



Interpretation and FAQ on China SDS and Labelling

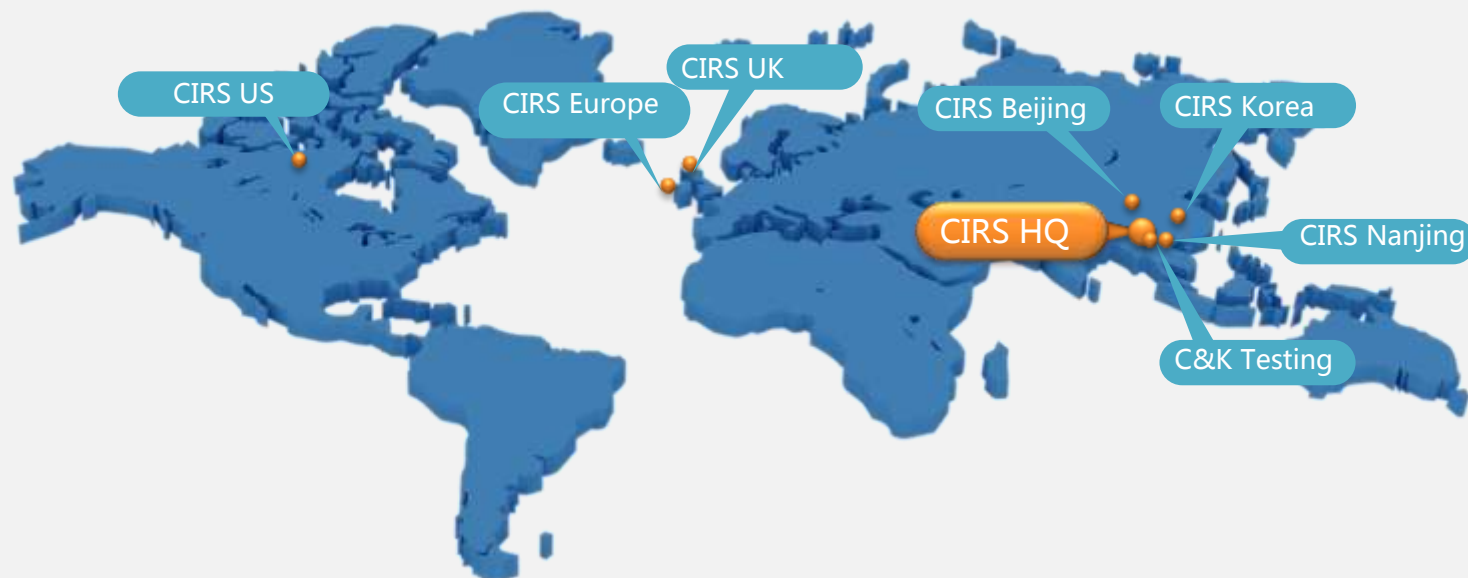


*Global Chemical
Regulatory Compliance*



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Who is CIRS?



- CIRS is an individual consulting firm founded in 2007 and headquartered in China;
- Has 350+ employees ;
- Branch offices in Dublin(Ireland), London (UK), Arlington(US), Seoul (Korea), Nanjing(China), Beijing(China), Hangzhou(China);
- CIRS provides regulatory compliance consulting, testing and training services.
- CIRS shares more than 70% Chinese consulting markets;
- Has 4000+ Clients across the world

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Information about the Webinar Series

Schedule



1. Serial Webinar Opening & Latest Updates of EU & UK CLP – Mr. Dean Winder
2. CLP Compliance in retail supply chain - Mr. Bryan Zhou
3. Introduction of Turkey GHS and KKDIK Updates - Mrs. Elif Koç, Mr Gökhan Ardiç
4. Latest Updates of the South Korean OSHA amendment - Julie Harrington.
5. Interpretation and FAQ on China SDS and Labelling - Mr. Li Xiang

Every Wednesday from 23rd of June to 21st of July 2021
14:00 (GMT+1)/9:00am (PST)

Making the most of the Series



- Send us your questions
- Request the Presentations for free
- Keep up to date with our Advanced Articles
- Consult our FAQ Documents

