



DEPARTMENT OF OCCUPATIONAL
SAFETY AND HEALTH

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

United Nations Conference on Environment and Development (UNCED)
(Chapter 19 of Agenda 21, 1992)



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/transp/ort/dangerous-goods/historical-background>

Technical focal points

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)

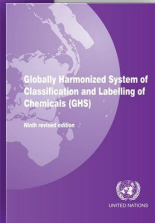
Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee)

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/transp/ort/dangerous-goods/historical-background>

Background of GHS

1st Edition

Published in 2003

01

2nd – 8th Edition

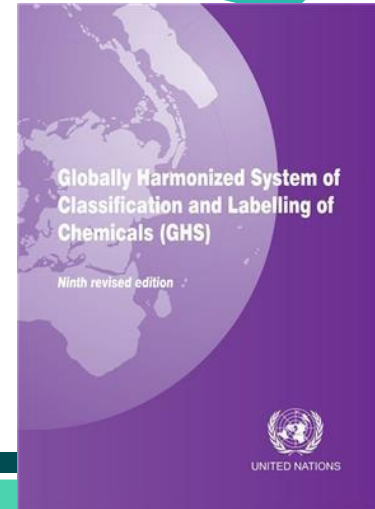
Updated every
2 years



9th Edition

Published in 2021

09



Background of GHS

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

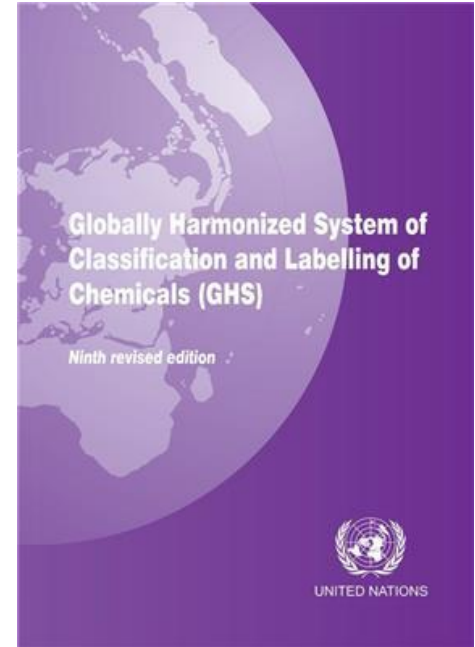
Classification
(Physical,
health, and
environmental
hazards)



