

Glass for Europe statement on REACH and the composition of float glass

According to the definitions of the European Directive on the Registration, Evaluation, Authorisation and Restriction of Chemicals 1907/2006 (REACH), glass is a single “substance” of “unknown or variable composition, complex reaction product, or biological material”. It is exempted from the registration requirement under certain conditions laid down in Annex V (11) of REACH.

Glass is not a mixture or a preparation and does not contain the individual separate elements, or their oxides, or other substances¹.

European manufacturers of float glass regularly analyse their products using equipment with an elemental detection limit of 10 ppm, or lower. Float glass is a substance composed primarily of Si, Na, Ca, Mg, Al, K, Fe, Ti, S and O (commonly called “soda lime silicate” glass). Pb, Cr, As, Sb, V may be present in float glass as trace level contaminants, always below 20 ppm. Tinted glass may contain Co, Se or Ni, up to 200 ppm.

FLOAT GLASS DOES NOT CONTAIN ANY SUBSTANCES OF VERY HIGH CONCERN (SVHC) IDENTIFIED IN ANNEX XIV OF REACH OR CANDIDATES FOR SVHC STATUS.

According to REACH, float glass products are “articles”. Registration and notification of substances in articles (under article 7.1 of the REACH regulation) is not required in the case of float glass, since it is made of a single substance “glass”.

Glass for Europe is the trade association for Europe’s flat glass sector. Flat glass is the material that goes into a variety of end products, primarily in windows and facades for buildings, windscreens and windows for automotive and transport as well as solar energy equipment, furniture and appliances. Glass for Europe brings together multinational firms and thousands of SMEs across Europe, to represent the entire building glass value-chain. It is composed of flat glass manufacturers, AGC Glass Europe, Guardian, NSG Group, Saint-Gobain Glass Industry and Siseçam-Trakya Cam, and works in association with national partners gathering thousands of building glass processors and transformers all over Europe.

¹ Chemists sometimes express glass compositions as mixtures of oxides for comparative purposes. However, soda-lime silicate glass is an amorphous inorganic substance obtained from different inorganic raw materials which react at high temperature to form a new random network, where different elements are linked together, typically by oxygen bridges, arranged in such a way that no free oxides are present.