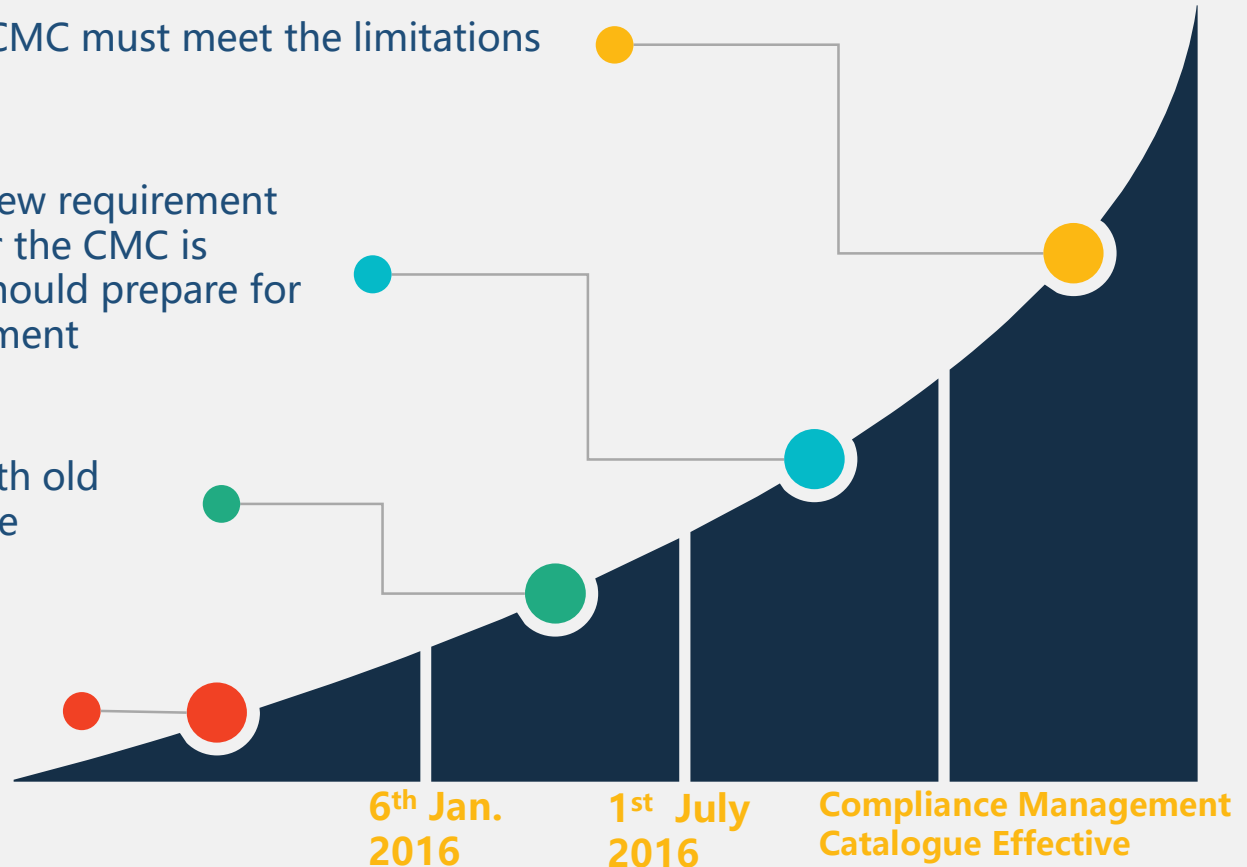
- **China RoHS 2 Timeline**

Products listed in the CMC must meet the limitations of China RoHS 2

Label must meet the new requirement SJ/T 11364-2014. After the CMC is released, companies should prepare for the hazardous requirement

Transitional period. Both old label and new label are acceptable

According to the old regulation which released in 2006



CMC : Compliance Management Catalogue

Experience in practice

- **China REACH (Safety requirements for hazardous chemicals in consumer products)**



Tips:

- This regulation will be a Voluntary Standard.
- This regulation has a good reference value for companies to control the hazardous chemicals in consumer products according to Chinese regulations.

Question & Answer



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**Thank you for
your attention**