**Hazard
Communication**
(Label and SDS)



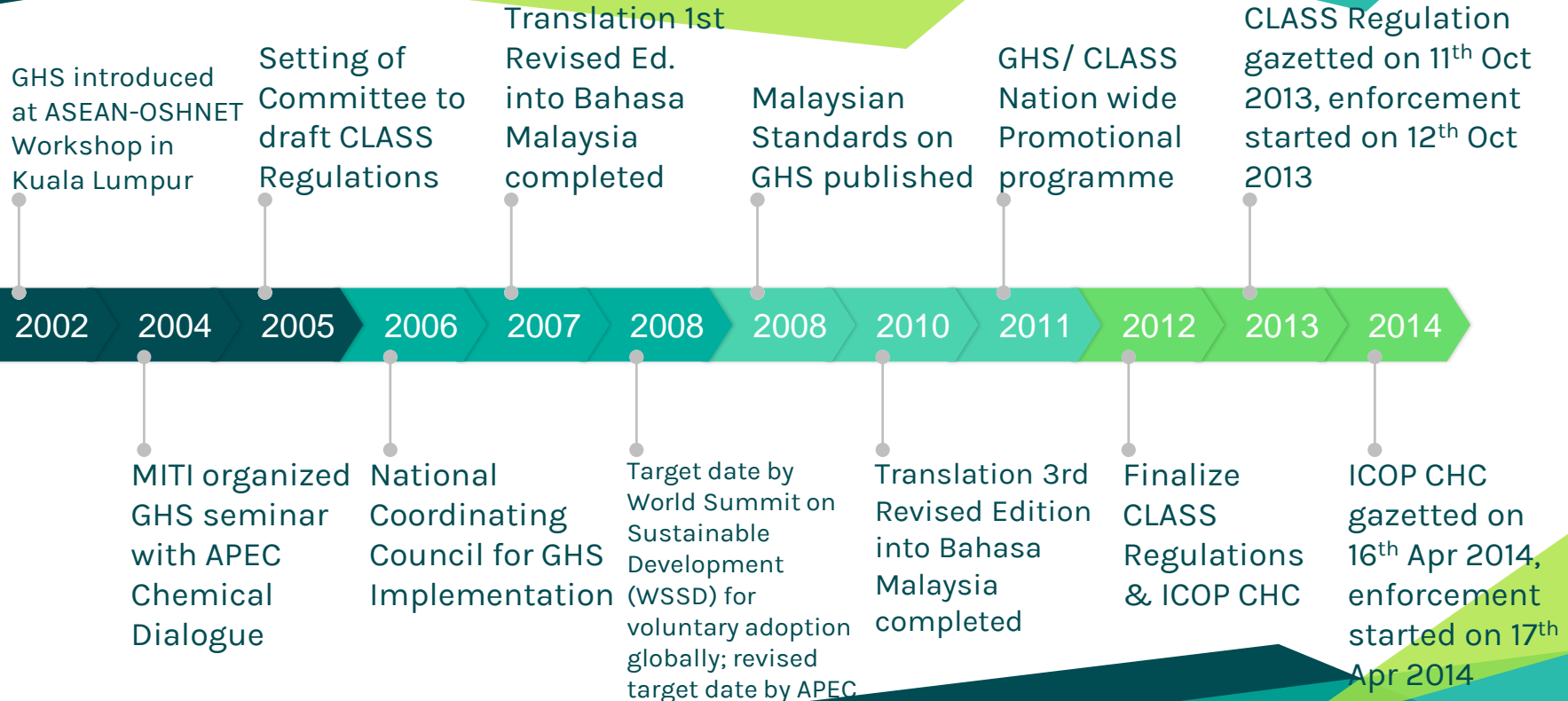
**GHS
Purple
Book**



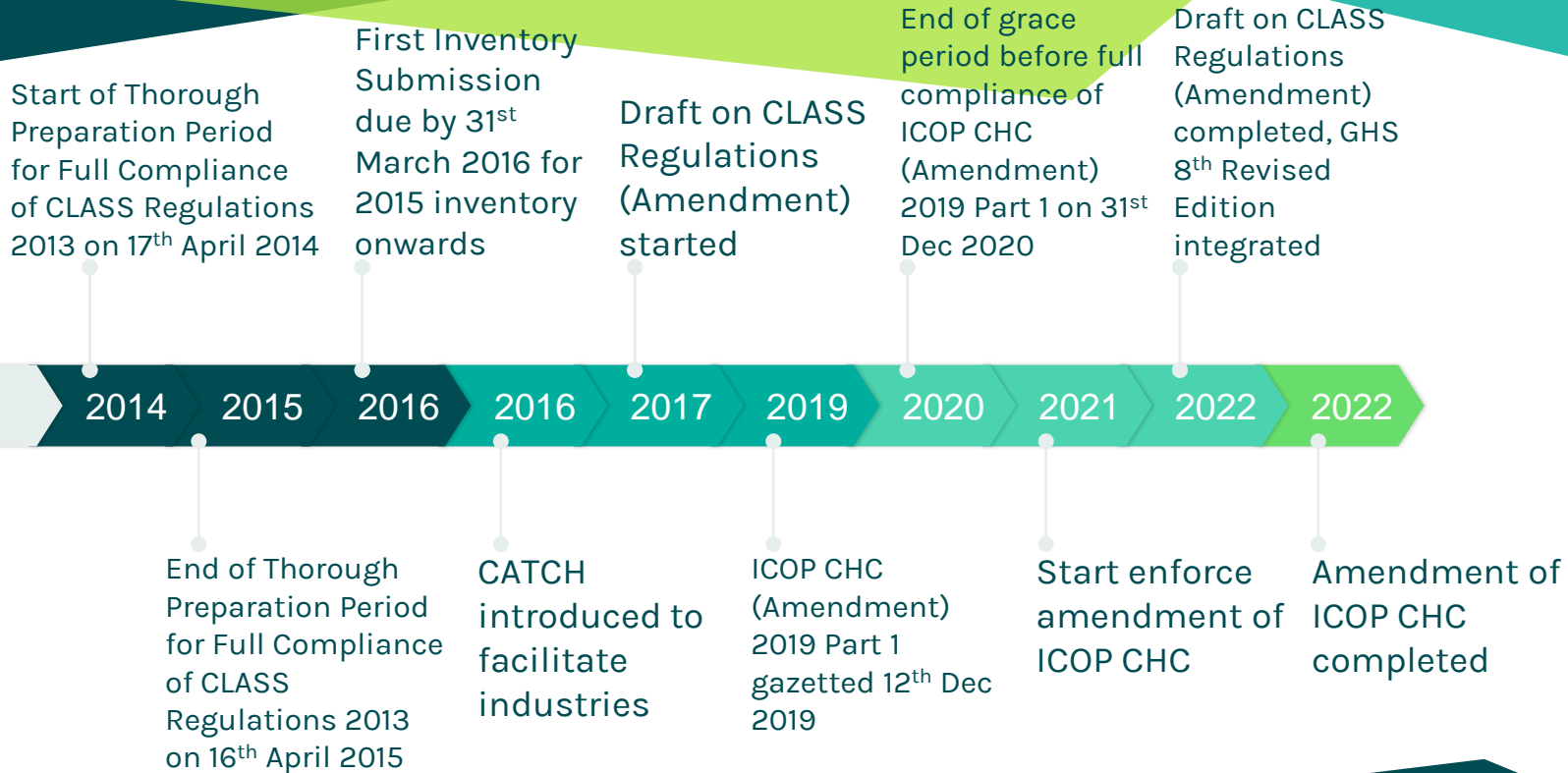
2.

History of GHS Implementation in Malaysia

Background to GHS Implementation in Malaysia



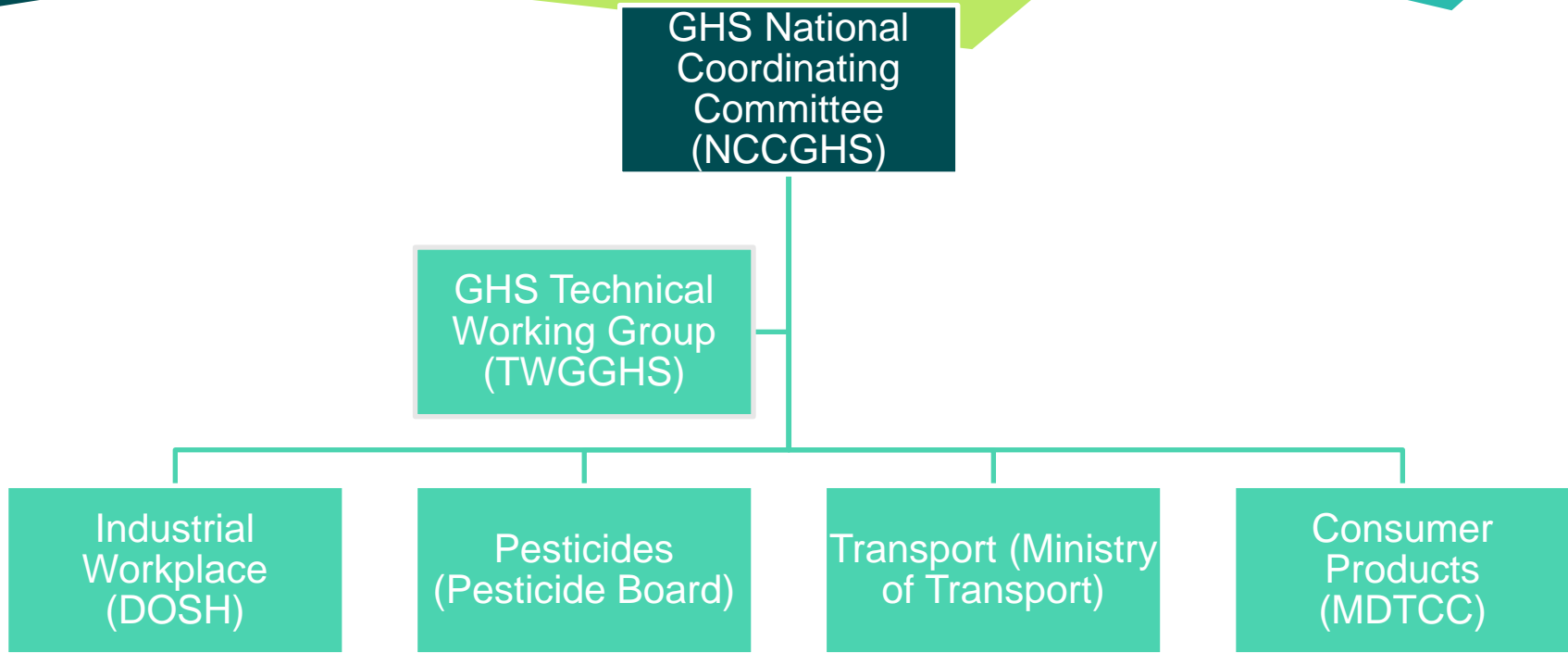
Background to GHS Implementation in Malaysia



Background to GHS Implementation in Malaysia

Sector	Lead Agency
Industrial Workplace	Department of Occupational Safety and Health (DOSH)
Pesticides	Pesticides Board (PB), Ministry of Agriculture
Transport	Ministry of Transport (MOT)
Consumer Products	Ministry of Domestic Trade, Co-Operatives and Consumerism (MDTCC)

Background to GHS Implementation in Malaysia



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)

No.	Action Plans	Lead agency	Collaborating agencies
AP1	To establish a Group of Resource Person on GHS (GRPGHS)	MITI	DOSH, IKM, LESTARI
AP2	To establish a Technical Working Group on Establishing an Integrated Chemical Database (TWGCD)	MITI	DOE, DOSH, IKM, LESTARI
AP3	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	MITI	NRE

GHS Implementation Roadmap in Malaysia (MyGHS)

**ST2 (Industrial Workplace):
Strengthen upstream
chemical safety
requirements at
industrial workplace**

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

GHS Implementation Roadmap in Malaysia (MyGHS)

ST3 (Industrial Workplace): Facilitate data generation for chemicals

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

GHS Implementation Roadmap in Malaysia (MyGHS)

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

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

GHS Implementation Roadmap in Malaysia (MyGHS)

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

No.	Action Plans	Lead agency	Collaborating agencies
AP12	Identify possible amendments on the requirements for pesticide classification and labelling based on available WHO and FAO guidelines	PB	MCPA
AP13	GHS capacity building for upstream personnel	PB	MCPA

GHS Implementation Roadmap in Malaysia (MyGHS)

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

No.	Action Plans	Lead agency	Collaborating agencies
AP1 4	Enhance capacities and capabilities of port authorities and port operators	MOT	MDM, Port authorities and port operators
AP1 5	Enhance transport safety of dangerous goods by road and rail	MOT	Land Public Transport Commission (SPAD), RTD, DOR

GHS Implementation Roadmap in Malaysia (MyGHS)

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

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

GHS Implementation Roadmap in Malaysia (MyGHS)

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

No.	Action Plans	Lead agency	Collaborating agencies
AP19	To carry out Comprehensibility Testing (CT) and Situation and Gap Analysis (SGA) for consumer sector	MDTCC	LESTARI

Training and Capacity Building for the Implementation of GHS in Malaysia

- ◆ 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.

