



▶ **The ILO and chemical safety
in the world of work**

The IOMC toolbox

▶ Chemicals and the world of work

The sound management of chemicals and waste is directly linked to the world of work.

- ▶ The **protection of workers** from toxic effects of chemicals is essential to ensuring healthy populations and sustainable environments.
- ▶ Nevertheless, workers continue to face **disproportionally high** exposures to **hazardous chemicals**.
- ▶ Exposure to hazardous substances claimed the lives of almost **1 million workers** in 2015 alone (*Hämäläinen et al. 2017*).
- ▶ Many more are subjected to **lifelong debilitating chronic conditions**.



▶ Background of the International Labour Organization

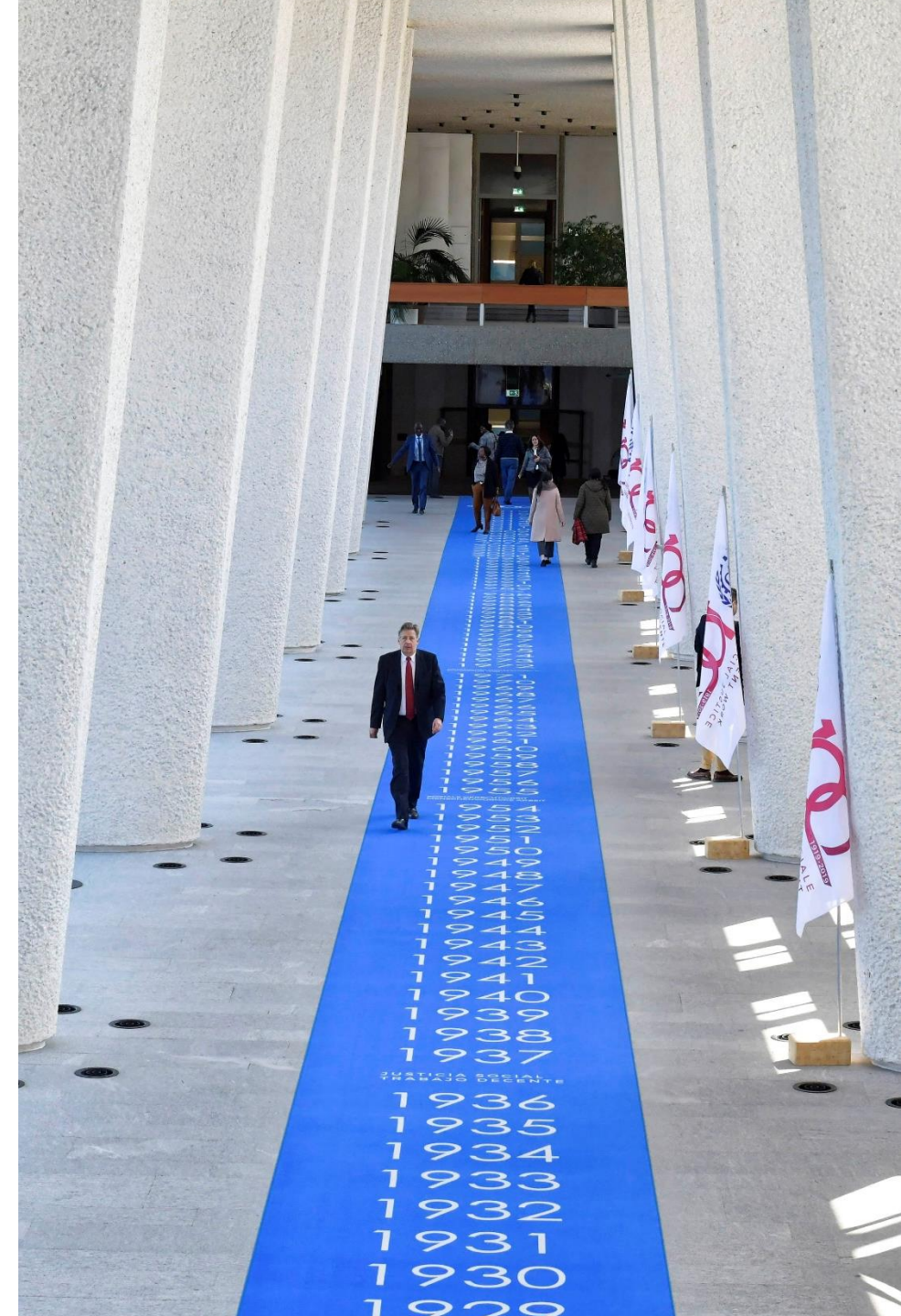
Founded in 1919 as the first and oldest United Nations specialized agency.

