GHS Implementation in Malaysia

5th October 2022

Ir. Ts. Hazlina Yon
Director of Chemical Management Division
1. Background of GHS
What is GHS?

The Globally Harmonized System of Classification and Labeling of Chemicals
Background of GHS


Interorganization Programme for the Sound Management of Chemicals (IOMC) Coordinating Group for the Harmonization of Chemical Classification Systems (CG/HCCS)

International Labour Organization (ILO) for the hazard communication
Organization for Economic Cooperation and Development (OECD) for the classification of health and environmental hazards
United Nations Sub-Committee of Experts on the Transport of Dangerous Goods (UNSCETDG) and ILO for the physical hazards

Source: https://unece.org/transport/dangerous-goods/historical-background
Background of GHS

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals (CETDGGHS)

Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee)

United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG or Orange Book) (Published in 1956)

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS Sub-Committee)

United Nations Globally Harmonized System of Classification and Labelling of Chemicals (UNGHS or Purple Book) (Published in 2003)

Source: https://unece.org/transport/dangerous-goods/historical-background
Background of GHS

1st Edition
Published in 2003

2nd – 8th Edition
Updated every 2 years

9th Edition
Published in 2021

Source:
https://unece.org/transport/dangerous-goods/historical-background
Purpose of the GHS:

- To enhance the protection of human health and the environment by providing an internationally comprehensible system for hazard communication
- To provide a recognized framework for countries without an existing system
- To reduce the need for testing and evaluation of chemicals
- To facilitate international trade in chemicals whose hazards have been properly assessed and identified on an international basis
Background of GHS

Classification (Physical, health, and environmental hazards)

Hazard Communication (Label and SDS)

GHS Purple Book

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Ninth revised edition
2. History of GHS Implementation in Malaysia
Background to GHS Implementation in Malaysia

2002
GHS introduced at ASEAN-OSHNET Workshop in Kuala Lumpur

2004
MITI organized GHS seminar with APEC Chemical Dialogue

2005
Setting of Committee to draft CLASS Regulations

2006
National Coordinating Council for GHS Implementation

2007
Translation 1st Revised Ed. into Bahasa Malaysia completed

2008
Target date by World Summit on Sustainable Development (WSSD) for voluntary adoption globally; revised target date by APEC

2008
Malaysian Standards on GHS published

2008
GHS/CLASS Regulations gazetted on 11th Oct 2013, enforcement started on 12th Oct 2013

2010
Translation 3rd Revised Edition into Bahasa Malaysia completed

2011
CLASS Regulation gazetted on 16th Apr 2014, enforcement started on 17th Apr 2014

2012
Finalize CLASS Regulations & ICOP CHC

2013

2014

10

Finalize CLASS Regulations & ICOP CHC

ICOP CHC gazetted on 16th Apr 2014, enforcement started on 17th Apr 2014
Background to GHS Implementation in Malaysia

- **2014**: Start of Thorough Preparation Period for Full Compliance of CLASS Regulations 2013 on 17th April 2014
- **2016**: First Inventory Submission due by 31st March 2016 for 2015 inventory onwards
- **2019**: Draft on CLASS Regulations (Amendment) started
- **2020**: End of grace period before full compliance of ICOP CHC (Amendment) 2019 Part 1 on 31st Dec 2020
- **2022**: Draft on CLASS Regulations (Amendment) completed, GHS 8th Revised Edition integrated
- **2015**: End of Thorough Preparation Period for Full Compliance of CLASS Regulations 2013 on 16th April 2015
- **2016**: CATCH introduced to facilitate industries
- **2019**: ICOP CHC (Amendment) 2019 Part 1 gazetted 12th Dec 2019
- **2021**: Start enforce amendment of ICOP CHC
- **2022**: Amendment of ICOP CHC completed
### Background to GHS Implementation in Malaysia

<table>
<thead>
<tr>
<th>Sector</th>
<th>Lead Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Workplace</td>
<td>Department of Occupational Safety and Health (DOSH)</td>
</tr>
<tr>
<td>Pesticides</td>
<td>Pesticides Board (PB), Ministry of Agriculture</td>
</tr>
<tr>
<td>Transport</td>
<td>Ministry of Transport (MOT)</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>Ministry of Domestic Trade, Co-Operatives and Consumerism (MDTCC)</td>
</tr>
</tbody>
</table>