Training and Capacity Building for the Implementation of GHS in Malaysia

- ◆ 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)

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)



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

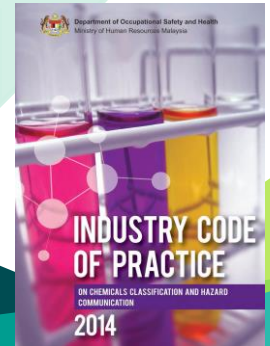
Guidelines on:

- ✓ 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)



ICOP CHC 2014

“Industry Code of Practice on Chemical Classification and Hazard Communication”

- ✓ Gazetted on 10 June 2014
- ✓ Based on GHS 3rd Revised Edition

Part 1 : List of Classified Chemicals

Part 2 : Chemical Classification



Part 4 : Confidential Business Information (CBI)

Part 3 : Hazard Communication (Labelling and Safety Data Sheet)

ICOP CHC (Amendment) 2019 Part 1

“Industry Code of Practice on Chemical Classification and Hazard Communication (Amendment) 2019 Part 1”

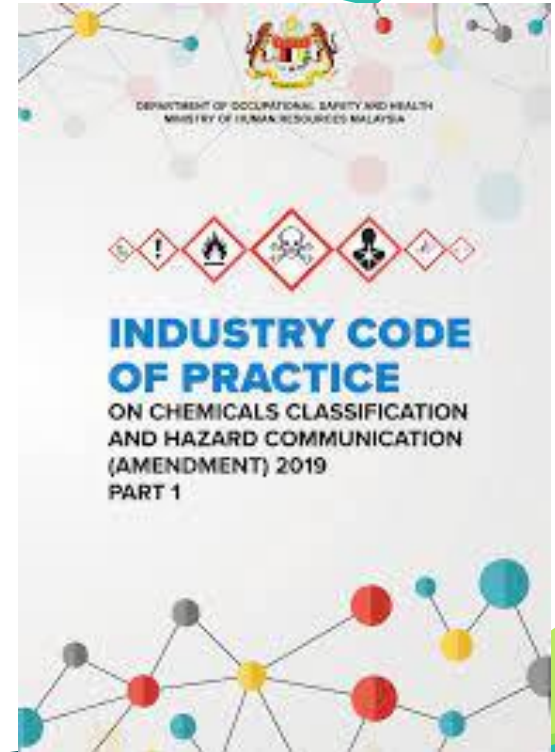
- ✓ Published on 11 October 2019

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

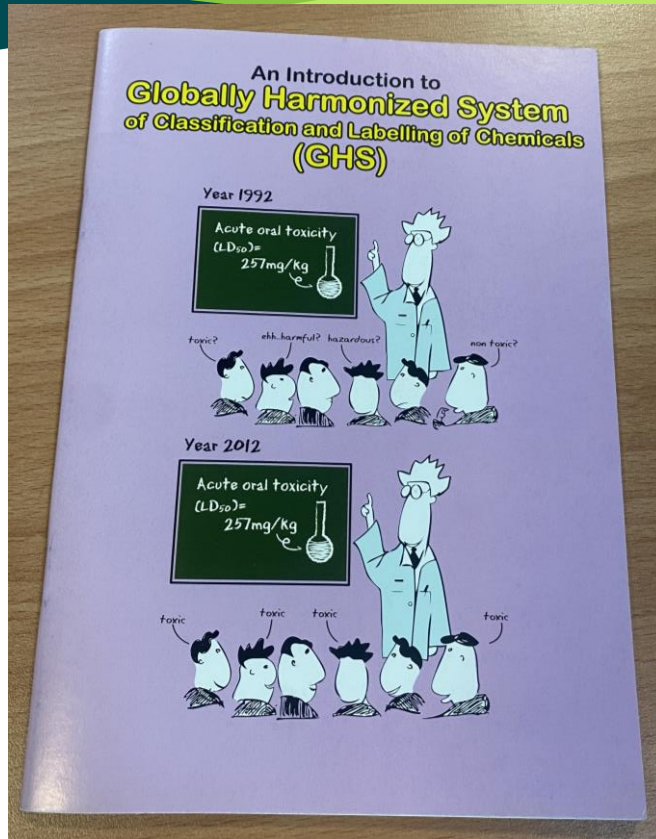
The principal supplier shall submit to Director General the relevant information and data to support the exclusion of any hazard class or classification of less severe category compared to minimum classification specified.



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) For User



Express Labelling Self-Assessment (ELSA)

✓ Published by DOSH in 2015

B. PENGGUNA/ USER				
B1. Bekas/ Container >125mL				
Semak Saiz Label/ Check Label Size				
Item	Y	N	N/A	
<3 litres (sekurang-kurangnya/ at least 52x74mm @ 3,848mm ²)				
3<S<50 litres (sekurang-kurangnya/ at least 74x105mm @ 7,770mm ²)				
50<S<500 litres (sekurang-kurangnya/ at least 105x148mm @ 15,540mm ²)				
≥500 litres (sekurang-kurangnya/ at least 148x210 @ 31,080mm ²)				
1. Pengecam Produk /Product Identifier				
Item	Y	N	N/A	
Ada nama bahan kimia (Have a chemical name)				
2. Kata Isyarat/ Signal Word				
Item	Y	N	N/A	
Ada perkataan 'Bahaya' atau 'Amaran' (Either 'Danger' or 'Warning')				
Huruf berwarna hitam (Letters in black)				
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)				
Dalam Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)				

3. Piktogram Bahaya Hazard Pictogram				
Item	Y	N	N/A	
Simbol berwarna hitam, latar belakang putih dan birai merah (Black symbol, white background and red border)				
Bentuk 'diamond' dengan sisi condong 45° mendatar (Diamond shape with sides tilted at 45° to the horizontal)				
Saiz luas 1/15 dari luas permukaan label. Sekiranya 1/15 dari permukaan label adalah kurang dari 100mm ² , saiz piktogram adalah 100mm ² (10 x 10 mm) (In a size of 1/15 th of the surface area of the label. If 1/15 th of the surface area of the label results in an area of less than 100mm ² , then the pictogram is to be taken as 100mm ² (10 x 10 mm))				
4. Pengenalan Pembekal/ Supplier Identification				
Item	Y	N	N/A	
Nama, alamat dan no. telefon dibekalkan (Name, address and telephone number provided)				
5. Pernyataan Bahaya/ Hazard Statement				
Item	Y	N	N/A	
Ada pernyataan bahaya dipaparkan (Hazard statements are included)				
Huruf berwarna hitam (Letters in black)				
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)				
Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)				
6. Pernyataan Berjaga-jaga/ Precautionary Statements				
Item	Y	N	N/A	
Ada pernyataan berjaga-jaga (Precautionary statements are included)				
Huruf berwarna hitam (Letters in black)				
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)				
Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)				
<u>B2. Bekas/ Container ≤ 125mL</u>				
Semak hanya elemen no. 1, 2, 3, 4 sahaja dan tambahkan elemen no. 7 di bawah (Assess elements no. 1, 2, 3, 4 & 7 only)				

7. Pernyataan 'baca SDS sebelum digunakan' / 'Read SDS Before Use' Statement				
Item	Y	N	N/A	
Ada pernyataan "baca Helaian Data Keselamatan sebelum digunakan" (A statement "read Safety Data Sheet before use" provided)				
Y = YES, N = NO, N/A = NOT APPLICABLE				
LABEL ADALAH PATUH APABILA TIADA KOTAK "N" DITANDAKAN. (LABEL IS COMPLIANT IF NO "N" BOX IS MARKED)				
Panduan saiz font/ Font size guide: e.g. Arial: Times New Roman: 7 pt 7 pt 8 pt 8 pt 9 pt 9 pt 10 pt 10 pt				

Express Labelling Self-Assessment (ELSA) For Supplier

Express Labelling Self-Assessment (ELSA)

✓ Published by DOSH in 2015

KEEP CALM AND USE ELSA

Express Labelling Self-Assessment
Semakan Kendiri Label Ekspres

Mula di sini jika anda ingin memeriksa kandungan label selaras dengan kehendak ICOP/CHC. Pastikan anda mempunyai SDS dan ICOP/CHC sebagai rujukan.