- ▶ Headquarters in Geneva, Switzerland.
- ▶ Mission and impact: **Promote rights** at work, encourage **decent employment** opportunities, enhance **social protection** and **strengthen dialogue** on work-related issues.
- ▶ **Tripartite governance** structure consisting of governments, employers and workers of 187 Member States.
- ▶ Adopts **international labour standards**, develops policies and programmes to promote decent work for all.



International labour standards

- ▶ In the last 100 years, the ILO has adopted **more than 40 legal instruments** on the protection of workers from chemical hazards.
- ▶ Legally binding conventions create a strong **preventative and protective foundation** in the area of chemicals and the world of work.
- ▶ The ILO brings together **governments, employers and workers** from around the world to negotiate and adopt international standards in a tripartite setting.
- ▶ Characteristics of ILO conventions:
 - Have their own range of applications.
 - Mainly operate in the areas of domestic policy.
 - Have a strong and elaborate supervisory system.
 - Promote the Sustainable Development Goals (SDGs).



▶ Chemicals Convention (No. 170) and Recommendation (No. 177), 1990

The main ILO instruments dealing with chemicals: Ratified by 22 member states.

Adopted in 1990 and among the first international instruments dealing with all major chemical hazards in a comprehensive manner.

- ▶ Provides the basis for the sound management of **all types of chemicals** and takes into account **new substances**.
- ▶ Focus on **chemical risks in the workplace**, but also protects the public and the environment.
- ▶ Prescribes the **classification and labelling** of all chemicals by hazards with appropriate information and symbols.
- ▶ Provision of **safety data sheets** for workers on all hazardous chemicals used in their workplace.
- ▶ Obliges ratifying states to implement a general national policy on the **prevention of occupational accidents and work-related diseases** caused by chemicals.
- ▶ Defines detailed **responsibilities for employers** regarding assessment of hazards and measures to limit exposure.
- ▶ Complimented by the **ILO code of practice: Safety in the use of chemicals at work**.

▶ Major Industrial Accidents Convention (No. 174) and Recommendation (No. 181), 1993

Provides precautionary measures to avoid or minimize the consequences of industrial disasters due to chemicals and other hazardous substances: Ratified by 18 member states.

▶ Provides:

- A **systematic and comprehensive model framework** for the protection of workers, the public and the environment against MIA involving hazardous substances.
- The **mitigation of the consequences** of such accidents where they do occur.

▶ Includes:

- **Identification of major hazard installations** and their control.
 - **Responsibilities** of the employers, competent authorities and the rights and responsibilities of workers.
 - It also defines the responsibilities of exporting States.
- ▶ Recommendation No. 181 contains further provisions, for example, the international transfer and the rapid compensation of victims of accidents.

▶ OSH as a fundamental principle and right at work (FPRW)

- ▶ The protection of workers against exposure to chemicals is closely linked to the ILO's efforts to promote decent work and especially **fundamental principles and rights at work (FPRWs)**.
- ▶ At its 110th Session in June 2022, the International Labour Conference decided to include “**a safe and healthy working environment**” as a FPRW.
- ▶ In addition, the **Occupational Safety and Health Convention, 1981 (No. 155)** and the **Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)** were designated as fundamental Conventions.
- ▶ All Member States now have an **obligation to promote and to realize** the principles concerning the fundamental right to a safe and healthy working environment.



The IOMC Toolbox



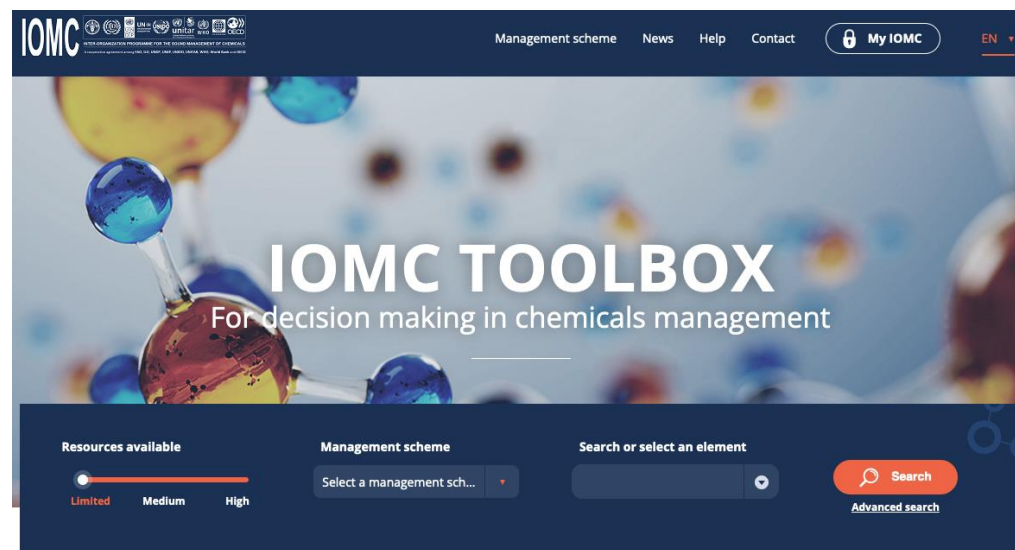
▶ Inter-Organization Programme for the Sound Management of Chemicals (IOMC)