Source: MITI
Background to GHS Implementation in Malaysia

GHS National Coordinating Committee (NCCGHS)

GHS Technical Working Group (TWGGHS)

Industrial Workplace (DOSH)
Pesticides (Pesticide Board)
Transport (Ministry of Transport)
Consumer Products (MDTCC)

Source: MITI
GHS Implementation Roadmap in Malaysia (MyGHS)

- MyGHS was established in 2010
- Comprises of 8 strategies and 19 action plans

**ST1 (cross sectoral strategy): Enhance capacity of the National Coordinating Committee on the implementation of GHS (NCCGHS)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP1</td>
<td>To establish a Group of Resource Person on GHS (GRPGHS)</td>
<td>MITI</td>
<td>DOSH, IKM, LESTARI</td>
</tr>
<tr>
<td>AP2</td>
<td>To establish a Technical Working Group on Establishing an Integrated Chemical Database (TWGCD)</td>
<td>MITI</td>
<td>DOE, DOSH, IKM, LESTARI</td>
</tr>
<tr>
<td>AP3</td>
<td>To enhance cooperation between the NCCGHS and the National Committee on the Management of Environmentally Hazardous Substances (NCMEHS) towards a sound chemicals management in Malaysia</td>
<td>MITI</td>
<td>NRE</td>
</tr>
</tbody>
</table>

Source: MITI
### ST2 (Industrial Workplace): Strengthen upstream chemical safety requirements at industrial workplace

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP4</td>
<td>To establish common definitions related to GHS</td>
<td>DOSH</td>
<td>DOE</td>
</tr>
<tr>
<td>AP5</td>
<td>To incorporate GHS provisions into Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997 (CPL 1997)</td>
<td>DOSH</td>
<td>DOE</td>
</tr>
<tr>
<td>AP6</td>
<td>To incorporate GHS provisions into the Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000 (USECHH 2000)</td>
<td>DOSH</td>
<td>DOE</td>
</tr>
</tbody>
</table>

Source: MITI
### ST3 (Industrial Workplace): Facilitate data generation for chemicals

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP7</td>
<td>To ensure data reliability (e.g. establish guidelines to obtain reliable data from various databases)</td>
<td>DOSH</td>
<td>DOE</td>
</tr>
<tr>
<td>AP8</td>
<td>To maintain the list of SAMM accredited laboratories and GLP Compliant Testing Facilities in the field of chemical and toxicity testing.</td>
<td>Standards Malaysia</td>
<td>IKM, SIRIM Berhad</td>
</tr>
</tbody>
</table>

Source: MITI
### ST4 (Industrial Workplace): Enhance awareness and capacities of industrial workers

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP9</td>
<td>To amend GHS training modules by incorporating elements of the CLASS regulation (that will replace CPL 1997)</td>
<td>DOSH</td>
<td>CICM, NIOSH, LESTARI</td>
</tr>
<tr>
<td>AP10</td>
<td>Training of trainers</td>
<td>NIOSH</td>
<td>DOSH, CICM</td>
</tr>
<tr>
<td>AP11</td>
<td>Sustainability of the training course</td>
<td>NIOSH</td>
<td>DOSH, CICM</td>
</tr>
</tbody>
</table>

Source: MITI
**ST5 (Agriculture): Enhance preparedness for GHS implementation in agriculture sector**

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP12</td>
<td>Identify possible amendments on the requirements for pesticide classification and labelling based on available WHO and FAO guidelines</td>
<td>PB</td>
<td>MCPA</td>
</tr>
<tr>
<td>AP13</td>
<td>GHS capacity building for upstream personnel</td>
<td>PB</td>
<td>MCPA</td>
</tr>
</tbody>
</table>

Source: MITI
### GHS Implementation Roadmap in Malaysia (MyGHS)