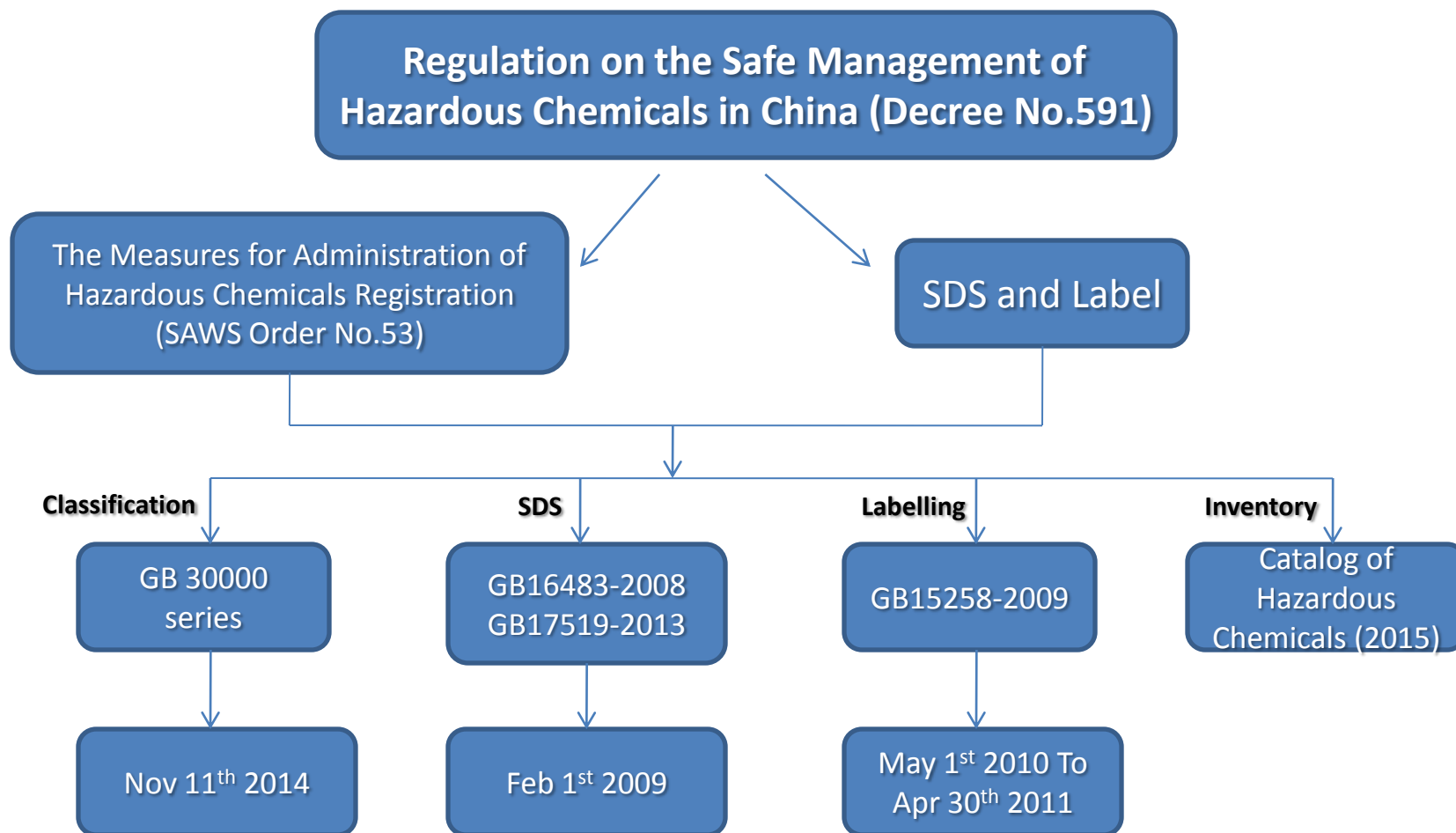
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PART

China GHS Standards



China GHS Standards



GHS Implementation in China

Scope of China GHS

Import and export

Hazard chemicals registration

Hazard chemicals safety permit

Information communication in supply chain

Others

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PART

China GHS Classification

China GHS Classification



Classification Standards: GB 30000.2~29-2013 (effect on Nov 1, 2014)