- ▶ Established in 1995.
- ▶ International coordinating group to:
 - Shape a sustainable future through **coordinated global action**.
 - Promote the **sound management of chemicals** globally.
 - Strengthen **international co-operation** in the field of chemicals.
 - Increase the effectiveness of the organizations' international chemicals programmes.
 - **Harmonize policies** and activities, pursued jointly or separately.



The IOMC toolbox

- ▶ The IOMC toolbox for Decision Making in Chemicals Management (IOMC Toolbox) is an internet-based toolbox.
- ▶ Compiles chemical management resources from multiple UN agencies.
- ▶ Content available in English, Spanish and French.
- ▶ Aimed at countries and stakeholders who wish to address specific issues regarding chemicals management.
- ▶ Helps users identify the most appropriate and efficient actions.
- ▶ The ILO is actively working to contribute to this online resource for constituents.



Occupational safety and health management scheme

- ▶ **Eight management schemes, six toolkits, and more than 500 IOMC tools, guidance documents, and training materials.**
- ▶ ILO leads the **Occupational Safety and Health Management Scheme for Chemicals.**
- ▶ This scheme aims to provide practical guidance to **prevent or reduce illnesses or injuries** caused by hazardous chemical exposures in the workplace.
- ▶ In order to provide targeted and relevant advice, different sections have been created for **Governments, Employers and Workers.**

Management schemes

Chemical Accident Prevention, Preparedness and Response This management scheme helps to protect the health of workers and the public, as well as the environment and property, by reducing the likelihood that accidents will occur and limiting the consequences if one does happen.	Classification and Labelling System Scheme The GHS addresses the classification of chemicals by types of hazard and proposes harmonized hazard communication elements, including labels and safety data sheets.
Industrial Chemicals Management Scheme This scheme strengthens the capabilities of countries in assessing risks associated with industrial chemicals throughout their lifecycle and managing them safely.	National management scheme for PRTRs A PRTR is a publicly accessible database or inventory of chemicals or pollutants released to air, water, and soil and transferred off-site for treatment. It brings together information about which chemicals are being released, where, how much, and by whom.
National Management Scheme for Pesticides Controlling which pesticides can be used helps to avoid adverse effects on human health and the environment. This scheme covers the pesticide lifecycle, from production to registration, distribution, use, and disposal.	Occupational Health and Safety Management Scheme for Chemicals This scheme provides information on how to prevent or reduce the incidence of chemically induced illnesses and injuries at work, consequently enhancing the protection of the general public and environment.
Public Health Management of Chemicals and WHO Chemicals Road Map Tools and information organized by topics of major relevance are provided for public health, environmental health, and medical aspects of assessing and managing chemical risks and impacts of chemicals. Tools are also organized by action areas of the Chemicals Road Map.	Best Available Techniques The Best Available Techniques (BAT) and similar concepts constitute essential elements for setting emission limit values and other permit conditions for industrial emissions in many countries around the world.

Select a management scheme

Resources available



Occupational Health
and Safety
Management Scheme
for Chemicals

under construction
governments

★ Occupational Safety and Health Management Scheme

Workers around the world are facing a global health crisis due to occupational exposure to toxic chemicals. Every year more than 1 billion workers are exposed to hazardous substances, including pollutants, dusts, vapours and fumes in their working environments. Many of these workers lose their life following such exposures, succumbing to fatal diseases, cancers and poisonings, or from fatal injuries following fires or explosions. We must also consider the additional burden that workers and their families face from non-fatal injuries resulting in disability, debilitating chronic diseases, and other health sequela, that unfortunately in many cases remain invisible. All of these deaths, injuries and illnesses are entirely preventable.

The Occupational safety and health management scheme aims to provide practical guidance to prevent or reduce illnesses or injuries caused by hazardous chemical exposures in the workplace. In order to provide targeted and relevant advice, different sections have been created for governments, employers and workers.