**ST6 (Transport):** Adopting the latest version of the UNRTDG in transport sector

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP14</td>
<td>Enhance capacities and capabilities of port authorities and port operators</td>
<td>MOT</td>
<td>MDM, Port authorities and port operators</td>
</tr>
<tr>
<td>AP15</td>
<td>Enhance transport safety of dangerous goods by road and rail</td>
<td>MOT</td>
<td>Land Public Transport Commission (SPAD), RTD, DOR</td>
</tr>
</tbody>
</table>

Source: MITI
ST7 (Transport): Enhance GHS implementation at areas that relate to transport sector

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP1 6</td>
<td>Reduce the risks of chemicals in transit that are stored at bonded warehouse</td>
<td>Customs</td>
<td>DOSH</td>
</tr>
<tr>
<td>AP1 7</td>
<td>Enhance safety of customs officers, and other related officers at the custom ports.</td>
<td>Customs</td>
<td>-</td>
</tr>
<tr>
<td>AP1 8</td>
<td>Enhance capability of emergency responders in addressing chemical accidents</td>
<td>BOMBA</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: MITI
GHS Implementation Roadmap in Malaysia (MyGHS)

ST8 (Consumer): Enhance preparedness for GHS implementation in consumer sector

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plans</th>
<th>Lead agency</th>
<th>Collaborating agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP19</td>
<td>To carry out Comprehensibility Testing (CT) and Situation and Gap Analysis (SGA) for consumer sector</td>
<td>MDTCC</td>
<td>LESTARI</td>
</tr>
</tbody>
</table>
The GHS advanced training sessions were held on September 2011 (Session 1) and September 2011 (Session 2).

A total number of 195 participants have completed the training sessions. It comprises about 90 agencies/companies.
Training and Capacity Building for the Implementation of GHS in Malaysia

After the training sessions were held in 2011, 10 GHS trainers have been identified (i.e. GHS trainers), i.e. 6 representatives from DOSH, 2 representatives from NIOSH, 1 representative from SIRIM and 1 representative from LESTARI.

In 2012, 5 training sessions were held in different regions and each training session comprises GHS awareness seminar and GHS advanced training course.
A total number of 543 participants have completed the GHS basic training whereas 396 participants have completed the GHS advanced training. It comprises about 174 agencies/companies.
Training and Capacity Building for the Implementation of GHS in Malaysia

GHS Awareness Seminar:
Session 1: Introduction to GHS (by NIOSH)
Session 2: GHS implementation in Malaysia (by MITI)
Session 3: Importance of GHS to the industry (by CICM)
Session 4: GHS toolkit (by SIRIM)
Session 5: CPL vs GHS-Malaysia supplier perspectives (by DOSH)
Session 6: Legislative GHS requirement in Malaysia-CLASS regulations (by DOSH)

Source: MITI
Training and Capacity Building for the Implementation of GHS in Malaysia

**GHS Advanced Training Course:**
- Session 1: Classification and communication of chemical hazards (UKM)
- Session 2: Environmental hazard classification criteria for substances and mixtures (SIRIM)
- Session 3: Practicing environmental hazards classification (SIRIM)
- Session 4: Physical hazard classification criteria for substances and mixtures (NIOSH)
- Session 5: Practicing physical hazards classification (NIOSH)
- Session 6: Health hazard classification criteria for substances and mixtures (DOSH)
- Session 7: Practicing health hazards classification (DOSH)

Source: MITI
3.
CLASS Regulation 2013 & ICOP CHC 2014
CLASS Regulation 2013

CPL 1997
- Classifications based on EU
- No information about chemical supplier address
- Scope of principal and subsidiary supplier not defined
- Does not address specific hazards e.g.: environment hazard

Guidelines on:
✓ Classification
✓ Labelling
✓ Chemical Safety Data Sheet

CLASS 2013
- Gazetted on 11th Oct 2013
- Enacted under provision of para.66 (2)(a), (c), (k) and (u), OSHA 1994
- Regulate the supply of hazardous chemicals for use at workplace
- Based on GHS 3rd Revised Edition, 2009

