# Political developments and foresight for the Asian continent

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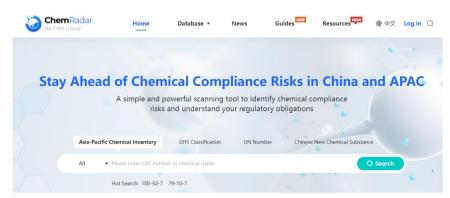
# Current chemical regulations in Asian regions and the latest updates

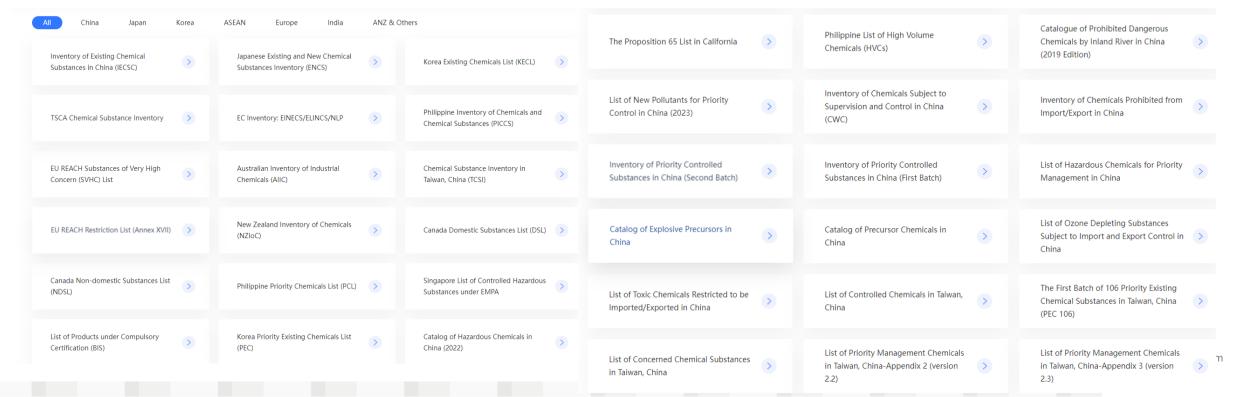




### Chemical Regulations: Registration/Notification/Recording/etc.

- New chemical substances
- Existing chemical substances
- Hazardous chemical substances (toxic/restricted/authorized/prohibited/etc.)







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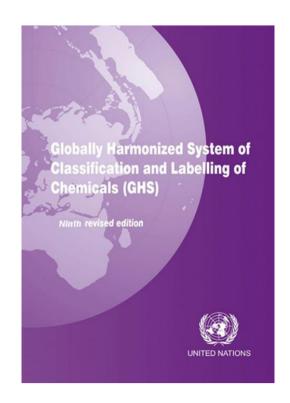
Country/Region	Regulations
China	MEE Order No.12 (China REACH) Regulations on Safe Management of Hazardous Chemicals in China
Korea	The Act on Registration and Evaluation, etc of Chemical Substances (Korea REACH) Occupational Safety and Health Act
Japan	Industrial Safety and Health Law Chemical Substance Control Law
Taiwan	Toxic and Concerned Chemical Substances Control Act (TCCSCA)
Philippines	Pre-Manufacture and Pre-Importation Notification (PMPIN)
Australia	Work Health and Safety Regulations (WHS Regulations)
New Zealand	Australian Industrial Chemicals Introduction Scheme (AICIS)



**GHS**: Globally Harmonized System of Classification and Labelling of Chemicals

- Classification
- Safety Data Sheet
- Labelling

Country/Region	Standard
China	GB/T 17519-2013 & GB/T 16483-2008
Japan	JIS Z 7253-2019
Korea	MOEL No 2020-130
Taiwan	CNS 15030
Malaysia	CLASS 2013; ICOP 2019
Thailand	B.E 2555
Indonesia	GHS regulation No 23/M-IND/PER/4/2013
Philippines	DENR Administration Order 2015-09 Rules and the Procedures for the
	Implementation of the Globally Harmonized System (GHS)
Vietnam	Circular no. 04/2012/TT-BCT stipulating the regulations on classification
	and chemical labelling
Australia	Work Health and Safety Regulations (WHS Regulations)
New Zealand	Hazardous Substances and New Organisms Act





### **New Updates**

### > China

- New China REACH has been implemented.
- VOC standards are introduced.
- QR code for Hazardous chemical registration.

