

New classification for formaldehyde and styrene: make sure that your classification, label and safety data sheet (SDS) are correct!

Following the publication of the 6th Adaptation to Technical Progress (ATP) to the classification, labelling and packaging of substances and mixtures (CLP) Regulation on 6th June 2014 (Regulation 605/2014), the existing GHS harmonized classification has been modified for several substances, including styrene and formaldehyde:

- Styrene is reclassified to toxic for reproduction category 2 and specific target organ toxicity – single exposure, category 1;
- Formaldehyde is reclassified to carcinogenic category 1B and mutagen category 2.

This new classification will enter into force on 1 April 2015. This means new labelling and Safety Data Sheet requirements, as well as new REACH obligations for formaldehyde (see details hereafter) have to be applied. However, the Regulation 1297/2014 published on the 6th December 2014 specifies that the substances and mixtures placed on the market before 1 June 2015 shall not be required to be relabeled and repackaged until 31 December 2015.




Do not forget that CLP will apply to mixtures from 1 June 2015, when the basic requirements for substances and mixtures will be the same (there will be a two-year grace period for mixtures already in the EU supply chain on that date to be consumed).

Styrene

Classification and labelling from 1/04/2015 (Regulation 605/2014):

Index N°	International Chemical Identification	EC No	CAS No	Classification CLP		Labelling CLP			Specific Conc. Limits, M-factors	Notes
				Hazard Class and Category Code(s)	Hazard statement Code(s)	Pictogram, Signal Word Code(s)	Hazard statement Code(s)	Suppl. Hazard statement Code(s)		
601-026-00-0	Styrene	202-851-5	100-42-5	Flam. Liq. 3 Reprod. 2 Acute Tox. 4 STOT RE 1 Skin Irrit. 2 Eye Irrit. 2	H226 H361d H332 H372 (hearing organs) H315 H319	GHS02 GHS08 GHS07 Danger	H226 H361d H332 H372 H315 H319		*	D

Other presentation :

Styrene		
Index N°	601-026-00-0	
International Chemical Identification	styrene	
EC No	202-851_5	
CAS No	100-42-5	
Classification CLP	Hazard Class and Category Code(s)	Hazard statement Code(s)
	Flam. Liq 3 Reprod. 2 Acute Tox. 4 STOT RE 1 Skin Irrit. 2 Eye Irrit. 2	H226 - Flammable liquid and vapour H361d - Suspected of damaging the unborn child H332 - Harmful if inhaled H372 (hearing organs) - Causes damage to organs through prolonged or repeated exposure H315 - Causes skin irritation. H319 - Causes serious eye irritation
Labelling CLP	Pictogram Code(s)	 GHS 02  GHS 08  GHS 07
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H226 - Flammable liquid and vapour H361d - Suspected of damaging the unborn child H332 - Harmful if inhaled H372 (hearing organs) - Causes damage to organs through prolonged or repeated exposure H315 - Causes skin irritation. H319 - Causes serious eye irritation
	Suppl.	

	Hazard statement Code(s)	
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Specific Conc. Limits, M-factors		* An asterisk (*) in this column indicates that the entry has specific concentration limits for acute toxicity under Directive 67/548/EEC (Table 3.2).
Notes	<p>Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.</p>	

Formaldehyde

Classification and labelling from 1/04/2015 (Regulation 605/2014)




Index N°	International Chemical Identification	EC No	CAS No	Classification CLP		Labelling CLP			Specific Conc. Limits, M-factors	Notes
				Hazard Class and Category Code(s)	Hazard statement Code(s)	Pictogram, Signal Word Code(s)	Hazard statement Code(s)	Suppl. Hazard statement Code(s)		
605-001-00-5	Formaldehyde ...%	200-001-8	50-00-0	Carc. 1B Muta. 2 Acute Tox. 3* Acute Tox. 3* Acute Tox. 3* Skin Corr. 1B Skin Sens. 1	H350 H341 H301 H311 H331 H314 H317	GHS08 GHS06 GHS05 Danger	H350 H341 H301 H311 H331 H314 H317		* Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 5 % ≤ C < 25 % Eye Irrit. 2; H319: 5 % ≤ C < 25 % STOT SE 3; H335: C ≥ 5% Skin Sens. 1; H317: C ≥ 0,2 %	B, D

Main consequences of this new classification of formaldehyde:

