

**Cerame-Unie comments on the ECHA recommendation to prioritise  
(Zr) Aluminosilicate RCF for their inclusion in Annex XIV of REACH Regulation**

**Comments submitted on behalf of Cerame-Unie**

The European Ceramic Industry covers a wide range of products including abrasives, brick & roof tiles, clay pipes, wall & floor tiles, refractory products, sanitary ware, table & decorative ware, technical ceramics. It accounts for more than 200.000 direct employments and a production value of € 25 billion within the EU in 2012.

**Use** (Zirconia) Aluminosilicate RCF based articles are used in ceramic installations as insulating material in the kilns (furnaces). During kiln operation, exposure to workers is insignificant. The vast majority of kilns used in the ceramic industry operate continuously. The kiln is a closed 'tunnel' with a pre-heating and cooling zone and a firing zone in the middle. The highest temperatures can be found in this firing zone. The ceramic products to be fired pass through rollers on the kiln or are placed on a kiln car on rails. For reasons of energy efficiency, these kilns operate continuously, the ceramic products move in and out but the kiln walls remain unreachable by humans. Therefore exposure to RCF inside the kiln is strictly limited to defined moments during inspection/maintenance and demolition. Before entering a kiln there is a defined time where the burners are stopped and the kiln can cool down. After maintenance the kiln needs to be heated again. This heat-up and cool down can take several hours to days. Due to the specific industrial nature of these activities this is a well-defined and well-prepared activity, carried out by trained operators under highly controlled conditions. In the ceramic industry, a typical inspection/maintenance would take place once a year or less. There are also kilns which are not shut down once in almost 30 years.

The (zirconia) aluminosilicate RCF is 'used' in the ceramic industry in the sense that articles consisting of these fibres are a part of the kiln furniture i.e. they cover the walls and/or roof of the kiln (furnace). These articles can be sheets, bricks, blankets, rolls, modules. The ceramic industry is a customer for these articles, not a downstream user of the substances according to the REACH definition.

**Substitution and alternatives**

The (zirconia) aluminosilicate RCF which are currently described on the candidate list and which are currently proposed for authorisation, do not cover chromia aluminosilicate RCF. These chromia based RCF are covered by the same case number as the two existing dossiers on RCF and hence have the same hazard profile. These three types of RCF are intersubstitutable but only two types are added to the candidate list. This is a consequence of the wrong substance ID which has already been highlighted in comments made on the candidate listing in 2009 and 2011.

Substitution of RCF by substances with a different hazard profile has taken place where possible, however, there are a number of high temperature uses where this is not the case. Substitution is a requirement under the Carcinogens and Mutagens Directive. Because of the high investment costs

and long lifetime of the kiln any substitution possibilities are well considered and the choice of (zirconia) aluminosilicate RCF is used only where no alternatives can deliver the same performance for the particular technical application.

We also refer to the study on Industrial and Laboratory Furnaces and Ovens carried out for the European Commission DG Enterprise in the context of the Ecodesign Directive which states that: *Alumino-silicate RCF products, better described as alumino-silicate wools, are one of the most energy efficient insulation materials available with, in many applications, no alternatives that have the same performance. AES HTIW cannot be used in some types of furnace and polycrystalline HTIW is so much more expensive that its use would cause the user's business to be uncompetitive with non-EU competitors who would not need to comply with REACH authorisation obligations. If alumino-silicate wool (ASW/RCF) could not be used, EU energy consumption would increase very significantly. The final report can be found here: <http://eco-furnace.org/documents.php>).*

## Exemptions

The use of RCF is already well regulated. At first, a restriction applies under Directive 2001/41/EC, limiting the use to industrial applications only. Furthermore, as regards industrial applications, the risk is properly controlled. National OELs (occupational emission limit) exist for RCF and a European binding OEL for RCF under the Carcinogens and Mutagens Directive is currently under discussion as part of the overall review of this Directive. A binding OEL for RCF is expected by the end of 2014, i.e. before authorisation would start. We therefore believe the criteria mentioned in REACH article 58 (2) are met as concerns the use of (zirconia) aluminosilicate RCF in the production of articles used for the ceramic industry.

In addition, this binding OEL will be applicable throughout the supply chain and cover all types of RCF covered by CAS number (142844-00-6) and EU number (604-314-4). As mentioned before, the current two dossiers put forward for prioritisation do not cover this full scope.

Cerame-Unie welcomes the SVHC-Roadmap which was published in 2013 and advocates a RMO (Risk Management Options) assessment before substances are proposed for the candidate list. As such assessment was not carried out in 2009 or 2011, we strongly recommend a proper RMO assessment for these materials before any further action is taken in respect of authorisation.

An authorization process will not bring an added-value in terms of environment or human health but will have a negative impact on the energy efficiency of the ceramic industry and hence the competitiveness of this industry. It is therefore in conflict with the aim of REACH to enhance competitiveness and the aim of authorisation to ensure the good functioning of the internal market.

## Review periods

The lifetime of ceramic kilns using (zirconia) aluminosilicate RCF is up to 30 years. Due to the high investment costs and the fact that most kilns are individually custom designed it is not possible to change to a different (and possibly less energy efficient) kiln before the kiln has been written off.

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