Globally Harmonized System of Classification and Labeling of Chemicals – Singapore’s Implementation

Purpose: Information
Submitted by: Singapore
Globally Harmonized System on Classification and Labeling of Chemicals - Singapore’s Implementation

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A Great Workforce A Great Workplace

APEC Chemical Dialogue Meeting 12 Aug 2014: Beijing China

Singapore My Garden City

- Land Area 714 sq km
- Employment 3.4 million
- Total Population 5.4 million
Scope

- National GHS Taskforce
- Approach & Strategies
- Journey & Milestones
- Challenges & Lessons Learnt

Endorsement of GHS by Asia Pacific Economic Cooperation (APEC)

- APEC Trade Ministers encouraged APEC members to work towards implementing the globally harmonized system (GHS) on hazard classification and labelling of chemicals and safety data sheets by 2006, including through capacity building.

GHS

Globally harmonised system of classification and labelling of chemicals

APEC Ministerial Meeting, 2002
National GHS Taskforce

2005
MTI
MINISTRY OF TRADE AND INDUSTRY
SINGAPORE

2008
MINISTRY OF MANPOWER

SCIC
SINGAPORE CHEMICAL INDUSTRY COUNCIL

National GHS Implementation Task Force

Ministry of Manpower [MOM]

Singapore Chemistry Industry Council [SCIC]

- National Environment Agency [NEA]
- Singapore Civil Defence Force [SCDF]
- Singapore Police Force [SPF]
- Maritime and Port Authority [MPA]
- Ministry of Trade and Industry [MIT]
- Health Science Authority [HSA]
- Singapore Institution of Safety Officers [SISO]
- Workplace Safety and Health Council [WSHC]
- Agri-Food and Veterinary Authority of Singapore [AVA]

- Civil Aviation Authority of Singapore [CAAS]
Singapore’s GHS Implementation Strategy

Vision: Safe use of chemicals

Strategic Outcome:
Implementation of GHS for effective hazard communication through labelling and safety data sheets

Legislative Alignment

Fire Safety Act, Fire Safety (Petroleum and Flammable Materials) Regulations

Environmental Protection Management Act, EPM (Hazardous Substances) Regulations

Workplace Safety and Health Act, WSH (General Provisions) Regulations
WSH (General Provisions) Regulations

Regulation 42 - Warning labels

The occupier of a workplace shall ensure that, every container of hazardous substances is affixed with one or more labels that conform with -

(a) any SS relating to classification & labelling of hazardous substances;

(b) such other standards, Code of Practice or guidance relating to the classification & labelling of hazardous substances as is issued or approved by the WSH Council.

Regulation 43 - Safety data sheet

43 (1) Where any hazardous substance is used, handled or stored in a workplace, it shall be the duty of the occupier of the workplace to —

(a) obtain a SDS of the substance;

(b) assess the information in the SDS & take precautionary measures to ensure the safe use of the substance;

(c) make available the SDS to all persons at work in the workplace who are liable to be exposed to the substance.
43(2) Where any hazardous substance is sold to any person for use in a workplace, the seller or any agent of the seller who caused or procured the sale shall provide the buyer with a SDS for the substance that

(a) gives accurate & adequate information on the substance

(b) conforms with any SS relating to SDS or such other standards, CP or guidance as is issued or approved by the WSH Council.

GHS Enforcement Exercise -2012
GHS Implementation for Single Substance Manufacturer/Supplier

Total number of workplaces inspected: 23

Proper shipping name

UN No. 1234

In Emergency Dial

999 POLICE or
995 FIRE SERVICE

Specialist Advice

ABC Pte Ltd
Tel No. 1234567

Transport Emergency Information Panel

Dangerous goods (DG) **package stores** are to be provided with warning placard

**Storage Emergency Information Panel**

**Tank farm area**

**Storage Requirements in Public Areas**

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**SS 586 Part 2: GHS – Singapore’s adaptations**

- Clarity on the definition
  - Concentration limits, Cut off values / relevant ingredients, Container

- Adaptation to GHS revision 4

any bag, barrel, bottle, box, can, cylinder, drum, intermediate bulk container (IBC) or the like that contains a hazardous chemical.

Excluding: pipes or piping systems, and engines, fuel tanks and other operating systems in a vehicle, tank containers, freight containers, carrying tank of a road tanker

Refer to SDS for additional information.
**Acute toxicity cat 5**

**Skin irritation cat 3**

**Aspiration hazard cat 2**

**Flammable liq- cat 4 except for Diesel**

**Env Acute cat 2 +3**

**Env Chronic cat 3 +4**

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**Small Containers**

- Clearly define small containers by volume
- Capacity ≤ 125 ml
Information on a workplace reduced label are:-

1. product identifier
2. pictogram(s) (red or black border).