Start here if you want to check the contents of the label in accordance with the requirements of ICOP/CHC. Make sure you have the SDS and ICOP/CHC as reference when selecting this menu.

DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH
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↓ SUPPLIER / PEMBEKAL ↓

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

Manufacturer (Pengilang)
ABCO Kimia Sdn. Bhd.,
1126 Jalan Kg. Ateap,
50534 Kuala Lumpur,
(24 Hr) Emergency
Tel No. : +603-6868 8887

Supplier (Pembekal)
WXYZ Kimia Sdn. Bhd.
1127 Jalan Kg. Ateap,
50534 Kuala Lumpur,
(24 Hr) Emergency
Tel No. : +603-6868 8889

HAZARD STATEMENTS

- Suspected of causing cancer (inhalation). (Dityangka menyebabkan kanser (penyedutan))
- Toxic, if swallowed, in contact with or inhaled. (Toksik sekiranya tertelan, tersentuh atau terhidup)
- Causes severe skin burns and eye damage. (Menyebabkan keletukan kulit dan kerosakan mata)
- May cause an allergic skin reaction. (Boleh menyebabkan kesan alergen kulit)

DANGER - BAHAYA

PRECAUTIONARY STATEMENTS

- Keep away from heat/ignition sources and hot surfaces. (Jauhkan daripada haba/cucuhan api/panas terbuka dan permukaan panas)
- No smoking. (Dilarang merokok)
- Avoid breathing vapour. (Elakkan bernafas wap)
- Use only outdoors or in well-ventilated area. (Guna di luar atau kawasan pengudaraan baik)
- Wash hand thoroughly after handling. (Basuh tangan dengan rapi selepas pengendalian)
- Obtain special instructions before use. (Dapatkan arahan khusus sebelum penggunaan)

Nota/Note : Semakan di bawah adalah untuk bekas bersaiz 125ml dan ke atas. Untuk bekas bersaiz 125ml dan ke bawah, semak hanya elemen no. 1, 2, 3, 4 sahaja dan tambahan elemen no.7 B2 di muka surat belakang (The assessment below is for con-

Semak Saiz Label/ Check Label Size				
Item	Y	N	N/A	
<3 litres (sekurang-kurangnya/ at least 52x74mm @ 3,848mm ²)				
3<S<50 litres (sekurang-kurangnya/ at least 74x105mm @ 7,770mm ²)				
50<S<500 litres (sekurang-kurangnya/ at least 105x148mm @ 15,540mm ²)				
≥500 litres (sekurang-kurangnya/ at least 148x210 @ 31,080mm ²)				
1. Pengcam Produk / Product Identifier				
Item	Peraturan/ICOP	Y	N	N/A
Berpadanan dengan pengcam produk yang digunakan dalam SDS (Matches the product identifier used in the SDS)	ICOP 3.2.1.1.1			
Bahan/ Substance:				
Mengikut Bahagian 1 ICOP CHC (According to Part 1 of ICOP) @ nama IUPAC dan nombor CAS (IUPAC name and CAS number)	ICOP 3.2.1.1.2			
Campuran/ Mixtures:				
Nama dagangan bagi penamaan campuran tersebut (Trade name of the designation of the mixture)	ICOP 3.2.1.1.3			
2. Kata Isyarat/ Signal Word				
Item	Peraturan/ICOP	Y	N	N/A
Ada perkataan 'Bahaya' atau 'Amaran' (Either 'Danger' or 'Warning')	ICOP 3.2.1.3.1			
Huruf berwarna hitam (Letters in black)	ICOP 3.2.1.3.3			
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)	ICOP 3.2.1.3.3			
Dalam Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)	Per. 8.3 (c)			
3. Piktogram Bahaya/ Hazard Pictogram				
Item	Peraturan/ICOP	Y	N	N/A
Simbol berwarna hitam, latar belakang putih dan birai merah (Black symbol, white background and red border)	Per. 9.1 (a)			
Bentuk 'diamond' dengan sisi condong 45° mendatar				

Bentuk 'diamond' dengan sisi condong 45° mendatar (Diamond shape with sides tilted at 45° to the horizontal)	Per. 9.1 (b)			
Saiz luas 1/15 dari luas permukaan label. Sekiranya 1/15 dari permukaan label adalah kurang dari 100mm ² , saiz piktogram adalah 100mm ² (10 x 10 mm) (In a size of 1/15 th of the surface area of the label. If 1/15 th of the surface area of the label results in an area of less than 100mm ² , then the pictogram is to be taken as 100mm ² (10 x 10 mm))	Per. 9.1 (c)			
4. Pengenal Pembekal/ Supplier Identification				
Item	Peraturan/ICOP	Y	N	N/A
Nama, alamat dan no. telefon dibekalkan (Name, address and telephone number provided)	ICOP 3.2.1.2.1			
5. Pernyataan Bahaya/ Hazard Statement				
Item	Peraturan/ICOP	Y	N	N/A
Semua pernyataan berkaitan pernyataan bahaya dipaparkan (All related hazard statements are included)	ICOP 3.2.1.4.3			
Huruf berwarna hitam (Letters in black)	ICOP 3.2.1.4.4			
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)	ICOP 3.2.1.4.4			
Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)	Per.8.3 (c)			
6. Pernyataan Berjaga-jaga/ Precautionary Statements				
Item	Peraturan/ICOP	Y	N	N/A
Keutamaan pada 6 pernyataan yang paling kritikal (jika lebih daripada 6 pernyataan) (Priority to 6 most stringent statements (if more than 6 statements))	ICOP 3.2.1.6.5			
Huruf berwarna hitam (Letters in black)	ICOP 3.2.1.6.7			
Saiz huruf lebih besar daripada 7 poin (Not smaller than 7 points)	ICOP 3.2.1.6.7			
Dalam Bahasa Melayu dan Bahasa Inggeris (In Malay and English language)	Per. 8.3 (c)			

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Express SDS Self-Assessment (ESSA)



Express SDS Self-Assessment (ESSA)

✓ Published by DOSH

Pre Check Criteria	Yes	No
A. Language - SDS is prepare in English and Bahasa Melayu		
B. Information are arrange in a format specified under Reg. 13(2) CLASS Regulations: Headings are as below. 1. Identification of the hazardous chemical and of the supplier 2. Hazard identification 3. Composition and information of the ingredients of the hazardous chemical 4. First-aid measures 5. Fire-fighting measures 6. Accidental release measures 7. Handling and storage 8. Exposure controls and personal protection 9. Physical and chemical properties 10. Stability and reactivity 11. Toxicological information 12. Ecological information 13. Disposal information 14. Transportation information 15. Regulatory information 16. Other information		
C. SDS is revise/update not more than 5 years since the last date of preparation or revision.		