- All Category 1 carcinogens manufactured or imported at 1 tonnes or more per year were to be registered by the 1st December 2010. With reclassification as a known carcinogen, formaldehyde producers and importers will have to immediately submit registration dossiers when the classification becomes legally binding. The first step is to introduce an inquiry dossier at the level of ECHA followed after the sameness check of ECHA by a formal registration dossier linked to the existing registration.
- As a Category 1 Carcinogen formaldehyde may be proposed as substances of very high concern (SVHCs) in the REACH Annex XIV Candidate list, for eventual inclusion in the Authorisation List. Further restrictions may also apply, especially for use in some consumer products;

- As a Category 1 carcinogen, formaldehyde use will be regulated by the Carcinogens Directive in EU workplaces. The central concept of this directive is that worker exposure to the substance is as low as technically possible, using the hierarchy of prevention;

Other presentation :







Formaldehyde		
Index N°	605-001-00-5	
International Chemical Identification	Formaldehyde ...%	
EC No	200-001-8	
CAS No	50-00-0	
Classification CLP	Hazard Class and Category Code(s)	Hazard statement Code(s)
	Carc. 1B Muta. 2 Acute Tox. 3* Acute Tox. 3* Acute Tox. 3* Skin Corr. 1B Skin Sens. 1	H350 - May cause cancer by inhalation H341 - Suspected of causing genetic defects H301 - Toxic if swallowed H311 - Toxic in contact with skin H331 - Toxic if inhaled H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction
Labelling CLP	Pictogram Code(s)	 GHS 08  GHS 06  GSH 05
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation H341 - Suspected of causing genetic defects H301 - Toxic if swallowed H311 - Toxic in contact with skin H331 - Toxic if inhaled H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction
	Suppl.	

	Hazard statement Code(s)	
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Specific Conc. Limits, M-factors		<p>* Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 5 % ≤ C < 25 % Eye Irrit. 2; H319: 5 % ≤ C < 25 % STOT SE 3; H335: C ≥ 5% Skin Sens. 1; H317: C ≥ 0,2 %</p>
Notes	<p>Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.</p> <p>Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.</p>	

CLP labelling for free formaldehyde in mixtures¹

The labeling requirements vary with specific concentration limits:

<0.1%		none
≥ 0.1 % - < 0.2 %	Pictogram Code(s)	GHS 08  GHS 07 
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation
	Supplemental label elements/information on certain substances and mixtures	EUH 208 : contains formaldehyde. May produce an allergic reaction
≥ 0.2 % - < 1 %	Pictogram Code(s)	GHS 08  GHS 07 
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation H317 - May cause an allergic skin reaction
	Supplemental label elements/information on certain substances and mixtures	
≥ 1 % - < 5 %	Pictogram Code(s)	GHS 08  GHS 07 
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation H317 - May cause an allergic skin reaction H341 - Suspected of causing genetic defects
	Supplemental label elements/information on certain substances and mixtures	

¹ Reference: Formacare (source: BASF)

≥ 5 % - < 25 %	Pictogram Code(s)	GHS 08  GHS 07 
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation H317 - May cause an allergic skin reaction H341 - Suspected of causing genetic defects H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation
≥ 25 %	Pictogram Code(s)	GHS 08  GHS 05  GHS 06 
	Signal Word	Dgr (Danger)
	Hazard statement Code(s)	H350 - May cause cancer by inhalation H317 - May cause an allergic skin reaction H341 - Suspected of causing genetic defects H314- Causes severe skin burns and eye damage H331 - Toxic if inhaled ² H335 - May cause respiratory irritation ³ H301 - Toxic if swallowed ⁴ H311- Toxic in contact with skin ⁵

² according to specific concentration limits of 67/548/EEC. Corresponding concentration limits do not exist under CLP. Mixture classification should be calculated in line with CLP regulation Annex I, chapter 3.1.3.

³ No upper limit is stated for the H335 in the CLP regulation

⁴ according to specific concentration limits of 67/548/EEC. Corresponding concentration limits do not exist under CLP. Mixture classification should be calculated in line with CLP regulation Annex I, chapter 3.1.3.

⁵ according to specific concentration limits of 67/548/EEC. Corresponding concentration limits do not exist under CLP. Mixture classification should be calculated in line with CLP regulation Annex I, chapter 3.1.3.