### > India

India REACH will be finalized shortly.

### > Korea:

- Simplify the data requirement for new chemical registration (0.1-1 ton/year).
- Safety information is required for R&D exemption.
- SDS submission for hazardous chemical products.
- risk assessment rules for products applied to the human body (draft).



### > Taiwan

- Amend the current TCCSCA.
- Reduce the registration burden.
- Reshuffle the authority structure.

### > Japan

- Recommends measures for risk assessment compliance under ISHL.
- An autonomous approach may be introduced in the future.

### > Thailand

- Requirements for declarations of hazardous substances has been updated.

### Malaysia

Consults on aligning health and safety rules with GHS 8

#### Vietnam

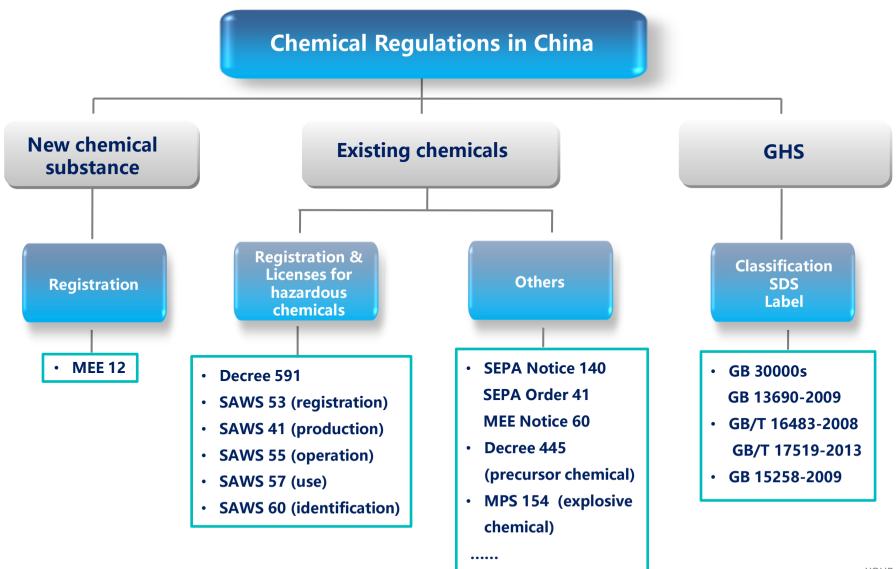
- Considering changes to labelling, SDS and reporting rules for restricted chemicals

# The impact of sustainability on chemical regulations in China



# **Chemical management framework in China**





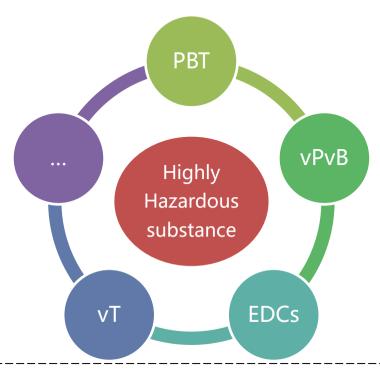
# **China REACH Registration Type**



Registration Type	Requirements
Record Filing	<ul> <li>Tonnage level &lt; 1t/y</li> <li>Polymers with new monomers/reactants concentration less than 2% or PLC (polymer of low concern) and do not fall under the polymer record filing exclusion</li> </ul>
Simplified Registration	Tonnage level 1-10 t/y
Regular Registration	<ul> <li>Tonnage level &gt;=10 t/y</li> </ul>

# **Highly Hazardous Substances**





**P**: refers to persistence, indicating that it is not readily degradable in the environment and the determination of persistence does not apply to inorganic substances.

B: refers to bioaccumulation, indicating a tendency to accumulate in an organism.

T: refers to toxicity, indicating more severe acute or chronic toxicity.

**EDCs**: refers to endocrine disruptors.

**v**: A substance that indicates an enhancement of a property, such as very severe toxicity, is called a very toxic substance (vT substance).