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	✓ or X	Comply	Not Comply
1. Identification of the hazardous chemical and of the supplier (ICOP CHC 3.7.1)			
(a) Product Identifier			
(b) Other means of identification			
(c) Recommended use of the chemical and restrictions on use			
(d) Details of principal suppliers (including name, address, phone number, etc			
(e) Emergency phone number			
2. Hazard identification (ICOP CHC 3.7.2)			
(a) Classification of the substance/mixture and any nation or regional information			
(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. 'flame', 'skull and crossbones'			
(c) Other hazards which do not result in classification (e.g. dust explosion hazard) or are not covered by the Regulations			
3. Composition and information of the ingredients of the hazardous chemical (ICOP CHC 3.7.3)			
Substance			
(a) Chemical identity			
(b) Common name, synonyms, etc			
(c) CAS number and other unique identifiers			
(d) Impurities and stabilizing additives which are			

4. First-aid measures (ICOP CHC 3.7.4)			
(a) Description of necessary measures, subdivided according to the different routes of exposure, i.e. inhalation, skin and eye contact and ingestion			
(b) Most important symptoms/effects, acute and delayed			
(c) Indication of immediate medical attention and special treatment needed, if necessary			
5. Fire-fighting measures (ICOP CHC 3.7.5)			
(a) Suitable (and unsuitable) extinguishing media			
(b) Specific hazards arising from the chemical (e.g. nature of any combustion hazardous products			
(c) Special protective equipment and precautions for fire-fighters			
6. Accidental release measures (ICOP CHC 3.7.6)			
(a) Personal precautions, protective equipment and emergency procedures			
(b) Environmental precautions			
(c) Methods and material for containment and cleaning			
7. Handling and storage (ICOP CHC 3.7.7)			
(a) Precautions for safe handling			
(b) Conditions for safe storage, including any incompatibilities			
8. Exposure controls and personal protection (ICOP CHC 3.7.8)			
(a) Control parameters e.g. permissible exposure limit and biological limit values			
(b) Appropriate engineering controls			
(c) Individual protection measures, such as personal protective equipment			
9. Physical and chemical properties (ICOP CHC 3.7.9)			
(a) Appearance (physical state, colour, etc.)			
(b) Odour			
(c) Odour threshold			
(d) pH			
(e) Melting point/freezing point			
(f) Initial boiling point & boiling range			
(g) Flash point			
(h) Evaporation rate			
(i) Flammability (solid, gas)			

CLASS Regulations Brochure

CLASS Regulations Brochure

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
Federal Government Administrative Centre
62530 Putrajaya

Tel: 03 - 8886 5343
Fax: 03 - 8890 1315
E-mail: jkkp@mohr.gov.my



DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH

OCCUPATIONAL SAFETY AND
HEALTH (CLASSIFICATION,
LABELING AND SAFETY DATA
SHEET OF HAZARDOUS
CHEMICALS) REGULATIONS 2013
(CLASS REGULATIONS)

CLASS Regulations Brochure

INTRODUCTION

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

*principal supplier = formulator, manufacturer, importer or any person who recycles/reformulates chemicals.

**subsidiary supplier = person who repacks, distributes or retails hazardous chemicals

MAIN PROVISIONS OF THE REGULATIONS

Classification

The principal supplier is responsible to classify the chemicals supplied to workplaces. The chemicals must be classified based on the list of chemicals provided or the classification methods outlined 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).

Packaging

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

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

- 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 legible & inerascable label, containing all these information:

- Product identifier;
- Supplier identification;
- Signal word;
- Hazard statement;
- Hazard pictogram; and
- Precautionary statement.

The size of the pictogram must be at least 1/15 of the label's surface area but must not be less than 100mm². The label must be firmly attached to one or more surfaces of the packaging to ensure clear visual of the warnings. If the packaging is 125ml 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.'

Labels and Labels (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 revised and reviewed when new information becomes available, once every 5 years after the preparation/review date, or when directed by DOSH officer.

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 follow:

- 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 orderly manner.

Confidentiality of business information

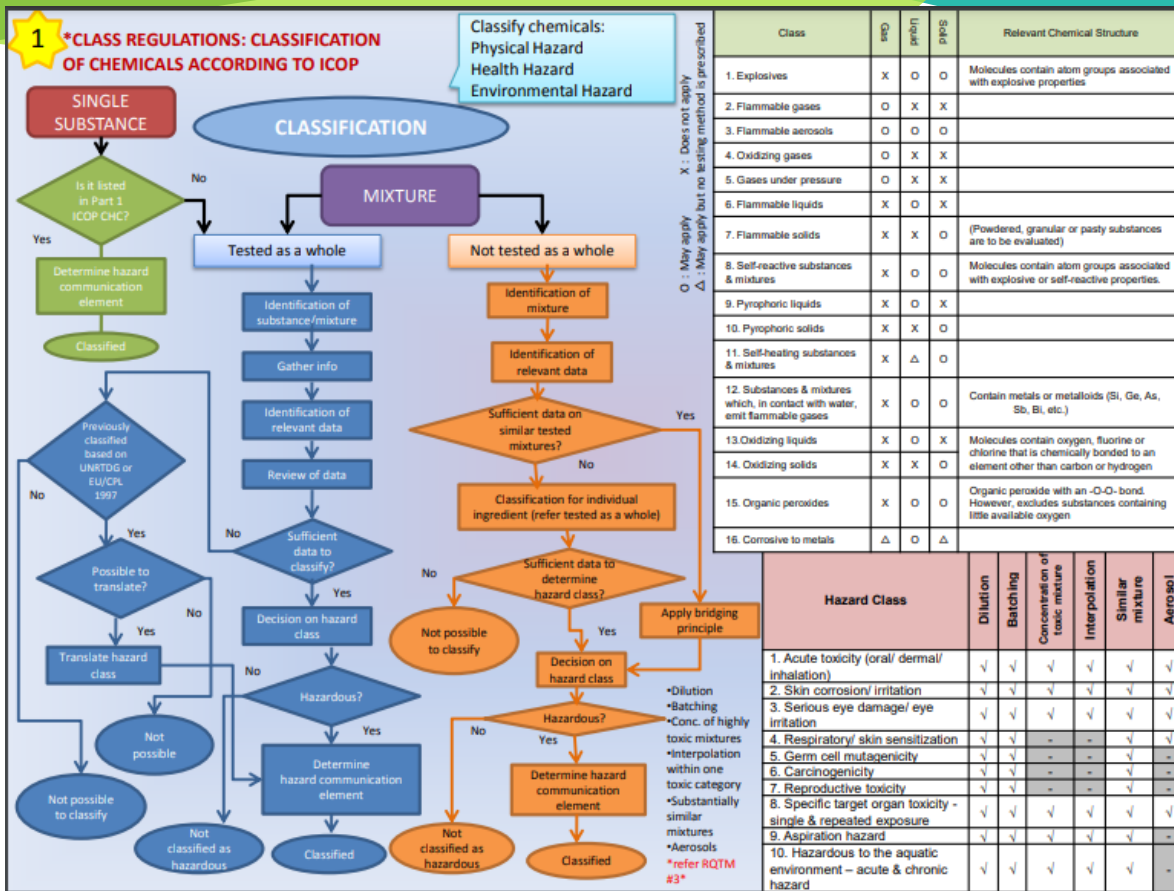
If the name of chemical and the concentration of ingredients of the mixture are part of confidential business information, it can be omitted from the label and the Safety Data Sheet and replaced with a generic name and allowable concentration range respectively.