Information is provided about many different topics related to chemical safety, including:

- Occupational safety and health (OSH) policies and frameworks.
- Key ILO international labour standards on chemicals safety and other international instruments.
- OSH management systems.
- The safe storage, transportation and disposal of hazardous chemicals, including classification and labelling.
- Workplace risk assessment and exposure monitoring.
- Common hazardous chemicals in the workplace and sectors of high risk.
- Information and training.

Limited



► Topics in the scheme

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Occupational Safety and Health Management Scheme for Chemicals

Governments

- ILO international labour standards and other international instruments
- National policies and legislative frameworks
- OSH Management Systems at the national level
- Chemical hazards at the workplace
- Exposure
- Classification and labelling of chemicals
- Storage and transportation
- Disposal
- Information and training
- MSMEs and the informal economy

Employers

- Chemical hazards at the workplace
- OSH management and risk assessment
- Exposure
- Classification and labelling of chemicals
- Storage and transportation
- Disposal
- Information and training
- Co-operation
- MSMEs and the informal economy

Workers

- Duties and rights of workers
- Chemical hazards faced by workers
- OSH Management and risk assessment
- Exposure
- Classification and labelling of chemicals
- Storage and transportation
- Disposal
- Information and training

Limited



▶ Components of the scheme

- ▶ **Sections:** Governments, Employers and Workers.
- ▶ **Elements:** Subtopics of the Management Scheme.
- ▶ **Implementation steps:** Suggested actions.
- ▶ **Tools:** The information resources.
- ▶ **More information:** Web links, diagrams etc.
- ▶ **Other links:** To relevant schemes.



▶ Scheme components – an example

- ▶ **Section:** Workers.
- ▶ **Element:** Classification and labelling of chemicals.
- ▶ **Implementation steps:**
 - Be aware of the GHS classification system.
 - Understand how the hazardous properties of chemicals are communicated through labelling and marking.
 - Utilize chemical Safety Data Sheets (SDS).
- ▶ **Tools:**
 - ILO: The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (2022).
 - ILO/WHO: International Chemical safety cards (2010).
- ▶ **More information:**
 - List of hazards covered by the GHS.
 - Components of a GHS label.

☆ Classification and labelling of chemicals

Chemicals in the workplace should be classified and labelled using the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). This is an internationally agreed-upon system to standardize chemical hazard classification and communication.

It includes:

- Criteria for classifying substances and mixtures according to their physical, health and environmental hazards.
- Requirements for communication of the hazards, through labels and safety data sheets (SDS).

Objectives of the GHS:

- Enhance the protection of human health and the environment by providing an internationally comprehensible system for hazard communication.
- Provide a recognized framework for those countries without an existing system.
- Reduce the need for testing and evaluation of chemicals.
- Facilitate international trade of chemicals.

Workers should receive information on the classification and labelling of chemicals in a form and languages they can understand.

Occupational Safety and Health Management Scheme for Chemicals

Classification and labelling of chemicals

The GHS classification system

Communicating hazardous properties

Safety Data Sheets

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Tools

Relevant tools

Below is a list of tools relevant for implementing this topic :

ILO: The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (2022)



ILO: The GHS in the world of work - Mapping synergies between ILO Instruments and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (2021)



OECD: eChemPortal



☆ ILO: The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (2022)

Description:

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS), developed following a number of major industrial accidents in the 1970s and 1980s, plays a fundamental role in protecting workers from chemical hazards through its system of harmonized chemical labels (pictograms) and safety data sheets.

This brochure provides an overview of the GHS and how it relates to occupational safety and health and international labour standards. It also looks at the role of different stakeholders, including governments, employers, suppliers and workers, in the implementation of the GHS.

Continue to:

[English](#)

More information

More information ×

[List of hazards covered by the GHS](#)

[Components of a GHS label](#)

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Components of a GHS label

- 1 Product identifier.
- 2 Supplier identification.
- 3 Hazard pictogram(s).
- 4 Signal word: a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. There are two signal words:
 - ▶ "Danger" for the more severe hazards, or
 - ▶ "Warning" for the less severe
- 5 Hazard statements: phrase that describes the nature of the hazards including, where appropriate, the degree of hazard.

1 ACETONE

3



4 DANGER

5 Highly flammable liquid and vapor
Causes serious eye irritation
May cause drowsiness or dizziness.

6 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Wear eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2 Company name: _____ Telephone: _____
Address: _____

- 6 Precautionary statements: phrase and/or pictogram that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous product.

▶ Thank you

For further information, please contact:

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