# **Highly Hazardous Substances**



# New Concept-Highly Hazardous Substance

### Including but not limited to:

- 1. EDCs
- 2. vT substances (meet any of the following):
- Acute toxicity (oral, dermal, inhalation) category 1
- Carcinogenicity (1A or 1B category)
- Germ cell mutagenicity (1A or 1B category)
- Reproductive toxicity (1A or 1B category)
- Specific target organ toxicity (repeated exposure) (category 1)
- Aquatic chronic toxicity NOEC or EC10<0.01mg/L</li>
- Acute aquatic toxicity EC50 or LC50<0.1mg/L (in the absence of aquatic chronic toxicity data)

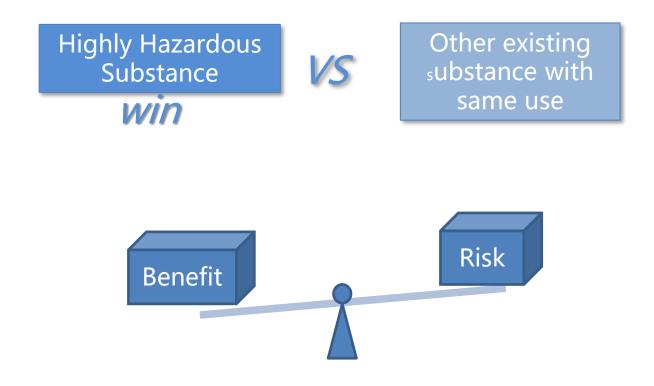
Highly hazardous chemical substances with equivalent environmental or health hazards

For regular registration, vT substances should be determined based on a combination of health and ecotoxicological data.

# **China REACH - Social-economic Benefit Analysis Report**



> For Highly Hazardous Substance Registration or New Use Registration:



## **Hazardous Chemicals in China**





Hazardous chemicals are defined as highly toxic chemicals and other chemicals which are toxic, corrosive, explosive, flammable and do harm to human body, facilities and environment



Chemicals meeting GHS hazard classification criteria and within 81 categories among 28 GHS classifications shall be regarded as hazardous chemicals under Decree 591.



# **QR Code Compliance**

### CIRS

### **Hazard Chemical Registration**

"One company, One product, One code"

Will be fully implemented in Nov 2021

- Chinese SDS
- Chinese Label
- Hazard Chemical Registration



化学品安全信息码

化学品名称 氨

CAS号 7664-41-7

登记号 4401100012100001

企业名称 广东测试企业001

警示词 危险





危险性说明

易燃气体,含冷冻液化气体,可引起冻伤,吞咽会中毒,皮肤接触会中毒,吸入致死,对水生生物有毒,对水生生物有毒,对水生生物有毒,对水生生物有毒,对水生生物有毒,对水生生物有害并且有长期持续影响

急救措施

立即脱去污染的衣着,应用28硼酸液或大量清水彻底冲洗。就医。立即提起眼睑,用大量流动清水或生理盐水彻底冲洗至少15分钟。就医。迅速脱离现场至空气新鲜处。保持呼吸道通畅。如呼吸困难,全等

化学品安全信息码

泄漏应急处置

远离火种、热源,工作场所严禁烟。使用防爆型的通风系统和设备。防止气体泄漏到工作场所空气中。避免与氧化剂、酸类、卤素接触。搬运时轻装轻卸,防止钢瓶及附件破损。配备相应品种和数量的消防器材及泄漏应急处理设备。 储存注意事项:储存于阴凉、通风的库房。应与氧化剂,酸类、卤素、食用化学品分开存放,切忌混储。采用防爆型照明、通风设施。禁止使用易产生火花的机械设备和工具。储区应备有泄漏应急处理设备。

灭火方法

灭火剂:雾状水、抗溶性泡沫、 二氧化碳、砂土。

化学品安全标签(点击下载)

安全技术说明书 (点击下载)

包装类别 桶装100ka

Shanghai, Beijing: Local Traceability Code!