Industry Code of Practice on Chemicals Classification and Hazard Communication (ICOP CHC)
“Industry Code of Practice on Chemical Classification and Hazard Communication”
✓ Gazetted on 10 June 2014
✓ Based on GHS 3rd Revised Edition
“Industry Code of Practice on Chemical Classification and Hazard Communication (Amendment) 2019 Part 1”

✓ Published on 11 October 2019

An updated list contains GHS classification for 662 chemicals

The classification specified in the list, is a minimum classification for the chemicals

Classification of additional hazard class or more severe category, principal supplier may classify accordingly

The principal supplier shall submit to Director General the relevant information and data to support the exclusion of any hazard class or classification of less severe category compared to minimum classification specified.
4. Awareness Materials on GHS and CLASS Regulation 2013
An Introduction to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Part of the 2010-2012 project “Training and Capacity Building for the Implementation of the GHS in Malaysia”

Published by Institute for Environment and Development (LESTARI), UKM
An Introduction to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Distribution of the booklets:
Express Labelling Self-Assessment (ELSA)

✓ Published by DOSH in 2015

Express Labelling Self-Assessment (ELSA) For User
Express Labelling Self-Assessment (ELSA) For Supplier

Express Labelling Self-Assessment (ELSA)
✓ Published by DOSH in 2015

Formaldehyde (CAS No: 50-00-0)
Kaudniren (Appling)
Hendra Syah (Lutfi)

1. DANGER BAHAYA

2. SYNOPSIS

3. PRECAUTIONARY STATEMENTS

4. 1. Kats Eyarlar/Signal Word

5. 1. Piktogram Bahaya/ Hazard Pictogram

6. Nota/Note: Senarai di bawah adalah untuk benta bersaiz 125ml dan ke atas. Untuk benta bersaiz 125ml dan ke bawah, senarai hanya elemen no. 1, 2, 3, 4 sahaja dan tambahan elemen no. 5, 6, 7, 8, 9, 10 di masa surat belakang (The assessment below is for containers larger than 125ml.)
### How to Use:
- Checking can be done to your SDS by using the checklist attached.
- Mark ✓ or X in column 1. SDS is compliant for the specific section if there is no X in column 1.
- Any section which is non-compliant would result in SDS not complying the requirements of CLASS Regulations and ICOP CHC.

## Minimum Informations

<table>
<thead>
<tr>
<th>Pre Check Criteria</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SDS is prepared in English and Bahasa Melayu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Information are arranged in a format specified under Reg. 13(2) CLASS Regulations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Headings are as below:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Identification of the hazardous chemical and of the supplier (ICOP CHC 3.7.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Product identifier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Other means of identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Recommended use of the chemical and restrictions on use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Details of principal suppliers (including name, address, phone number, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Emergency phone number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Hazard identification (ICOP CHC 3.7.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Classification of the substance/mixture and any national or regional information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Label elements (hazard pictogram or symbol, signal word, hazard statement and precautionary statements). Hazard symbols may be provided as a graphical reproduction of the symbols in black and white or name of the symbols e.g. &quot;Flame&quot;, &quot;Skull and crossbones&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Other hazards which do not result in classification (e.g. dust explosion hazard) or are not covered by the Regulations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Composition and information of the ingredients of the hazardous chemical (ICOP CHC 3.7.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Chemical identity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Common name, synonyms, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) CAS number and other unique identifiers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Impurities and stabilizing additives which are</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Express SDS Self-Assessment (ESSA)

- ✓ Published by DOSH
Benefits of complying with the CLASS Regulations:

To the employers:
• Facilitate the identification, assessment and control of risks
• Facilitate chemical trade
• Reduce regulatory compliance costs in the long term

To the workers:
• Better understanding of hazard, thus reducing confusion due to various formats of hazard communication of hazardous chemicals
• Safe working environment & effective emergency response

To the public:
• A safer & healthier environment

Department of Occupational Safety and Health

Level 1, 3, 4 & 5, Block D4, Complex D
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62350 Putrajaya

Tel: 03 - 8880 2343
Fax: 65 - 8866 1216
E-mail: jlhs@johor.gov.my
INTRODUCTION

The Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 were granted on the 11th October 2013. These regulations outline the responsibility of suppliers (principal* and subsidiary**) of chemicals for use at the workplace in the aspect of classification, labelling, Safety Data Sheet and submission of inventory. Detailed guidance in the form of an Industry Code of Practice on Chemicals Classification and Hazard Communication (ICOP CHO) is also provided to help suppliers to classify chemicals and communicate hazards effectively as required by the law.