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

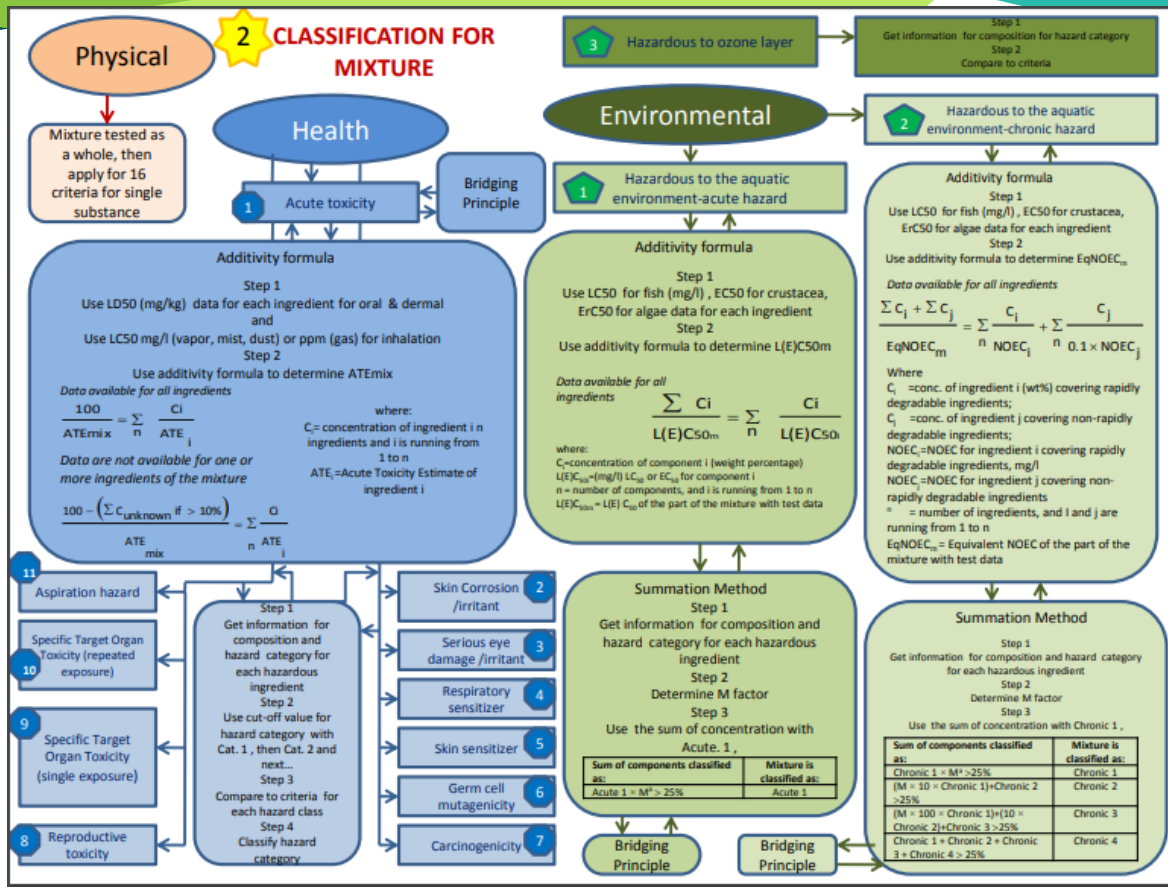
RQTM
ICOP CHC
2014



Reverse Quick Training Method (RQTM)

ICOP CHC 2014

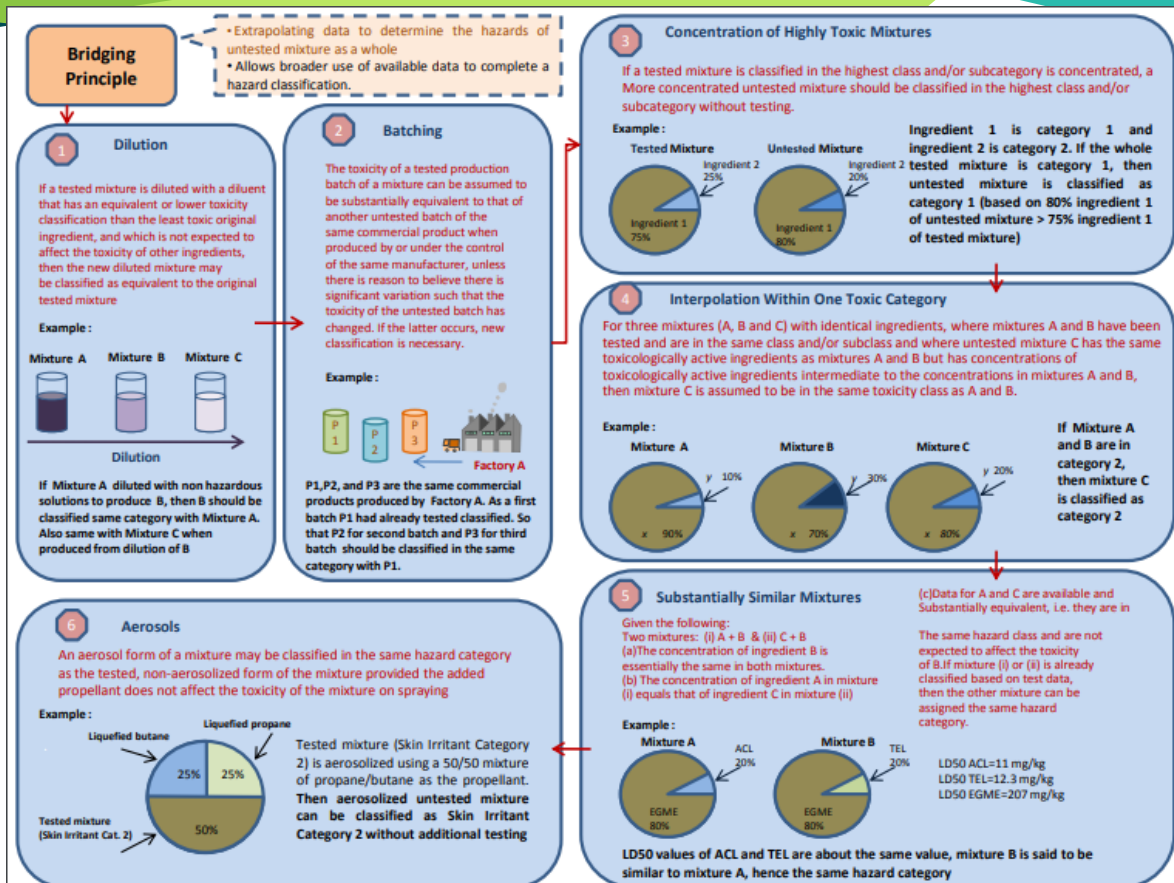
RQTM
ICOP CHC
2014



Reverse Quick Training Method (RQTM)

ICOP CHC 2014

RQTM
ICOP CHC
2014



CLASS Labels Brochure

CLASS Labels Brochure



CLASS LABELS

OCCUPATIONAL SAFETY AND HEALTH
(CLASSIFICATION, LABELLING AND SAFETY DATA SHEET OF HAZARDOUS CHEMICALS) REGULATIONS 2013
PERATURAN-PERATURAN KESELAMATAN DAN KESEHATAN PEKERJAAN
(PEMBELAHAN, PELABELAN DAN HELAMAN DATA KESELAMATAN BAHAN KIMIA BERBAHAYA) 2013



What is the 6 elements needed?



