

# **First Chemical Industries Conference**

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Burkhard Wagner, Berlin

# How can the Egyptian Chemical Industry benefit from European and International Knowledge on Chemicals?

# Benefit for Egyptian Industry

- Useful Data Sources
  - CLP Regulation Art. 42: classification and labelling inventory and Annex VI: Legally classified substances
  - REACH Regulation Art. 119: Inventory of hazardous substances
  - EU Substances lists
  - OECD eChem Portal
- REACH Art. 57: Substances of very high Concern
- Biocides
- OECD and EU Test Guidelines
- Risk Assessment Methodology
- Risk Assessment Terminology

# CLP Regulation 1272/2008 – Annex VI Table 3.1

## Classification according to CLP Regulation

International Chemical Identification	EC No	CAS No	Classification		Labelling		
			Hazard Class and Category Code(s)	Hazard statement Code(s)	Pictogram, Signal Word Code(s)	Hazard statement Code(s)	Suppl. Hazard statement Code(s)
hydrogen	215-605-7	1333-74-0	Flam. Gas 1 Press. Gas	H220	GHS02 GHS04 Dgr	H220	
aluminium lithium hydride	240-877-9	16853-85-3	Water-react. 1	H260	GHS02 Dgr	H260	
sodium hydride	231-587-3	7646-69-7	Water-react. 1	H260	GHS02 Dgr	H260	

<http://ecb.jrc.ec.europa.eu/esis> → C&P → Annex VI → Table 3.1

## CLP Regulation 1272/2008 – Annex VI – Table 3.2

Classification according to Dir. 67/548/EEC

Index No	International Chemical Identification	EC No	CAS No	Classification	Labelling
001-001-00-9	hydrogen	215-605-7	1333-74-0	F+; R12	F+ R: 12 S: (2-)9-16-33
001-002-00-4	aluminium lithium hydride	240-877-9	16853-85-3	F; R15	F R: 15 S: (2-)7/8-24/25-43
001-003-00-X	sodium hydride	231-587-3	7646-69-7	F; R15	F R: 15 S: (2-)7/8-24/25-43

<http://ecb.jrc.ec.europa.eu/esis> → C&P → Annex VI → Table 3.2

# Inventory I

- **CLP Regulation Art. 42(1)**
  - The Agency (ECHA) shall establish and maintain a classification and labelling inventory in the form of a publicly accessible database.
  - Manufacturers and importers have to submit the classification and labelling of hazardous substances to ECHA by 3 January 2011.

# Inventory II

- **REACH Regulation Art. 119(1)**
  - The Agency (ECHA) shall make the following information publicly accessible in a database:
  - Chemical name of hazardous substance
  - Classification and labelling
  - Physico-chemical and environmental fate data
  - Results of toxicological and ecotoxicological studies
  - DNEL and PNEC values
  - Guidance on safe use
  - Analytical methods

# EU Lists of Substances I

## European Chemical Substances Information System (ESIS)

- <http://ecb.jrc.ec.europa.eu/esis/>
- EINECS (existing chemicals)
- ELINCS (new chemicals)
- NLP (no longer polymers)
- PBT (persistent, bioaccumulative, toxic)
- Biocides
- Classification and Labelling

# EU Lists of Substances II

## European Chemical Substances Information System (ESIS) continued

- 2782 HPVC (high production volume chemicals)
- 7829 LPVC (low production volume chemicals)
- IUCLID data sets
- ORATS (Online Risk Assessment Tracking System) = 141 substances

# EU Pesticide Database

[http://ec.europa.eu/sanco\\_pesticides/public/index.cfm](http://ec.europa.eu/sanco_pesticides/public/index.cfm)

Registration data for active substances

- Date for EU maximum residue limits

# OECD eChem Portal

- Developed by request of the WSSD 2002 to improve the hazard data on chemicals
- eChem Portal is a contribution to SAICM.
  - This portal contains data from international, regional, and national governmental chemicals programmes
- <http://www.oecd.org/ehs> → Directories and databases
- <http://webnet3.oecd.org/echemportal/>

# REACH Authorisation I

- **Article 57** „Substances of very high concern (SVHC)“:
  - Carcinogen Category 1 or 2
  - Mutagen Category 1 or 2
  - Toxic for reproduction Category 1 or 2
  - Persistent, bioaccumulative and toxic
  - Very persistent and very bioaccumulative
  - Endocrine disruptor

# REACH Authorisation I

## SVHC Candidate List

- Substance
- EC No
- Date of inclusion
- Reason for inclusion
- Support Document
- Decision No.
- [http://guidance.echa.europa.eu/authorisation\\_en.htm](http://guidance.echa.europa.eu/authorisation_en.htm)
- [http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)

# Biocides – Directive 98/8/EC

## EU Commission Website:

<http://ec.europa.eu/environment/biocides/>

- Review programme of substances
- Substances included in Annex I or IA
- Register of biocidal products: This is a registration programme for products

# Test Guidelines

- OECD Test Guidelines: <http://www.oecd.org/ehs>  
→ Chemicals Testing Guidelines
- EU Test Guidelines Annex V of Dir. 67/548/EEC: <http://ecb.jrc.ec.europa.eu/testing-methods/>
- EU Test Guidelines for REACH: Commission Regulation (EC) No 440/2008: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:142:0001:0739:EN:PDF> (These are more or less the same Test Guidelines as under Annex V)

# Risk Assessment Methodology

ECHA published extensive Guidance documents for risk assessment methods of chemicals:

[http://guidance.echa.europa.eu/guidance\\_en.htm](http://guidance.echa.europa.eu/guidance_en.htm) → Guidance on Information Requirements and Chemical Safety Report; use the pathfinder to locate the document of your special interest.

# Glossary of Scientific Terms

- IPCS/OECD Risk Assessment Terminology:  
<http://www.who.int/ipcs/methods/harmonization/areas/terminology/en/index.html>
- University of Oxford: Chemical Safety Information - Glossary:  
<http://msds.chem.ox.ac.uk/glossary/GLOSSARY.html>
- IUPAC Compendium of chemical Terminology  
<http://goldbook.iupac.org/>

# How to find a CAS number?

- CAS Numbers are unique identifiers of chemical names and the best way to find a chemical in the internet.
- United States National Institute for Standards and Technology (NIST):  
<http://webbook.nist.gov/chemistry/name-ser.html>
  - Example: Chlorobenzene
  - CAS No: Chlorobenzene [108-90-7]