*Principal supplier = a manufacturer, importer or any person who sells or distributes a hazardous chemical
**Subsidiary supplier = a person who repacks, distributes or moves hazardous chemicals

ENFORCEMENT OF THE REGULATIONS

The principal supplier is responsible to classify the chemicals supplied to workplaces. The chemicals must be classified and labelled based on the list of chemicals provided in the ICOP. Records of classification done on the chemicals must be maintained by the principal supplier and be made readily available upon request of officer from the Department of Occupational Safety and Health (DOSH).

The supplier must ensure that the packaging of the hazardous chemicals that he supplies meets the following requirements:

• The package should be able to contain the chemical properly and a safety device is required to be fitted to the packaging.
• The materials used for packaging must be inert to the contents.
• The packaging and fastening should be strong and durable.
• Replaceable fastening devices should be reliable to ensure the contents would not escape.

The packaging should also be sealed initially whereby the seal could not be repaired once it is opened.

Labelling

The supplier is responsible to ensure that the packaging of every hazardous chemical supplied be equipped with a legible and indelible label, containing all the information:

• Product identifier;
• Supplier identification;
• Signal word;
• Hazard statement;
• Hazard pictogram;
• Precautionary statement;

The size of the pictogram must be at least 1/15 of the label’s surface area but not be less than 100mm. The label must be firmly attached to one or more surfaces of the packaging to ensure clear view of the warnings. If the packaging is 2.5L and smaller, the labelling may be simplified to include:

• Product identifier;
• Supplier identification;
• Signal word;
• Hazard pictogram where applicable; and
• The statement 'Read Safety Data Sheet before use...'.

Safety Data Sheet (SDS)

The supplier is responsible to provide an updated Safety Data Sheet (SDS) in Bahasa Malaysia as well as in English for each hazardous chemical or mixture containing hazardous substances. The SDS must contain the following information:

• Identification of the hazardous chemical and supplier;
• Hazard(s) identification;
• Composition and information on ingredients;
• First aid measures;
• Fire-fighting measures;
• Accidental release measures;
• Handling and storage;
• Exposure controls and personal protection;
• Physical and chemical properties;
• Stability and reactivity;
• Toxicological information;
• Ecological information;
• Disposal information;
• Transportation information;
• Regulatory information;
• Other information (including date of preparation and revision of the SDS).

The SDS must be reviewed and rewritten when new information becomes available, once every 5 years after the preparation/review data, or when directed by DOSH.

Inventory

The Regulations require that an inventory of hazardous chemicals for one calendar year activity must be prepared by the importer and the manufacturer if the quantity imported or supplied accordingly for each chemical exceeds 1 metric tonne per year. The inventory must be submitted to the Director General no later than 31st March of the following year. Information to be included in the inventory is as follows:

• Product identifier;
• Name of the hazardous chemical;
• Composition and ingredients of a hazardous chemical;
• Hazard classification and;
• Total quantity of each hazardous chemical imported or supplied.

The inventory must also be maintained in good condition and in orderliness manner.

CONCLUSION

If the name of chemical and the concentration of ingredients of the mixture are part of confidential business information, it can be omitted from the label and the Safety Data Sheet and replaced with a generic name and allowable concentration range respectively.

The information must be revealed to Director General, Occupational Health Doctor or anyone who uses or handles the chemical when requested in writing. The information released should be used solely for the purpose of protection of the safety and health of employees.
Reverse Quick Training Method (RQTM)
ICOP CHC 2014
Reverse Quick Training Method (RQTM) ICOP CHC 2014

**Bridging Principle**
- Extrapolating data to determine the hazards of an untreated mixture as a whole
- Allows broader use of available data to complete a hazard classification

