



# EUROPEAN REFRACTORIES PRODUCERS' FEDERATION

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PRE is a member of Cerame-Unie - Rue de la Montagne 17, 1000 Brussels - [www.cerameunie.eu](http://www.cerameunie.eu)  
Tel. +32 (0)2 808 38 82 - Fax +32 (0)2 511 51 74 - E-mail : [sec@cerameunie.eu](mailto:sec@cerameunie.eu) - Web : [www.pre.eu](http://www.pre.eu)

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## Classification and labelling of refractory monolithics in accordance with the CLP Regulation

### **Scope**

The CLP Regulation (EC 1272/2008) on classification, labelling and packaging, entered into force on 20 January 2009. It replaces the Dangerous Substances Directive (67/548/EEC) and the Dangerous Preparations Directive (1999/45/EC). It introduces new classification criteria, hazard symbols and labelling phrases. The CLP regulation deadline for mixtures to comply with the new criteria is June 1st 2015.

In the refractory producing industry unshaped refractory products (monolithics) are considered mixtures under CLP definitions.

Under the CLP Regulation, more monolithics will be covered compared to the previous legislative regime, in particular as a result of the following:

- There are more substances/mixtures that are used in the industry to produce monolithics that are now classified as dangerous or have a more severe classification due to the implications of the REACH regulation
- Classification rules and thresholds have changed between the CLP regulation and the former Dangerous Preparations Directive

Hence more mixtures will have to be classified, due to the presence of substances such as sodium silicate, respirable crystalline silica (RCS)<sup>1</sup> - quartz (fine fraction 1 – 10%) - lime, portland cement or phosphates.

In Europe, shaped refractories are defined as articles under REACH and CLP and therefore do not require CLP classification and labelling.

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<sup>1</sup> A PRE position paper specifically focusing on silica monolithics was published in February 2012 and can be found on the PRE website ([www.pre.eu](http://www.pre.eu)).

**Sodium Silicate Bonded Silica Mortar**

Supplier name  
Address1  
Address2  
Tel number




**Danger**  
 Provoque des lésions oculaires graves. Risque présumé d'effets graves pour les organes à la suite d'expositions répétées ou d'une exposition prolongée.  
 Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage. Ne pas respirer les poussières. Se laver les mains soigneusement après manipulation. EN CAS DE CONTACT AVEC LES YEUX: Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer. Appeler immédiatement un CENTRE ANTIPOISON ou un médecin. Éliminer le contenu et le récipient en conformité avec toutes réglementations locales, régionales, nationales, et internationales.  
Contient: Quartz (SiO<sub>2</sub>), acide silicique, sel de sodium

**Danger**  
 Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.  
 Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust. Wash hands thoroughly after handling. IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Dispose of contents and container in accordance with all local, regional, national and international regulations.  
Contains: Quartz (SiO<sub>2</sub>), Silicic acid, sodium salt

Example label suitable for 25kg container with volume ~15 litre  
(using label size 100 mm x 200 mm to fit 2 languages).

Where applicable, the expected label elements on the CLP label are:

- Product name
- Supplier name, address and telephone number
- Hazard and Precautionary statements
- Pictogram
- Signal word
- Main hazardous ingredients that lead to classification of the mixture
- Supplementary information

Apart from the classification, including hazard and risk communication through updated safety datasheets (which strictly speaking falls under REACH requirements), the packaging has to be properly labelled.

Label requirements and safety datasheet information are such that the information captured thereon must be in the official language of the Member State where the product is put onto the market, i.e. the intended recipient.

Label requirements for mixtures are described in the guidance on Classification and Labelling. Statement codes do not need to be printed on the label.

Many useful insights in how to manage CLP classification, labelling and packaging requirements can be found in the official guidelines provided by ECHA (see references below).

Further details on the label and pictogram size are given in the appendix to this document.

