

Status of the Implementation of GHS in China

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I. law and regulation system of chemical management

➤ China's law and regulation system include four levels----

- ⇒ the first level is the laws approved and promulgated by the People's Congress;
- ⇒ the second level is the administrative laws promulgated by State Council;
- ⇒ the third level is the regulations issued by each Ministry;
- ⇒ the fourth level is the national standards;

Laws concerning Chemicals

- ◆ Law of the People's Republic of China on **Work Safety**, promulgated in June 2002, taking effect in November 1, 2002
- ◆ Law of the People's Republic of China on **Prevention and Control of Occupational Diseases**, promulgated in January 2001, taking effect in May 1, 2002

Administrative Regulations

- ◆ Regulations of the People's Republic of China on **Monitored and Controlled Chemicals**, promulgated by the State Council in 1995
- ◆ Regulations of the People's Republic of China on the Control of **Agricultural Chemicals**, Promulgated by the State Council in 1997, Amended in 2001
- ◆ Regulations on the Control over **Safety of Dangerous Chemicals**, Promulgated by the State Council in Jan 2002, taking effect in March 15, 2002, **Manufacturers are requested to make MSDS and labeling for chemicals in certain Lists**
- ◆ Regulation on **Work Safety Licenses**, Promulgated by the State Council in Jan. 2004
- ◆ Regulations on **Labor Protection in Workplaces** Where Toxic Substances Are Used, Promulgated by the State Council in April 2002
- ◆ Regulations for Administration of **Precursors and Chemicals used in Production of Narcotic Drugs** and Psychotropic Substances, Promulgated by the State Council in May 2005

Ministerial regulations

- ◆ Measures for The Administration of **Operating Licenses for Hazardous Chemicals**, issued by the former State Economy and Trade Commission (SETC) in 2002
- ◆ Measures for The Administration of **Registration of Hazardous Chemicals**, issued by SETC in 2002
- ◆ Measures for The Administration of **Packaging and Container Fixed-point Production**, issued by SETC in 2002
- ◆ Regulation of Environmental Management on the **First Import** of Chemicals and the **Import and Export of Toxic Chemicals**, jointly issued by the former SEPA, SETC and General Administration of Customs (GAC) of in 1994
- ◆ Measures for Environmental Management of **New Chemical Substances**, issued by SEPA in 2003
- ◆ Management measure for **pesticide label and instruction**, issued by Ministry of Agriculture (MoA) in November 2007, to specifically provide the label and introduction of pesticide, including the content, logo, production, usage and management requirement which need to be noted in the label and introduction.

National Standards

◆ Chemical Classification

- Classification and code of dangerous goods (GB6944-2005)
- List of dangerous goods (GB12268-2005)
- Classification and labels of dangerous chemical substances commonly used (GB13690-1992)
- Levels, Classification and Code of Hypertoxic Substance (GA57-93)
- Classification of health hazard levels from occupational exposure to toxic substances (GB5044-85)
- Safety rules for classification, precautionary labeling and precautionary statements of chemicals-Flammable aerosols (26 items) (**note: the 26 items are totally transferred from GHS, no Aspiration Hazards currently**)
- The guidelines for the hazard evaluation of new chemical substances (HJ/T 154-2004)

Difference between UN GHS and China's GB

HEALTHY HAZARDS	UN GHS (<i>Second revised edition, 2007</i>)	National Standards of China (GB...-2006)
Acute toxicity (Gases)	Category 1 Category 2 Category 3 Category 4: (ATE values is 20 mL/L) Category 5	Category 1 Category 2 Category 3 Category 4: (ATE values is 5mL/L) Category 5
Reproductive toxicity	Classification criteria for mixtures: Category 1 Category 2 Additional category for effects on or via lactation	Classification criteria for mixtures: Category 1 Category 2 —
Specific target organ toxicity—single exposure	Category 1 Category 2 Category 3	Category 1 Category 2 —
Aspiration hazard	Category 1 Category 2	— —