Fully adopt UN GHS Rev. 4, 28 hazard classes, including Aspiration hazards and Hazards to the ozone layer;

Physical Hazards 16 Classes	Explosive, Flammable gases, Flammable aerosols, Oxidising gases, Gas under pressure, Flammable liquids, Flammable solids, Pyrophoric liquids, Pyrophoric solids, Self-heating substances and mixtures, substances and mixtures which are in contact with water emit flammable gases, Oxidising liquids, Oxidising solids, Organic peroxides, Corrosive to metals, Self-reactive substances and mixtures.
Health Hazards 10 Classes	Acute toxicity, Skin corrosion/irritation, Serious eye damage/irritation, Respiratory or skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity, Specific target organ toxicity- single exposure, Specific target organ toxicity-repeated exposure, Aspiration Hazard(*)
Environmental Hazards 2 Classes	Hazardous to the aquatic environment Hazardous to ozone layer

China GHS Classification



Official Classification: **Information sheet of hazardous chemicals classification (2015.08)**

Serial No.	Chemical Name	Nickname	English Name	CAS No.	Hazardous Classification	Remark
危险化学品分类信息表						
序号	品名	别名	英文名	CAS 号	危险性类别	备注
1.	阿片	鸦片	opium	8008-60-4	特异性靶器官毒性-反复接触, 类别 2	
2.	氨	液氨; 氨气	ammonia; liquid ammonia	7664-41-7	易燃气体, 类别 2; 加压气体; 急性毒性-吸入, 类别 3*; 皮肤腐蚀/刺激, 类别 1B; 严重眼损伤/眼刺激, 类别 1; 危害水生环境-急性危害, 类别 1	
3.	5-氨基-1,3,3-三甲基环己甲胺	异佛尔酮二胺; 3,3,5-三甲基-4,6-二氨基-2-烯环己酮; 1-氨基-3-氨基甲基-3,5,5-三甲基环己烷	5-amino-1,3,3-trimethyl-cyclohexanemethanamine; isophorone diamine; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; isophoronediamine; 3,3,5-trimethyl-4,6-diamino-2-enecyclohexanone; 4,6-diamino-3,5,5-trimethyl-2-cyclohexen-1-one	2855-13-2	皮肤腐蚀/刺激, 类别 1B; 严重眼损伤/眼刺激, 类别 1; 皮肤致敏物, 类别 1; 危害水生环境-长期危害, 类别 3	
4.	5-氨基-3-苯基-1-[双(0,N-二甲基氨基膦基)]-1,2,4-三唑[含量>20%]	威菌磷	5-amino-3-phenyl-1,2,4-triazol-1-yl-N,N,N'-tetramethylphosphonic diamide (more than 20%); triamphos; wepsyn	1031-47-6	急性毒性-经口, 类别 2*; 急性毒性-经皮, 类别 1	剧毒
5.	4-[3-氨基-5-(1-甲基胍基)戊酰氨基]-1-[4-氨基-2-氯代-1(2H)-嘧啶基]-1,2,3,4-四脱氧-β,D赤己-2-烯吡喃糖醛酸	灰瘟素	3-(3-amino-5-(1-methylguanidino)-1-oxopentylamino)-6-(4-amino-2-oxo-2,3-dihydro-pyrimidin-1-yl)-2,3-dihydro-6(H)-pyran-2-carboxylic acid; blasticidin-s; blas; blaes	2079-00-7	急性毒性-经口, 类别 2*	
6.	4-氨基-N,N-二甲基苯胺	N,N-二甲基对苯二胺; 对氨基-N,N-二甲基苯胺	4-amino-N,N-dimethylaniline; N,N-Dimethyl-p-phenylenediamine; p-Amino-N,N-dimethylaniline	99-98-9	急性毒性-经口, 类别 3*; 急性毒性-经皮, 类别 3*; 急性毒性-吸入, 类别 3*	

2828 entries!

Minimum
Obligated
harmonized
classification



Safety Data Sheet

Safety Data Sheet



GB 16483-2008 National Standard on Safety Data Sheet For Chemical Products

GB 17519-2013 Guidance on the compilation of safety data sheet for chemical products

- The SDS should be written in Chinese;
- For foreign manufacturer, Chinese domestic 24h emergency number is mandatory to provide in section 1 if it's hazardous chemical ;
- Volume fraction or concentration range of ingredients should follow descending order;
- CBI: the CAS number and exact concentration of each ingredient could be kept as confidential but relevant hazards information shall be indicated.