## **China VOC Standards - Scope**

CIRS

**VOC: Volatile Organic Compounds** 



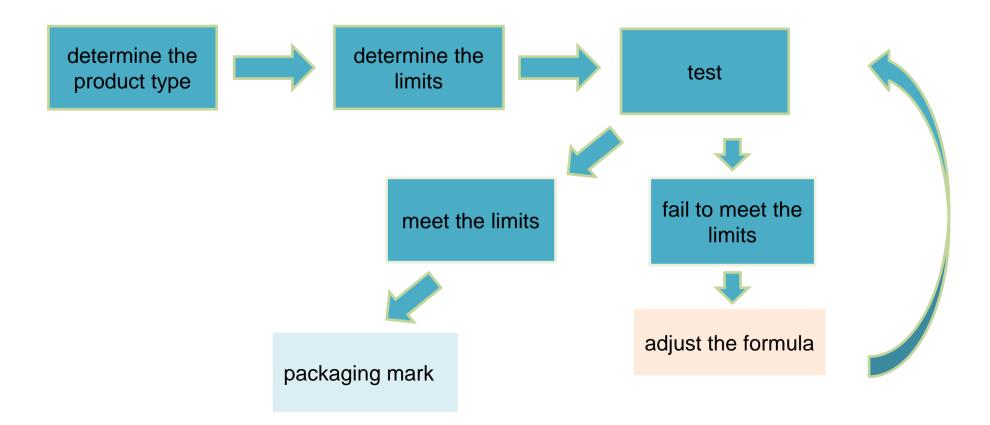
### **China VOC Standards - Scope**



- Limit of harmful substances of woodware coatings GB 18581-2020
- Limit of harmful substances of architectural wall coatings GB 18582-2020
- Limit of harmful substances of industrial protective coatings GB 30981-2020
- Limit of harmful substances of vehicle **coatings** GB 24409-2020
- Limit of volatile organic compounds content in adhesive GB 33372-2020
- Limits of volatile organic compounds (VOCs) in **printing ink** GB 38507-2020
- Limits for volatile organic compounds content in cleaning agents GB 38508-2020
- Others

# **China VOC Standards - Scope**





# **Hazardous Chemicals Safety Law (draft for comments)**



- Ministry of Emergency Management
- Draft version for public comments





- 1. Clarify the division of responsibilities of different competent authorities.
- 2. The regulatory requirements on manufacturing/storage/operation/use/transportation/disposal of hazardous chemicals are more detailed.
- 3. Hazardous chemicals used for research & development, trial production & trial marketing, low exposure, low release, etc. can be exempted from hazardous chemical registration.
- 4. License system is optimized.
- 5. Establish an information monitoring system to improve the management level of hazardous chemicals.
- 6. Add a chapter on waste disposal safety.
- The punishment will be increased significantly.

# **Chemical Related Regulation Updates**



- 2024.6 Four New Phthalate Restrictions Added to China China RoHS
- 2024.5 China GHS Classification Updates (draft)
- 2024.2 Shanghai Local Traceability Code System is launched
- 2024.1 China to Simplify Import and Export Control for Certain Products Containing Low Concentration of Triethanolamine
- 2023.12 China to Prohibit the Import and Export of PFOS Products in 2024
- 2023.10 China Imposes Export Control Measures on Graphite Materials
- 2023.8 China's MEE Consulting on the List of Toxic and Hazardous Water Pollutants (Second Batch)
- 2023.6 China's MEE Prohibits Five POPs including Short-chain Chlorinated Paraffins

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# The future trend of Asian chemical regulations



# **Future Chemical Policy Development**



### The current actions in EU:

- ➤ Ban the most harmful chemicals in consumer products allowing those chemicals only where their use is essential.
- > Pay attention to the cocktail effect of chemicals when assessing chemical risks.
- ➤ Phase out per- and polyfluoroalkyl substances (PFAS) in the EU, unless their use is essential.
- ➤ Boost investment and innovative capacity for the production and use of chemicals that are safe and sustainable by design throughout their lifecycle.
- > Promote the EU's supply and sustainability of critical chemicals.
- Establish a simpler "one substance, one assessment" process for assessing the risks and hazards of chemicals.
- Play a leading role globally by championing and promoting high chemical safety standards and not exporting chemicals banned in the EU.

# **Future Chemical Policy Development**



### **Future trend in Asia:**

- 1. For highly hazardous chemical substances (PBT, vPvB, etc.), the registration may be more difficult
- 2. Risk and hazard assessment on volumes, uses, exposure/emissions and environmental footprint.
- 3. PFAS, POPs, SVHC list in different countries
- 4. Improve enforcement of chemicals legislation in different regions.
- 5. Green Deal? Carbon Neutral?

# THANKS!

#### **CIRS Service**



**EU REACH** 



**UK REACH** 



**China Chemical Management** 



**Korea REACH** 



**Taiwan TCSCA** 



**Global GHS** 



**Training & Testing** 

#### Why CIRS



4000+ global SDS & Label every year



3000+ K-REACH pre-registration



2000+ EU REACH registration



2000+ China REACH typical notification



Designed TPR(Third Party Representative) service



Full one-stop compliance service in China



Customized on-site/online training service