National Standards

◆ Chemical Label and SDS

- Safety data sheet for chemical products-Content and Order of sections (GB/T 16483-2008)
 - ✓ Revised according to GHS requirement of safety data sheet for chemical products, instead of GB/T17519.1-1998、GB16483-2000
 - ✓ Stipulates the construct, content and general format of SDS
 - ✓ Appendix (SDS Preparation Guidelines) provides the requirements for the preparation of the 16 items information, thereinto the information of toxicology and ecology are revised according GHS requirement.
- Labeling of Chemicals Based on GHS (GB/T 22234-2008)
 - ✓ Adopts the contents of JIS Z 7251:2006 <Labeling of Chemicals Based on GHS> (Japanese version)
 - ✓ Stipulates chemical's GHS hazards categories and their label elements (symbol, warning, hazard instruction, etc.)

National Standards

◆ Chemical Label and SDS (cont.)

- General rules for preparation of Chemical Safety Label (GB15258-1999)
 - ✓ Made particular provisions on the definition, contents, compiling requirements, production and usage of chemical safety label. (at present, the revision has already been done and sent to WTO, but not issued yet)
- Labels for packages of dangerous goods (GB190-1990)
 - ✓ Stipulates the classification logo, size, color, methods of usage and so on of the package label of dangerous goods. (at present, the revision has already been done and sent to WTO, but not issued yet)

National Standards

◆ Chemical Testing

- **Chemical hazardous properties test methods (a series of 16 standards):** According to UN's Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, China developed a series of standards of hazardous properties test method for dangerous goods, and implemented them in 2004.

1. Safety code for inspection of hazardous properties for dangerous goods—General specifications, GB 19458-04
2. Safety code for inspection of hazardous properties for dangerous goods of oxidizing substances, GB 19452-04
3. Safety code for inspection of hazardous properties for dangerous of civil explosives, GB 19455-04
4. Safety code for inspection of hazardous properties of dangerous goods for nitrates, GB 19456-04
5. Safety code for inspection of hazardous properties for dangerous goods of flammable solids, GB 19521.1-04
6. Safety code for inspection of hazardous properties for dangerous goods of flammable liquid, GB 19521.2-04

7. Safety code for inspection of hazardous properties for dangerous goods of flammable gas, GB 19521.3-04
8. Safety code for inspection of hazardous properties for dangerous good of substances which in contact with water emit flammable gases, GB 19521.4-04
9. Safety code for inspection of hazardous properties for dangerous goods of pyrophoric solid, GB 19521.5-04
10. Safety code for inspection of hazardous properties for dangerous goods of corrosive substances, GB 19521.6-04
11. Safety code for inspection of hazardous properties for dangerous goods of toxic substances, GB 19521.7-04
12. Safety code for inspection of hazardous properties for dangerous goods of toxic gases, GB 19521.8-04
13. Safety code for inspection of hazardous properties for dangerous goods of gas mixture, GB 19521.9-04
14. Safety code for inspection of hazardous properties for dangerous goods of compressed gases, GB 19521.10-04
15. Safety code for inspection of small gas receptacles for dangerous goods, GB 19521.13-04
16. Safety code for the inspection of medium and minitype receptacles for dangerous goods, GB 19521.14-04

National Standards

◆ Chemical Testing (cont.)

- Physical and chemical, health-toxicity and eco-toxicological test methods of chemicals (a series of 123 standards)
 - ✓ To correspond to REACH, China launched national standard-setting work on the new test methods for hazardous chemicals. The series of standards are totally 123 items, among which 65 items are standards of physical and chemical test methods, and the others are standards of toxicity and eco-toxicological test methods.
- The Guidelines for the Testing of Chemicals (HJ/T153-2004) and Methods for the Testing of Chemicals
 - ✓ To regulate chemical testing, the former SEPA released industry standards stipulating the testing requirements of chemical properties of physical and chemical, bio-system effect, degradation and accumulation, health effects

National Standards

◆ Others

- The principle of classification of transport Packaging groups of dangerous goods (GB/T 15098-94)
- Rule for the Storage of Common Dangerous Chemicals (GB15603-1995)
- Symbols for the Transport of Dangerous Goods (GB191-2000)
- Material Safety Data Sheet (GB/T 17519.1-1998): Part 1 content and order of sections (instead by GB/T16483-2008)
- Material Safety Data Sheet (GB/T 17519.2-2003): Part 2 detailed rules for preparation
- General rule for classification and hazard communication of chemicals (already sent to WTO according to TBT Agreement and waited for reply)

II. Institutions Implementing GHS in China

- ◆ Joint promoting by ministries and committees
 - Lead Department: National Development and Reform Commission (NDRC)
 - Participating departments: MEP, Ministry of Health (MoH), Ministry of Commerce (MoC), Ministry of Public Security (MPS), Ministry of Transport (MoT), General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ), the State Administration of Work Safety (SAWS), etc.