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

Manufacturer (Pengilang)
ASCO Kimia Sdn. Bhd.,
1126 Jalan Kg Altap, 50534 Kuala Lumpur.
24 Hr Emergency
Tel No : +603-8888 8887

Supplier (Pembekal)
WXYZ Kimia Sdn. Bhd.,
1127 Jalan Kg Altap, 50534 Kuala Lumpur.
24 Hr Emergency
Tel No : +603-8888 8889



DANGER BAHAYA

**PRECAUTIONARY STATEMENTS
PERNYATAAN BERJAGA-JAGA**

- Keep away from heat/spark/open flame and hot surfaces.
Jauhkan daripada haba/tuas/hanyutan terbuka dan permukaan panas.
- No smoking.
Dilarang merokok.
- Avoid breathing vapour.
Elakkan bernafas wap.
- Use only outdoors or in well-ventilated area.
Guna di ruang luar atau kawasan pengudaraan baik.
- Wash hand thoroughly after handling.
Basuh tangan dengan rapi selepas pengendalian.

- 1** Product Identifier
Pengecam Produk
- 2** Supplier Identification
Pengenalan Pembekal
- 3** Hazard Statement
Pernyataan Bahaya
- 4** Precautionary Statement
Pernyataan Berjaga-jaga
- 5** Signal Word
Kata Isyarat
- 6** Hazard Pictogram
Piktogram Bahaya

Promotional Materials on GHS



GLOBALLY HARMONISED SYSTEM (GHS) AWARENESS AND BASIC COURSE

ANJURAN BERSAMA
Chemical Industries Council of Malaysia (CCIM)
&
Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP)

CLASS Pictograms Brochure

CLASS Pictograms Brochure



Jabatan Keselamatan dan Kesihatan Pekerjaan

**OCCUPATIONAL SAFETY AND HEALTH
 (CLASSIFICATION, LABELLING AND SAFETY DATA SHEET OF
 HAZARDOUS CHEMICALS) REGULATIONS 2013**

**PERATURAN-PERATURAN KESELAMATAN DAN KESIHATAN PEKERJAAN
 (PENGELASAN, PELABELAN DAN HELAIAN DATA KESELAMATAN
 BAHAN KIMIA BERBAHAYA) 2013**

CLASS PICTOGRAMS

PHYSICAL HAZARD BAHAYA FIZIKAL	PHYSICAL HAZARD BAHAYA FIZIKAL	PHYSICAL HAZARD BAHAYA FIZIKAL
 Expanding bomb Bom Meletup	 Flame Nyalaan	 Flame over circle Nyalaan Atas Bulatan
<ul style="list-style-type: none"> • Explosives (Unstable explosives, Div. 1.1, 1.2, 1.3 & 1.4) • Self-reactive chemicals • Organic peroxide • <i>Bahan letup (Bahan letup tidak stabil, Div. 1.1, 1.2, 1.3 & 1.4)</i> • <i>Bahan kimia swareaktif (Jenis A & B)</i> • <i>Peroksida organik (Jenis A & B)</i> 	<ul style="list-style-type: none"> • Flammable (Gas (Cat. 1), aerosol, liquid & solid) • Self-reactive chemicals (Type B, C, D, E & F) • Pyrophoric (Liquids & solids) • Self-heating chemicals • Chemicals which, in contact with water, emit flammable gas • Organic peroxides (Type B, C, D, E & F) • Mudah terbakar (Gas (Kat. 1), aerosol, cecair & pepejal) • <i>Bahan kimia swareaktif (Jenis B, C, D, E & F)</i> • <i>Protonik (Cecair & pepejal)</i> • <i>Bahan kimia swapanasan</i> • <i>Bahan kimia yang jika terkena air, membebaskan gas mudah terbakar</i> • <i>Peroksida organik (Jenis B, C, D, E & F)</i> 	<ul style="list-style-type: none"> • Oxidizing gases • Oxidizing liquids (Cat. 1, 2 & 3) • Oxidizing solids (Cat. 1, 2 & 3) • Gas mengoksida • Cecair mengoksida (Kat. 1, 2 & 3) • Pepejal mengoksida (Kat. 1, 2 & 3)

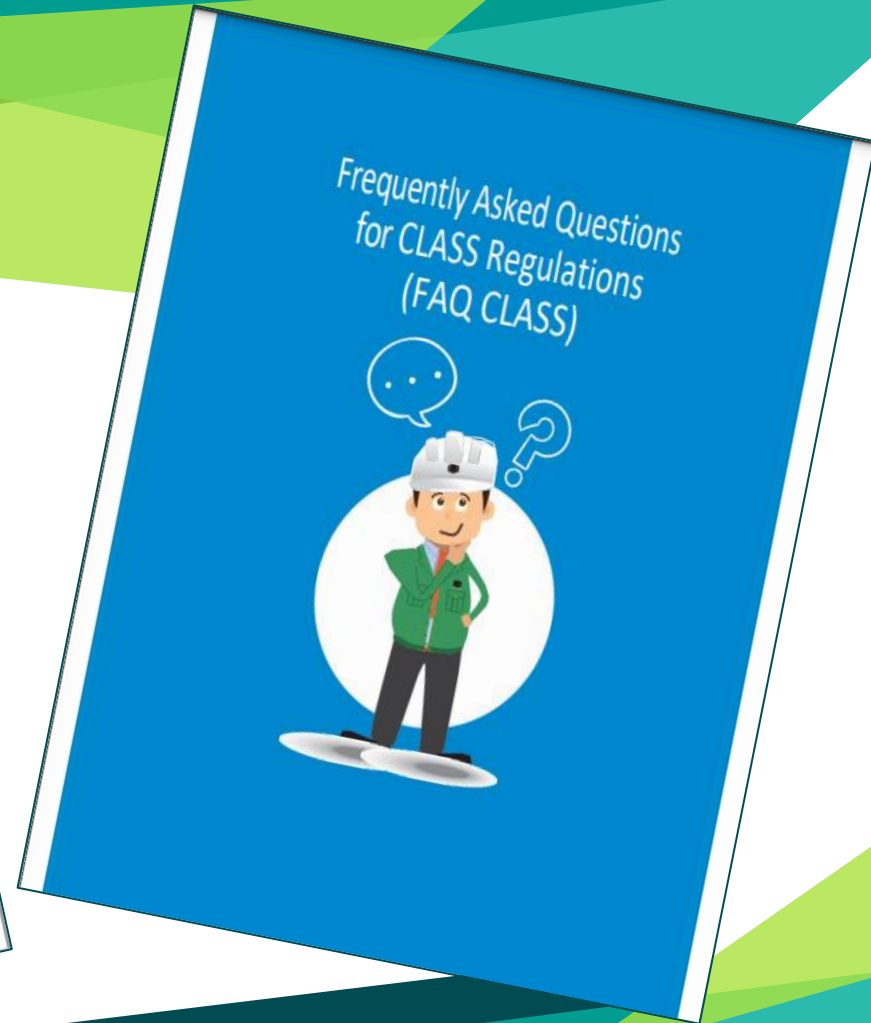
PHYSICAL HAZARD BAHAYA FIZIKAL	PHYSICAL/HEALTH HAZARD BAHAYA FIZIKAL/KESIHATAN	HEALTH HAZARD BAHAYA KESIHATAN
 Cylinder Gas Gas Silinder	 Corrosion Kakisan	 Skull and Crossbones Tengkorak dan Tulang Bersilang
<ul style="list-style-type: none"> • Gases under pressure (Compressed gas, liquefied gas, refrigerated liquefied gas & dissolved gas • Gas di bawah tekanan (Gas termampat, gas tercair, gas tercair sejuk & gas terlarut) 	<ul style="list-style-type: none"> • Corrosive to metals • Skin corrosion or irritation (Cat. 1A/1B/1C) • Serious eye damage or eye irritation (Cat. 1) • Mengakiskan logam • Kakisan atau kerengsaan kulit (Kat. 1A/1B/1C) • Kerosakan mata atau kerengsaan mata yang serius (Kat. 1) 	<ul style="list-style-type: none"> • Acute toxicity—oral (Cat. 1, 2 & 3) • Acute toxicity—skin (Cat. 1, 2 & 3) • Acute toxicity—inhalation (Cat. 1, 2 & 3) • Ketoksikan akut—oral (Kat. 1, 2 & 3) • Ketoksikan akut—kulit (Kat. 1, 2 & 3) • Ketoksikan akut—penyedutan (Kat. 1, 2 & 3)
 Exclamation Mark Tanda Seru	 Health Hazard Bahaya Kesihatan	 Alam Sekitar Environment
<p style="text-align: center;">HEALTH/ENVIRONMENTAL HAZARD BAHAYA KESIHATAN/ALAM SEKITAR</p> <ul style="list-style-type: none"> • Acute toxicity—oral (Cat. 4) • Acute toxicity—skin (Cat. 4) • Acute toxicity—inhalation (Cat. 4) • Skin corrosion or irritation (Cat. 2) • Serious eye damage or eye irritation (Cat. 2) • Skin sensitization • Specific target organ toxicity—single exposure (Cat. 3) • Hazardous to the ozone layer • Ketoksikan akut—oral (Kat. 4) • Ketoksikan akut—penyedutan (Kat. 4) • Ketoksikan atau kerengsaan kulit (Kat. 2) • Kerosakan mata atau kerengsaan mata yang serius (Kat. 2) • Pemekaan kulit • Ketoksikan organ sasaran khusus—pendarahan tunggal (Kat. 3) • Berbahaya kepada lapisan ozon 	<ul style="list-style-type: none"> • Respiratory sensitization • Germ cell mutagenicity • Carcinogenicity • Reproductive toxicity (Cat. 1A/1B & 2) • Specific target organ toxicity—single exposure (Cat. 1 & 2) • Specific target organ toxicity—repeated exposure (Cat. 1 & 2) • Aspiration hazard • Pemekaan permukaan • Kemutagenan sel germa • Kekarsinogenan • Ketoksikan pembiakan (Kat. 1A/1B & 2) • Ketoksikan organ sasaran khusus—pendarahan tunggal (Kat. 1 & 2) • Ketoksikan organ sasaran khusus—pendarahan berulang (Kat. 1 & 2) • Bahaya aspirasi 	<ul style="list-style-type: none"> • Hazardous to aquatic environment—acute hazard • Hazardous to aquatic environment—chronic hazard (Cat. 1 & 2) • Berbahaya kepada persekitaran akuatik—bahaya akut • Berbahaya kepada persekitaran akuatik—bahaya kronik (Kat. 1 & 2)

