cefic
sector group

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The European UP Resin Sector Group
Statement concerning styrene-free technologies

The European UP Resin Sector Group in CEFIC[1] , which is currently composed of Ashland, CCP Composites, Reichhold and Scott Bader, has been and will continue to be deeply committed to innovation and technological development. Over the past decades, it has taken many initiatives towards the continuous improvement of products, equipment, transport, handling, best practices and information for the benefit of its consumers and workers. This has helped to ensure the safe handling of styrene based UP resins and the ever growing success of these resins in numerous applications.

Recently, there have been announcements on the development and commercialization of styrene-free UP resins for use in specific applications. The European UP Resin Sector Group believes that such technologies could deliver benefits in the future. The member companies of the Sector Group have not only been committed to the continuous support and development of styrene-based resins, but equally to the development of alternatives resins. However, as we are still in the early stages of the development of these alternatives, styrene-based resins will continue to be the most reliable substance on the market for UP resin applications. Styrene-based resins will also continue to be the most cost-competitive choice for the time being. Equally, styrene monomer as an important base raw material is widely available across the globe from long term manufacturers.

As styrene-free resins lack the versatility of styrene containing UP resins and are not available for all applications, styrene remains the preferred monomer for cross linking unsaturated polyester resins. Research into substitutes has been extensive, but it has proven to be very challenging. Current alternatives to styrene in UP resins are less versatile and, in addition, less well-studied from a regulatory perspective. Therefore, it can be concluded that at this stage there is no alternative solution that can match the universal performance of styrene.

Already in 2007, the European Union (EU) risk assessment of styrene[2] concluded that it is safe for both the environment and for consumers. The European UP Resin Sector Group is fully committed to developing best practices and has produced extensive safe use guidelines for handling UP resins. In addition, the members have been active in developing effective closed-mold systems that further protect workers' health. It has been demonstrated that workers can safely work with styrene when using recommended protective equipment and by limiting possible exposure to emissions.

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[1] CEFIC is the European Chemical Industry Council

2 The final draft EU risk assessment report was published on the European Chemicals Agency (ECHA) website in December 2008, following nearly 10 years. This was an extensive assessment of the full body of available science. Its conclusions on carcinogenicity can be found on page 271. Conclusions on risk to human health can be found on page 335. http://echa.europa.eu/doc/trd_substances/styrene/rar/trd_rar_uk_styrene.pdf

In June 2011, the United States of America Department of Health and Human Services (HSS) included Styrene monomer in the National Toxicology Program's (NTP) 12th Report on Carcinogens (RoC), as a substance that is *"reasonably anticipated to be a human carcinogen".* This conclusion by the NTP is diametrically opposed to the European-wide assessment that styrene does not pose a concern for human carcinogenicity. On the basis of EU risk assessment report and taking into account all available scientific information the Competent Authorities of the EU decided already in 2007 not to classify styrene for carcinogenicity. As a result styrene is not classified for carcinogenicity in the European Union. The US industry association, Styrene Information and Research Center, (SIRC) is actively contesting the listing by the NTP, based on solid scientific arguments.

The European UP Resin Sector Group also works closely with and actively supports, EuCIA, the leading Brussels based Association of the European Composites Industry, in sharing best practices of safe handling of UP/VE resins within composites manufacturing.

For more information on the **European UP Resin Sector Group** please visit the following website: http://www.upresins.org/

For more information on **EuCIA** please visit the following website: http://www.http://www.eucia.org

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