Responsibilities/Activities of Ministries

◆ **National Development and Reform Commission (NDRC)**

- From a policy point of view, study and establish directory of chemicals whose production should be supported and restricted or prohibited, and make related policy measures
- Give support to the approval of the major projects of the relevant department

Responsibilities/Activities of Ministries

◆ Ministry of Environmental Protection (MEP)

- Be responsible for the formulation and amendment of China's environmental protection laws and standards related to chemicals
- Organize the compilation of chemical eco-toxicological test methods for testing chemicals, by reference to GHS requirements of aquatic environment damage and related OECD technology guidelines
- Take charge and organize the classification and implementation of GHS part of environmental damage
- Participate in the research on reacting strategies and relevant science, provide data about chemical impact on environmental; set up the laboratories and improve the conditions
- Develop the eco-toxicological testing and environmental hazards assessment of new chemicals, constructed the eco-toxicological testing institutions and qualified laboratories (GLP)
- Be currently studying on and carrying out the classification of the basis and hazard of notified new chemical substances according to GHS requirements.

Responsibilities/Activities of Ministries

◆ Ministry of Commerce

- Investigate and analyze the status in quo of chemicals trade
- Research and make policies to facilitate the application and registration of export enterprises
- Carry out a number of international cooperation or negotiation from the perspective of foreign trade

◆ Ministry of Health

- Participate in policy study and provide toxicological test data

Responsibilities/Activities of Ministries

- ◆ **General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)**
 - AQSIQ has started to establish Key Laboratories in inspection and quarantine agencies in Tianjin, Shanghai, Guangdong, etc. to implement GHS and react REACH, set up the relevant databases, web sites and chemical database, information platform, and completed the 16 items public information required by the safety data sheets (SDS) of import and export chemical
- ◆ **Standardization Administration Committee (SAC) of PRC**
 - Evaluate the status in quo of chemical standards and test methods of China
 - Preside the amendment of national standards of chemicals
- ◆ **Other departments**
 - MPS, MoT and other departments in China are actively carrying out the work corresponding to GHS within their functions

III. Management on the Import and Export of Chemicals

- ◆ AQSIQ is responsible for the inspection and quarantine against import/export of dangerous goods, according to the Law on Import and Export Commodity Inspection and Regulations on the Control over Safety of Dangerous Chemicals.
- ◆ In 1985, 1995, 2000 and 2003 respectively, China promulgated shipping, air, rail and road transport of dangerous goods on packaging test management approach.
- ◆ Based on Law of Commodity Inspection and IMDG Code, Inspection and quarantine agencies drafted nearly 100 standards for the classification level test and packaging inspection of dangerous goods during various modes of transport, which are effective technical supports of China's dangerous goods management and in the basic standards of international dangerous goods technical regulations.

IV. Problems and Challenges

- ◆ Multi-departments involved, not yet formed inter-ministerial coordination mechanism
- ◆ Lack of uniform plan for GHS implementation
- ◆ Distempered system of chemical management laws
- ◆ Technically difficult for China to ensure the timeliness of GHS, due to quick update of GHS
- ◆ Lack of experts and experiences of GHS classification
- ◆ Authoritative data information of the substances is severely in short
- ◆ Lack of domestic propaganda

V. Recommendations

- ◆ Establish and perfect chemical management law and regulation system
- ◆ Revise the existing national standards such as chemical classification, label according to GHS classification requirements
- ◆ Enhance international cooperation and GHS information communion
- ◆ Strengthen personnel and technical training about chemical identification and classification
- ◆ Promote the propaganda of GHS, etc.



Thanks for your attention!

感谢聆听！