1. Identification	9. Physical and Chemical Properties
2. Hazard overview	10. Stability and reactivity
3. Composition/information on ingredients	11. Toxicological information
4. First-aid measures	12. Ecological information
5. Fire-fighting measures	13. Disposal
6. Accidental release measures	14. Transport Information
7. Handling and storage	15. Regulatory information
8. Exposure controls/personal protection	16. Other information

China SDS Handbook



- Published books**

- Manual of hazardous chemicals inventory (SAWS, NRCC)
- Compilation of Safety Data Sheet for hazardous chemicals ver3.0 (NRCC, SINOPEC, SKLSCC)

- Links in Annex II of GB/T 17519-2013**



SDS data resource SDS 编写数据源		第1部分	第2部分	第3部分	第4部分	第5部分	第6部分	第7部分	第8部分	第9部分	第10部分	第11部分	第12部分	第13部分	第14部分	第15部分	第16部分
Accelrys: (美国) 化学物质毒性效应登记数据库			✓						✓			✓					
Accelrys: Registry of Toxic Effects of Chemical Substances (RTECS)																	
http://ccinfoweb.ccohs.ca/rtecs/search.html																	

Safety Data Sheet



Section 1 Identification

- Product Name (both in Chinese and English)
- Recommended Application and Restricted Application
- Supplier Identification
- **Emergency Phone Number**



Chinese Domestic &
24 Hour Available

Safety Data Sheet



Section 2 Hazard Identification

GHS危险性类别

物理危险

Physical Hazard

健康危险

Health Hazard

环境危险

Environmental Hazard

未被分类

急性毒性-经口

类别3

急性毒性-吸入

类别3

对水环境急性危害

类别1

对水环境慢性危害

类别1

标签要素

象形图：

Pictogram



警示词：

Signal word

危险

危险性说明：

H Statement

吞咽会中毒。

吸入会中毒。

对水生生物毒性极大并具有长期持续影响。

防范说明

P Statement

预防措施：

作业后彻底清洗双手。

使用本产品时不得进食、饮水或吸烟。

Safety Data Sheet



Section 3 Composition/Information on Ingredients

3. 成分/组成信息

物质或混合物:

混合物

Mixture

成分:

Chemical
Name

CAS
No.

Ingredients

化学名称	CAS 号	EC 号	含量 (%)
钛酸四丁酯	5593-70-4	227-006-8	10-20%
锌粉	7440-66-6	231-175-3	5-10%
缩钛酸丁酯	9022-96-2	-	5-10%
2-乙基-1-己醇钛	1070-10-6	213-969-1	1 - 5%

Safety Data Sheet



Section 3

Mixture

Hazard Category		Cut-Off Value (%)
Acute Toxicity		≥1.0
Skin Corrosion/Irritation		≥1.0
Serious Eye Damage/Eye Irritation		≥1.0
Respiratory or Skin Sensitization		≥0.1
Germ Cell Mutagenicity	Category 1	≥0.1
	Category 2	≥1.0
Carcinogenicity		≥0.1
Reproductive Toxicity		≥0.1
STOT- Single Exposure		≥1.0
STOT – Repeated Exposure		≥1.0
Aspiration Hazard	Category 1	≥10 and dynamic viscosity ≤20.5 mm ² /s (40°C)
	Category 2	≥10 and dynamic viscosity ≤14 mm ² /s (40°C)
Hazardous to the aquatic environment		≥1.0

Safety Data Sheet



Section 8 Exposure Controls/ Personal Protection

GBZ 2.1-2019: occupational exposure limits for hazardous agents in the workplace

接触控制和个人防护

8.1 接触控制:

8.1.1 容许浓度:

乙酸-1-甲氧基-2-丙基酯

(CAS# 108-65-6)

1-甲氧基-2-丙醇

(CAS# 107-98-2)

IOELV(EU)

TLV(RC)

TLV(EU)

REL(USA)