## **References**

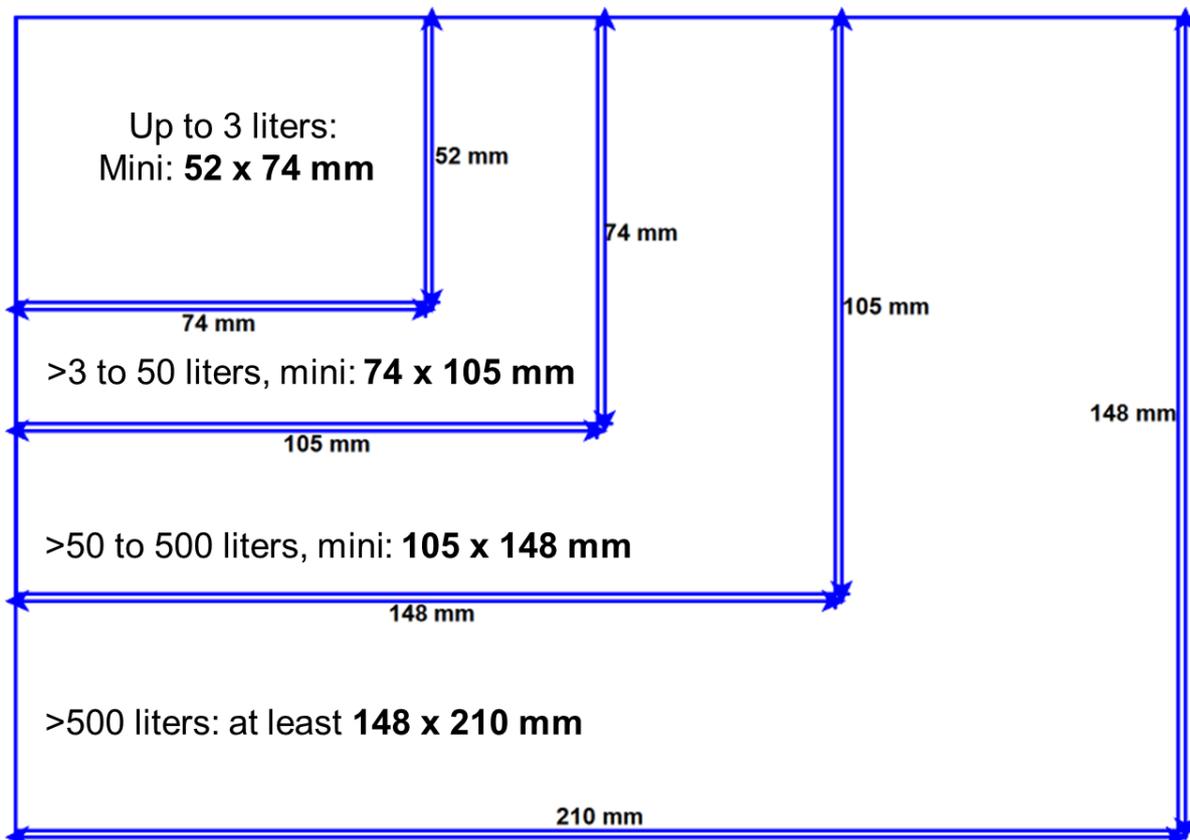
- CLP = Classification, Labelling and Packaging Regulation, [\(EC\) No 1272/2008](#)
- DPD = Dangerous Preparations Directive, [\(EC\) No 1999/45](#)
  
- European Chemicals Agency website:  
<http://echa.europa.eu/web/guest/home>
  
- Introductory Guidance on the CLP regulation  
[http://echa.europa.eu/documents/10162/13562/clp\\_introduitory\\_en.pdf](http://echa.europa.eu/documents/10162/13562/clp_introduitory_en.pdf)
  
- Guidance on the compilation of safety datasheets  
[http://echa.europa.eu/documents/10162/13643/sds\\_en.pdf](http://echa.europa.eu/documents/10162/13643/sds_en.pdf)
  
- Guidance on Labelling and Packaging in accordance with CLP  
[http://echa.europa.eu/documents/10162/13562/clp\\_labelling\\_en.pdf](http://echa.europa.eu/documents/10162/13562/clp_labelling_en.pdf)

**Appendix: Industry Guidelines**

- *CLP pictograms*



- *Minimal label sizes are shown in the following scheme:*



- *Minimal pictogram sizes:*

For the various package sizes the following minimum sizes of the individual pictograms are prescribed, with packages up to or above:

- Up to 3 liters: at least 10 x 10 mm, if possible 16 x 16 mm
- Between 3 and 50 liters: at least 23 x 23 mm
- Between 50 and 500 liters: at least 32 x 32 mm
- Above 500 liters: at least 46 x 46 mm

- *General labelling considerations:*

Where a package consists of an outer and an inner packaging, together with any intermediate packaging, and the outer packaging meets labelling provisions in accordance with the rules on the transport of dangerous goods, the inner and any intermediate packaging shall be labelled in accordance with this regulation. This means not only big bags, but also individual sacks that are put on the market, and where applicable cardboard boxes, buckets, ...

Multiple languages are allowed to be shown on labels, sometimes demanded by the customer, but they must include at least the language of intended recipient<sup>2</sup>.

Pictograms with red diamond shape, could be pre-printed, depending on the chosen solution. It is recommended to cover the pictograms up with a solid overprint which blacks them out completely when these are not needed.

Small quantity exemptions exist in the regulations, but will generally fall out of scope for our industry.

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<sup>2</sup> The list of languages required per country can be found here :  
[http://echa.europa.eu/documents/10162/13562/languages\\_required\\_for\\_labels\\_and\\_sds\\_en.pdf](http://echa.europa.eu/documents/10162/13562/languages_required_for_labels_and_sds_en.pdf)