Other information such as the signal word and/or hazards of the chemical should be included where practicable.

Wherever practicable, with a full GHS label. Where a full GHS label is not practicable, a workplace label shall be used in the following situations:-

1) that is decanted, transferred or dispensed from its original container to a working-sized container;
2) used in laboratories
3) which is not supplied to another workplace;
4) to be sent out for research and analysis;
5) in small containers (125 ml or less).

Guidebook on GHS (2014) - provide guidance on SS 586

Promoting GHS

<table>
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<tr>
<th>Seminar</th>
<th>Number of Participants (2006- June 2014)</th>
<th>No. of Runs</th>
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<tbody>
<tr>
<td>National GHS Awareness Seminar</td>
<td>1,831</td>
<td>14</td>
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Quarterly coming 15th Run: 5 Sept 2014
Capable Building for GHS

- Association for Overseas Technical Scholarship (AOTS) GHS courses, Japan: 5 persons attended

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<tr>
<th>Course</th>
<th>Numbers trained (2006-June 2014)</th>
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<td>User</td>
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<td>Classification</td>
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<td>13</td>
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<td>Training session for the Competent Authority</td>
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Conference cum Workshop on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals

Think Globally and Act Locally – Crossing the Midpoint, Moving Forward and Making Changes
5 and 6 May 2014, Suntec Convention
Singapore
Virtual Expert Resource Group

1. Ken Price – Riskom International Pty Ltd
2. Dr Sano – Japan Chemical Database Ltd
3. Dr Hiroshi Jonai - Nihon University, Japan
4. Takeshi Morita – National Institute of Health Sciences Japan
5. Ms Rosa Gracia Couto- Secretary of the United Nations Sub-Committee of Experts (UNSCOE)
Singapore’s GHS Implementation Journey

Formation of GHS Task Force (TF)

Alignment of Legislation

Launch of Spore Standard (SS) 586

Guidebook on GHS

Implementation Roadmap

Virtual Expert Resource Group

4 GHS Leaflets

2002

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015 and beyond

13th runs: National GHS Awareness Seminars (Quarterly)

- All Chemical Manufacturers of Single Substances
- All Users of Single Substances
- All Chemical Manufacturers of Mixtures
- All Users of Mixtures

Single substances impacted by Rev 4 add on 1 year (1 July 2015)

add on 1 year (1 July 2016)

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Challenges in Implementing GHS

- Custodianship of GHS Task Force to oversee the implementation
- Legislation alignment
- Catch up: Singapore Standard Vs GHS (Revision #) document
- Impact analysis
- Building block approach to adopt
- Implementation timelines
- Reach out to SME
- Workers’ training
- Practical issues

Holistic / Whole of government approach
- Lead agency to champion
- Multi-prolonged strategies
- Legislation & Standards
- Compliance Assistance
- Consultation and engagement
- Promotion
- Capability Building
- Enforcement / targeted intervention
Singapore’s GHS webpage

Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Background
The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is a United Nations (UN)-developed system for chemical classification and hazard communication through harmonized provisions for standard labels and safety data sheets (SDS). It is developed from various existing systems in the US, EU, Canada, and from the UN’s own research and study of universal standards.

The GHS was endorsed by the UN World Summit for Sustainable Development in 2002. At the 14th APEC Ministerial Meeting in Q2 2002, APEC Trade Ministers also set the stamp of approval on the GHS for APEC-wide implementation by 2005. This target date was rescheduled to 2008 at the APEC Chemical Dialogue meeting in 2004.

The status of GHS implementation in 67 countries is listed here.

Timeline for Implementation
Suppliers of chemicals are required to prepare SDS and product labels, and users are required to provide GHS labels in accordance with the requirements specified in ISO 11014. Almost every industry will be affected by the GHS. The main industries include chemical manufacturing, petrochemicals, electronics, metal working, paint manufacturing, printing, transportation and storage.

At the launch of the SS 596 in Nov 2006 by SPRING Singapore, it was announced that transition periods of two and three years are needed to implement the GHS for single substances by manufacturers and users respectively. For materials, an additional two years was allowed.

Companies with existing hazard communication systems based on SS 266 (Caution Labelling for Hazardous Substances and CP 318 Preparation and Use of Material Safety Data Sheets (MSDS)) will need to prepare phase-in strategies for transition from the current systems to the new GHS requirements based on the new SS 596.

https://www.wshc.sg/ghs

Thank you

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