MAC: Maximum Allowable Concentration

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEEL: Permissible concentration-Short Term Exposure Limit

短期价值: 550mg/m³, 100ppm

长期价值: 275mg/m³, 50ppm

369mg/m³, 100ppm

短期价值: 568mg/m³, 150ppm

长期价值: 375mg/m³, 100ppm

短期价值: 540mg/m³, 150ppm

生物接触限值:

组分名称	标准来源	生物监测指标	生物限值	采样时间
二甲苯	ACGIH(2009)	尿中甲基马尿酸	1.5 g/g 肌酐	班末

Safety Data Sheet



Section 9 Physical and Chemical Properties

Appearance (Form, Colour, State)	Vapor Pressure
Odour	Vapor Density
pH and concentration	Density/Relative Density
Melting Points/Freezing Point	Water Solubility
Boiling Point, Initial Boiling Point, Boiling Range	Partition coefficient n-octanol/water
Flash Point	Autoignition Temperature
Combustion Limit/Exposure Limit	Deacomposition Temperature

Safety Data Sheet



Section 11 Toxicological Information

Acute Toxicity	Carcinogenicity
Skin Corrosion/Irritation	Reproductive Toxicity
Eye Damage	STOT- Single Exposure
Respiratory/Skin Sensitization	STOT- Repeated Exposure
Germ cell mutagenicity	Aspiration Hazard

Safety Data Sheet



Section 12 Ecological Information

- Information of ecotoxicity;
- Durability and degradability;
- Potential bioaccumulation;
- Mobility in the soil.

More experimental data or
ecological cut-off value is
welcome!

Safety Data Sheet



Section 14 Transport Information

- UN Number
- UN Shipping Name
- Hazard Classification of UN
- Packaging Categories
- Marine Pollutant
- Special Precautions for Users

Land Transportation
Inland Water Transportation
Maritime Transportation
Air Transportation

Safety Data Sheet



Section 15 Regulatory Information

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations names	information	
Regulations on the safety administration of dangerous chemicals	Catalog of Hazardous Chemicals	Styrene listed
	List of Hazardous Chemicals for Priority Management	Styrene listed
	Catalog of Highly Toxic Chemicals	Not listed
Regulations on labor protection in workplaces where toxic substances are used	Catalog of Highly Toxic substances	Not listed
Regulations on the environmental management of first import of toxic chemicals	List of Toxic Chemicals Restricted to be Imported/Exported	Not listed
Measures for environmental management of new chemical substances	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	Styrene, Acrylic acid 3-(4-{1-[4-(2-acryloyloxy-2-hydroxy-ethoxy)-phenyl]-1-methyl-ethyl}-phenoxy)-2-hydroxyl -propyl ester listed

15.2 Downstream users precautions:

Disposal of products/containers according to local regulations.

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PART

China GHS Labelling

GHS Labelling



GB 15258-2009 National Standard on General Rules for Preparation of Precautionary Label for Chemicals

Special Requirements:

- Chemical name should be in both Chinese and English.
- For foreign manufacturer, a least one Chinese domestic 24h emergency number shall be provided in section 1.
- Order of hazard statements: Physical Hazards > Health Hazards > Environmental Hazards.
- No more than 5 of hazard chemical ingredients should be listed (Not mandatory)
- A simplified label is applied to the package whose volume is less than 100ml.

Label Size

Container or Package capacity (L)	Label Size
Capa. ≤ 0.1	simplified label
$0.1 < \text{Capa.} \leq 3$	50*75
$3 < \text{Capa.} \leq 50$	75*100
$50 < \text{Capa.} \leq 500$	100*150
$500 < \text{Capa.} \leq 1000$	150*200
$1000 < \text{Capa.}$	200*300

GHS Labelling

Signal Word points to: 危险

Product Identification points to: 化学品名称 A组分: 40%; B组分: 60%

Pictogram points to: 易燃, 有毒, 环境

Hazard Statement points to: 极易燃液体和蒸气, 食入致死, 对水生生物毒性非常大

Precautionary Statement points to: 【预防措施】

- 远离热源、火花、明火、热表面。使用不产生火花的工具作业。
- 保持容器密闭。
- 采取防止静电措施, 容器和接收设备接地、连接。
- 使用防爆电器、通风、照明及其他设备。
- 戴防护手套、防护眼镜、防护面罩。
- 操作后彻底清洗身体接触部位。
- 作业场所不得进食、饮水或吸烟。
- 禁止排入环境。