Display of Chemical Container with CLASS Labels



FREQUENTLY ASKED QUESTION ON THE CLASS Regulations: Promotional materials


FAQ CLASS
Regulations



Reverse Quick Training Method (RQTM) Chemical Information Management System (CIMS)

RQTM CIMS

For
submission
of inventory



CIMS
<http://cims.dosh.gov.my>

For the purpose of simplifying the processes of chemicals inventory submission by chemical suppliers, DOSH has developed an online submission system called CIMS

CHEMICALS INFORMATION MANAGEMENT SYSTEM (CIMS)

INVENTORY OF CHEMICALS

5. USERS & ROLES

- 1. LEGAL PROVISION**
 - CLASS Regulation 2013 – duty of importer & manufacturer** to prepare and supply inventory of hazardous chemicals supplied for:
 - I. 1 calendar year
 - II. Quantity exceeding 1 MT/year
- 2. INFORMATION IN THE INVENTORY**
 - I. Product Identifier
 - II. Name, CAS no. (if any)
 - III. Composition & ingredients
 - IV. The hazard classification
 - V. Total quantity of chemicals supplied
- 3. MISCELLANEOUS**
 - ✓ Inventory to be maintained in good order
- 4. OBJECTIVE & RATIONALE**
 - I. To facilitate compliance to CLASS Regulation 2013
 - II. To monitor compliance status to the CLASS Regulation 2013
 - III. To identify chemicals supplied to workplaces with its hazard classification and total quantity
 - IV. Knowledge sharing of hazard information of hazardous chemicals
- 5. USERS & ROLES**
 - I. Importers & Manufacturers** – register with the system and make inventory submission for substances and mixtures
 - II. DOSH HQ Officer** – 1st level of chemical submission checking and updates new chemicals with its hazard information
 - III. DOSH Head of Section** – 2nd level of chemical submission checking and acknowledgement
 - IV. DOSH Enforcement Officer (State Office)** – view the chemical submission done by suppliers once acknowledged by Head of Section at DOSH HQ.
 - V. System Administrator** – system administration and maintenance
 - VI. Public** – Chemicals' Hazard Information Search (no registration required)

ICOP CHC (Amendment) 2019 Part 1 Infographic

ICOP CHC (Amendment) 2019 Part 1 Infographic



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
<https://www.dosh.gov.my/index.php/list-of-documents/info-kkp/pengurusan-kimia-1/38>

LAMPIRAN 1

Rev. 1 - 24 Jun 2020



Jabatan Keselamatan dan Kesihatan Pekerjaan
Kementerian Sumber Manusia

Senarai Semak Penguatkuasaan *Self-Assessment* Peraturan-Peraturan Keselamatan Dan Kesihatan Pekerjaan (Pengelasan, Pelabelan Dan Helaian Data Keselamatan Bahan Kimia Berbahaya) 2013 (CLASS)

(Untuk diisi oleh pembekal)

BAHAGIAN A : MAKLUMAT AM				
1.0 MAKLUMAT PEMBEKAL				
Tarikh Pengisian		No. Pendaftaran Tempat Kerja JKKP		
Nama Syarikat		Alamat Syarikat		
Tahun Mula Beroperasi		No. Pendaftaran Syarikat (ROC)		
Pegawai Yang Bertanggungjawab (PIC)		Jawatan		
Emel Pegawai (PIC)		No. Telefon		
Jumlah Pekerja	Lelaki : _____ Perempuan : _____			
ID Pendaftaran CIMS (jika ada)	_____			
Kategori Pembekal Sila tandakan (x) pada ruangan pembekal yang berkaitan.	Pembekal Utama		Pembekal Subsidiari	
	Jenis Pembekal	Bil Bahan Kimia	Jenis Pembekal	Bil Bahan Kimia
	<input type="checkbox"/> Pengitar Semula		<input type="checkbox"/> Pembungkus Semula	
	<input type="checkbox"/> Perumus		<input type="checkbox"/> Pengedar	
	<input type="checkbox"/> Pengilang		<input type="checkbox"/> Peruncit	
	<input type="checkbox"/> Pengimport			
<input type="checkbox"/> Perumus Semula				

NATIONWIDE OPERATIONS FOR CLASS 2013 COMPLIANCE

Compliance Level By Element for Year 2022:

Element	A		B		C		D		E		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	
Classification	130	50.2%	5	1.9%	27	10.4%	0	0.0%	97	37.5%	259
Packaging	237	91.5%	3	1.2%	12	4.6%	0	0.0%	7	2.7%	259
Labelling	173	66.8%	24	9.3%	34	13.1%	5	1.9%	23	8.9%	259
SDS	153	59.1%	39	15.1%	38	14.7%	7	2.7%	22	8.5%	259
Inventory	191	73.7%	8	3.1%	10	3.9%	0	0.0%	50	19.3%	259
TOTAL	115	44.4%	31	12.0%	48	18.5%	39	15.1%	26	10.0%	259

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