**Dilution**
- If a tested mixture is diluted with a diluent that has an equivalent or lower toxicity classification than the least toxic original ingredient, and which is not expected to affect the toxicity of other ingredients, then the new diluted mixture may be classified as equivalent to the original tested mixture.
- Example: Mixture A, Mixture B, Mixture C

**Batching**
- The toxicity of a tested production batch of a mixture can be assumed to be substantially equivalent to that of another untreated batch of the same commercial products when produced by or under the control of the same manufacturer, unless there is reason to believe there is significant variation such that the toxicity of the untreated batch has changed. If the latter occurs, new classification is necessary.
- Example: Mixture A, Mixture B, Mixture C

**Interpolation Within One Toxic Category**
- For three mixtures (A, B, and C) with identical ingredients, where mixtures A and B have been tested and are in the same class and/or subcategory and where untreated mixture C has the same toxicologically active ingredients as mixtures A and B but has concentrations of toxicologically active ingredients intermediate to the concentrations in mixtures A and B, then mixture C is assumed to be in the same toxicity class as A and B.
- Example: Mixture A, Mixture B, Mixture C

**Substantially Similar Mixtures**
- If Mixtures A and B are in category 2, then mixture C is classified as category 2.
- Example: Mixture A, Mixture B, Mixture C

**Aerosols**
- An aerosol form of a mixture may be classified in the same hazard category as the tested, non-aerosol form of the mixture provided the added propellant does not affect the toxicity of the mixture on spraying.
- Example: Mixture A, Mixture B, Mixture C

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Concentration of Highly Toxic Mixtures

If a tested mixture is classified in the highest class and/or subcategory is concentrated, a more concentrated untreated mixture should be classified in the highest class and/or subcategory without testing.

Example:
- Tested Mixture
- Untested Mixture

**Data for A and C are available and substantially equivalent, i.e., they are in the same hazard class and are not expected to affect the toxicity of B. If mixture (i) or (ii) is already classified based on tests, then the other mixture can be assigned the same hazard category.**

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Reverse Quick Training Method (RQTM) ICOP CHC 2014
CLASS LABELS

What is the 6 elements needed?

Formaldehyde (Formaldehid)
(CAS No. : 50-00-0)

HAZARD STATEMENTS
PEPERIKSAAN BAHAYA

- Supposed of causing cancer.
- Enzyt effect membrane system.
- Toxic if inhaled, in contact with the skin.
- Caution: must avoid skin and eye damage.
- Information about health hazards recorded in this data sheet.
- May cause allergic skin reaction.
- Avoid manipulation by untrained personnel.

PRECAUTIONARY STATEMENTS
PERYERIKAN SAPEHATA JASA

- Keep away from foodstuffs, potable water, and children.
- Store at a temperature of 15-25°C.
- Avoid contact with eyes.
- Avoid inhaling vapors.
- Avoid swallowing.
- If swallowed, call a doctor.
- Avoid skin contact.
- Avoid prolonged contact with the skin.

Signal Word Data Sheet

Class 3

Supplier Identification Pengenalan Pencipta

Product Identifier Pengenalan Pengikat

Hazard Pictogram Pamegah Bahaya

Class Labels Brochure

Promotional Materials on GHS

GLOBALLY HARMONISED SYSTEM (GHS)
AWARENESS AND BASIC COURSE

ANJURAN BERSAMA
Chemical Industries Council of Malaysia (CCIM)
Jabatan Keamanan dan Kesihatan Pekerjaan (JKKP)
CLASS Pictograms Brochure

CLASS Pictograms

Brochure
Display of Chemical Container with CLASS Labels
FREQUENTLY ASKED QUESTION ON THE CLASS Regulations: Promotional materials
Reverse Quick Training Method (RQTM) Chemical Information Management System (CIMS)

For submission of inventory

RQTM CIMS

For the purpose of simplifying the processes of chemicals inventory submission by chemical suppliers, DOSH has developed an online submission system called CIMS.
ICOP CHC (Amendment) 2019 Part 1 Infographic

Application of Industry Code of Practice on Chemicals Classification and Hazard Communication (Amendment) 2019

12 DEC 2019

Industry Code of Practice on Chemicals Classification and Hazard Communication (Amendment) 2019 - ICOP CHC 2019
- Gazetted as P.U.(B) 123
- Amendment on Part 1 (List of Classified Chemicals)