Refer to SDS points to: 【事故响应】

- 如皮肤(或头发)接触: 立即脱掉所有被污染的衣服。用水冲洗皮肤、淋浴。
- 食入: 催吐, 立即就医。
- 收集泄漏物。
- 火灾时, 使用干粉、泡沫、二氧化碳灭火。

Supplier Information points to: 【安全储存】

- 在阴凉、通风良好处储存。
- 上锁保管。

Emergency Phone Number points to: 【废弃处置】

- 本品或其容器采用焚烧法处置。

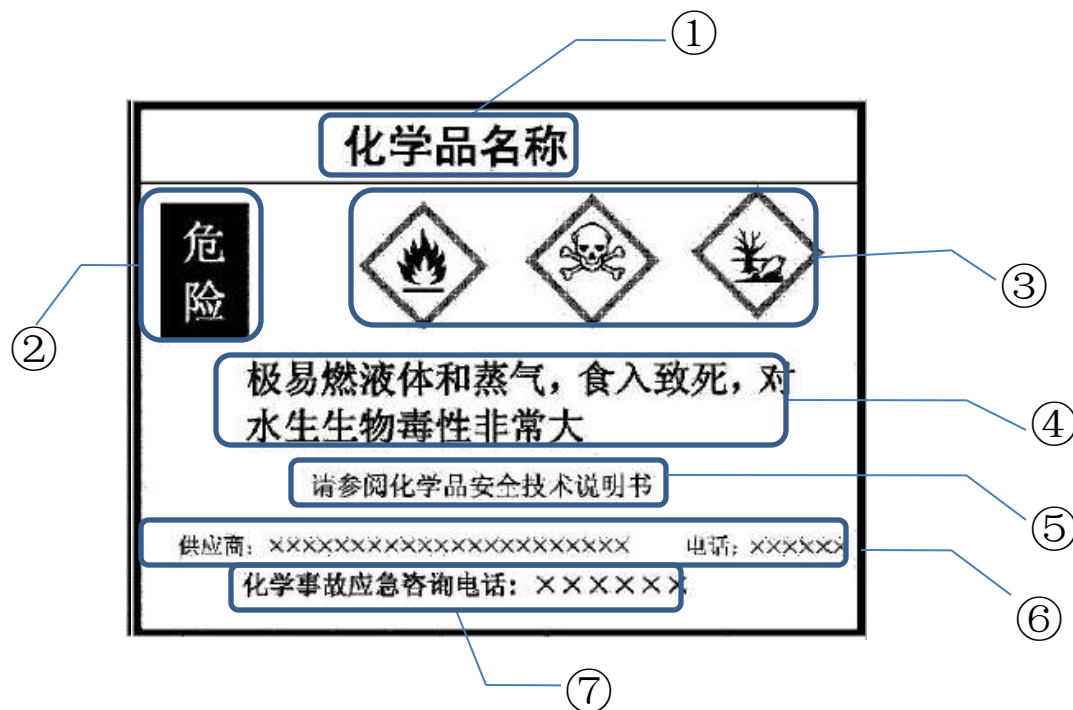
请参阅化学品安全技术说明书

供应商: XXXXXXXXXXXXXXXXXXXX 电话: XXXXXX
地址: XXXXXXXXXXXXXXXXXXXX 邮编: XXXXXX
化学事故应急咨询电话: XXXXXXX

GHS Labelling

Simplified Label (≤ 100 ml)

GB15258-2009



1. Product identification
2. Signal word
3. Pictogram
4. Hazard Statement
5. Refer to SDS
6. Supplier name and contact number
7. Emergency phone number

**Precautionary Statement
is omitted!**

Bottle in A Box

The diagram shows a top-down view of an open box containing six bottles arranged in a 3x2 grid. A blue arrow points from one of the bottles in the grid to a larger, detailed illustration of a single bottle on the right side of the image. The bottle is cylindrical with a flat top and a slightly wider base.

