

Summary of GAE Position Paper on Intermediates

February 2018

Use of Raw Materials as Intermediates under REACH in the Manufacture of Glass

This position paper is presented on behalf of Glass Alliance Europe ("GAE"), which represents the EU glass industry, within the context of the exemption of intermediates from authorisation under Regulation 1907/2006 ("REACH").

Summary

Since raw materials that are used in the manufacture of glass are used for physical and chemical processing and are intentionally transformed into the new substance glass, they should be considered as intermediates under REACH, meaning that their uses for the manufacture of glass will be exempted from authorisation in case they are included in Annex XIV of REACH.

Glass is an inorganic material obtained from different inorganic raw materials which react at high temperature to form a new random network (synthesis), where different elements are bonded together by oxygen bridges. Raw materials used in a glass formulation undergo physical (melting) and chemical (formation of the network) processes. During the chemical reaction to form glass (synthesis), different substances are transformed into a non-crystalline vitreous substance. In the glass, the chemical elements are incorporated via new and strong chemical bonds that become an integral part of the glass structure.

During the manufacture of glass, the raw materials are intentionally transformed into the new substance glass. It is a non-reversible process since the components cannot be separated once the process is completed. The raw materials are intentionally and deliberately used in order to be transformed into glass.

According to Article 56.1 of REACH, if a substance is included in Annex XIV, it can only be manufactured or used if that use has been authorised or if it is exempted. Under Article 2.8 of REACH, on-site and transported isolated intermediates are exempted from authorisation.

'**Intermediate**' is defined by Article 3.15 of REACH as "*a substance that is manufactured for and consumed in or used for chemical processing in order to be transformed into another substance (hereinafter referred to as synthesis)*". **Transported isolated intermediates**, which is the category relevant for the raw materials used in the manufacture of glass, are substances manufactured at one site and consumed/used at another site. They are 'isolated' between their creation at the first site and their use at the other site¹.

¹ "Transported isolated intermediate" is defined in Article 3 (15c) of REACH as "*an intermediate not meeting the criteria of a non-isolated intermediate and transported between or supplied to other sites*".



In this regard, the **EU Court**² specified that the classification depends on the intended purpose of manufacture and use of the substance and in particular whether the substance is used in order to be synthesised and with the intended purpose of being transformed into another substance. This interpretation was also relied upon by the **ECHA Board of Appeal**³, which considered whether the substance was intentionally used in order to be transformed into another substance and also specified that the main aim of the production process is irrelevant.

Taking into account our understanding of the EU Court Case² and the ECHA Board of Appeal decision³, the glass manufacturing industry concludes that, since raw materials that are used in the manufacture of glass are transformed into the new substance glass, which is deliberately manufactured, these raw materials have to be considered as intermediates, in accordance with the definition provided by Article 3.15 of REACH.

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About Glass Alliance Europe

Glass Alliance Europe is the European Alliance of Glass Industries. It is composed of 14 national glass associations and of the five main sectors of the glass industries: container glass, flat glass, special glass, domestic glass and continuous filament glass fibres. Over Europe, the glass industry comprises more than 500 plants providing 500,000 direct and indirect jobs.

Europe is the world leader in glass making. Glass is a unique and inert material made from abundant natural resources and fully recyclable. It is a key contributor to the EU objectives of a low-carbon, energy-efficient and circular economy, and a key enabling material for essential supply chains, such as the pharmaceutical and health sector, the food and drink industry, buildings and construction, automotive, luxury goods and perfumes, electronics, etc.

² Case T-268/10 RENV (*PPG and SNF v ECHA*).

³ Decision of the ECHA Board of Appeal in case A-010-2014 (*Nordenhamer Zinkhütte GmbH v ECHA*).

ANNEX

Intermediates and Registration

Under REACH glass is classified as a UVCB substance (substance of unknown or variable composition, complex reaction products or biological materials). It is therefore considered as a substance as such and exempted from the registration requirement under REACH under certain conditions laid down in Annex V (11) REACH.

REACH does not apply to non-isolated intermediates (Article 2 (1c) REACH), whereas isolated intermediates on the other hand are subject to registration but may benefit from reduced information requirements if they are manufactured and used under “strictly controlled conditions” (Article 2 (8a) and Art. 18 REACH).

The glass industry requires that all raw materials subject to registration requirements are fully registered given that the industry cannot guarantee that strictly controlled conditions are met under all circumstances.

Intermediates and Authorisation

Isolated intermediates are not subject to authorisation (Art. 2(8b) REACH and Title VII).

Therefore, even if an intermediate is on the candidate list of substances of very high concern (SVHC) and is going to be prioritized, its use as an intermediate in the glass industry will not be subject to authorisation.

Nature of glass: further reading

- 1) J. Zarzycki: Glasses and the vitreous state – Cambridge University Press, 1991.
- 2) H. Scholze: Glass, nature, structure and properties – Springer Verlag, 1991.
- 3) J.E. Shelby: Introduction to glass science and technology – The Royal Society of Chemistry, 1997.
- 4) A. K. Varshneya: Fundamentals of Inorganic Glasses – Society of Glass technology, 2006.