1 JAN 2021 ONWARDS

Chemical Supplier Shall Use
- Part 1 ICOP CHC 2019; and must be read together with
- Part 2, 3 & 4 ICOP CHC 2014

12 DEC 2019 - 31 DEC 2020

Chemical Supplier Shall Use
- Part 1, 2, 3 & 4 ICOP CHC 2014; and
- Part 1 ICOP CHC 2019 (optional)

16 APR 2014

- List of minimum classification for the chemicals. Suppliers may apply classification of additional hazard class or minor severity category, with supporting data. However, suppliers shall submit data to DG DOSH to exclude any hazard class or classification of less severe category.
- Revised classification for 40 chemicals.
- Additional of 383 new chemicals.

For further info contact DOSH Malaysia Chemical Management Division
Engagement with rubber industries and manufacturers regarding classification of Carbon Black

Date: 25th May 2021
Online session
## SELF-ASSESSMENT CHECKLIST DURING PANDEMIC IN LOCAL LANGUAGE

### Senarai Semak

**Self Assessment Peraturan CLASS 2013.pdf**
CLASSIFICATION TOOL FOR CHEMICAL MIXTURE (CATCH)

https://catch.ukm.my/
## NATIONWIDE OPERATIONS FOR CLASS 2013 COMPLIANCE

### Compliance Level By Element for Year 2022:

<table>
<thead>
<tr>
<th>Element</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Classification</td>
<td>130</td>
<td>50.2%</td>
<td>5</td>
<td>1.9%</td>
<td>27</td>
<td>10.4%</td>
</tr>
<tr>
<td>Packaging</td>
<td>237</td>
<td>91.5%</td>
<td>3</td>
<td>1.2%</td>
<td>12</td>
<td>4.6%</td>
</tr>
<tr>
<td>Labelling</td>
<td>173</td>
<td>66.8%</td>
<td>24</td>
<td>9.3%</td>
<td>34</td>
<td>13.1%</td>
</tr>
<tr>
<td>SDS</td>
<td>153</td>
<td>59.1%</td>
<td>39</td>
<td>15.1%</td>
<td>38</td>
<td>14.7%</td>
</tr>
<tr>
<td>Inventory</td>
<td>191</td>
<td>73.7%</td>
<td>8</td>
<td>3.1%</td>
<td>10</td>
<td>3.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>115</td>
<td>44.4%</td>
<td>31</td>
<td>12.0%</td>
<td>48</td>
<td>18.5%</td>
</tr>
</tbody>
</table>
PROSECUTION OF CLASS REGULATIONS 2013 BY STATES IN MALAYSIA FROM 2015 TO 2020

POPULAR PROVISIONS UNDER THE CLASS REGULATIONS 2013:

- **Regulation 4**
  Duty of principal supplier to classify chemical a hazardous chemical

- **Regulation 5**
  Record of classification

- **Regulation 8**
  Duty to label packaging of hazardous chemical

- **Regulation 14**
  Inventory of hazardous chemicals
5. Conclusion
CONCLUSION

- Malaysia has come a long way from CPL 1997, an EU based classification, to GHS integrated into the local legislation.
- There were many parties/stakeholders involved in the earlier implementation of GHS, including UNITAR, JICA, LESTARI, NIOSH, and government agencies.
- After the GHS 3rd Edition was integrated into the local legislation, i.e CLASS Regulations 2013, ICOP CHC 2014 was gazetted.
- The ICOP CHC 2014 is similar to the GHS Purple Book which includes the criteria of classification of hazardous chemicals.
- From time to time, the Malaysian Government will update the classified chemical list in Part 1, ICOP CHC as can be seen in Amendment 2019 Part 1.
- Up until today, many engagements has been conducted with associations such as Chemical Industries Council of Malaysia (CICM), The Malaysian Rubber Products Manufacturers’ Association (MRPMA), Malaysian Plastics Manufacturers Association (MPMA), and Federation of Malaysian Manufacturers (FMM) when there are issues arising regarding CLASS Regulations 2013.
Thank You