A diagram of a single pack of a container. It shows a cylindrical shape with a flat top and bottom. A vertical line on the left side indicates the height. A blue arrow points downwards from the center of the bottom face, indicating the direction of flow or force.

Publication: 10/20/2016

200 tons

pubs in this volume
 Bureau of the Census
 Washington, D.C.
 For **more** information

Close

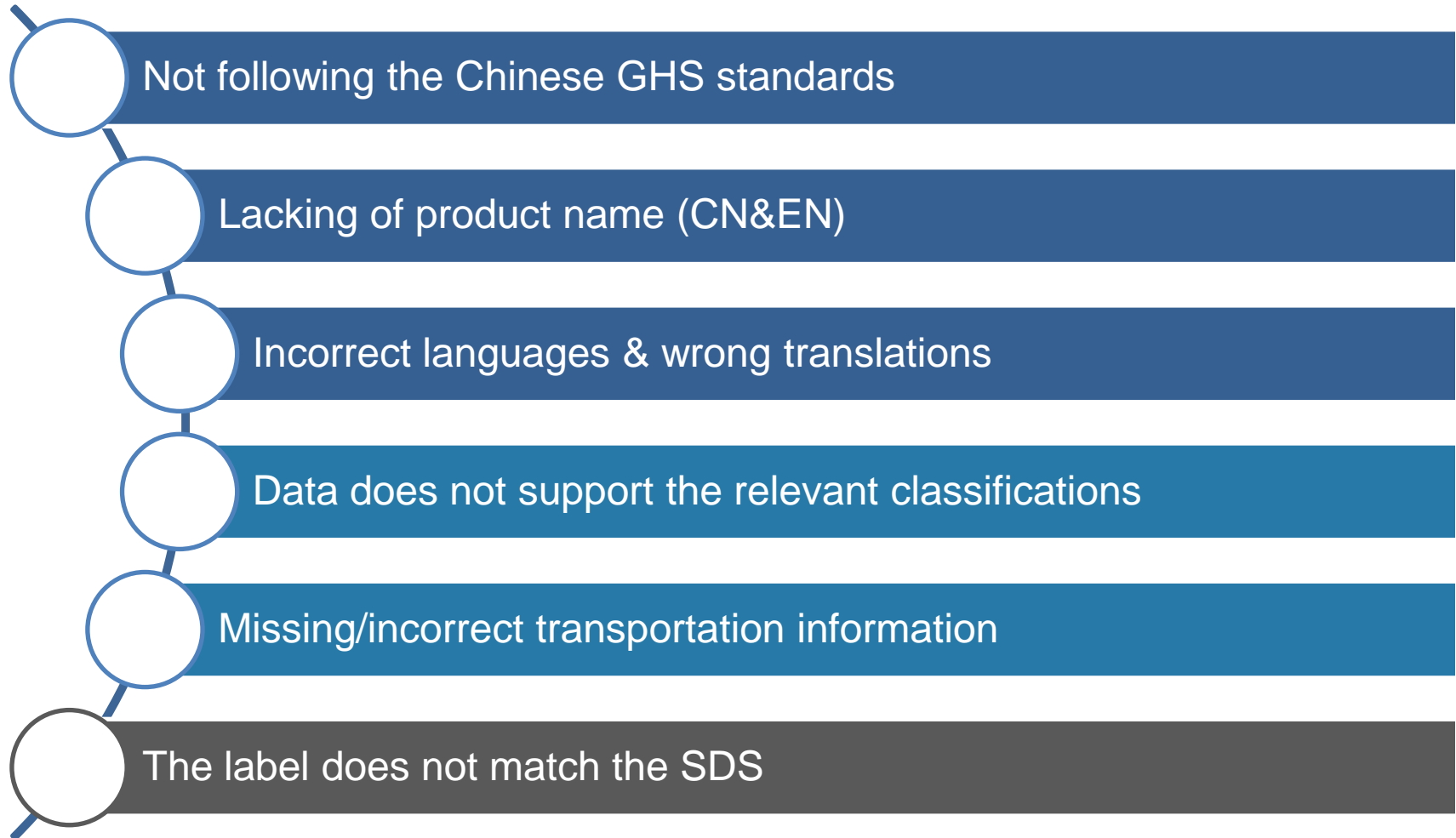
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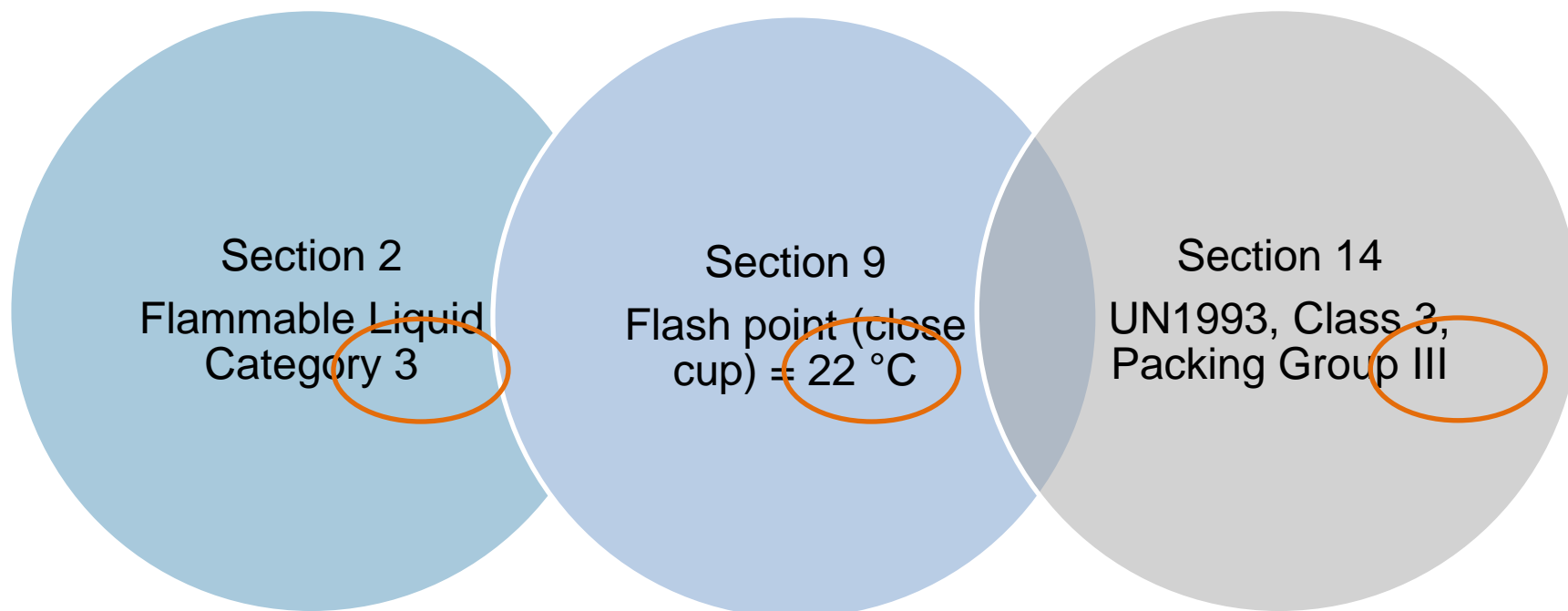
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PART

Common Errors and CIRS Advice

Common Errors on Chinese SDS & labels



Inconsistent info given in SDS - example



If the flash point (close cup) is above 23 °C and below 60 °C, it is classified as Flammable liquid category 3. The Packing Group is “III”.

Compliance Advice from CIRS



- **Inventory status checking**
 - Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)
 - Catalog of Hazardous Chemicals(2015)
 - <http://apciss.cirs-group.com/?l=en-us>
- **Have essential knowledge of China GHS regulation**
 - Classification - GB 30000.2-28-2013
 - Chinese SDS - GB/T 16483-2008 and GB/T 17519-2013
 - Chinese GHS label - GB 15258-2009
- **Communicate with supplier and clients for China GHS compliance**
- **Monitor regulation updates**
- **Trust professional firm to update the SDS and label in time**

CIRS Service



- China SDS and Label Review
- 24hrs Emergency Telephone Number Service
- Hazardous Chemical Registration
- China SDS Authoring and Labelling
- China harmonized Classifications search of hazardous chemical inventory
- China REACH Notification

Q & A

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