

Main chemical components of solar glass





Overview

What are solar cells made of?

It is composed of low iron glass, solar cells, film, back glass, and special metal wires. The solar cells are sealed between a low iron glass and a back glass through film, making it the most innovative high-tech glass product for construction. Using low iron glass to cover solar cells can ensure high solar transmittance.

What oxides are used in solar glass?

In solar glass formulations, the key components are magnesium oxide (MgO). These oxides are widely used because of their abundance and the properties they provide to the glass matrix. The resulting glass exhibits the mechanical and optical properties necessary for transmission, and thermal resistance. The predominant use of these basic oxides is in solar technologies.

What is glass used for in a photovoltaic system?

In thin-film technology, glass also serves as the substrate upon which the photovoltaic material and other chemicals (such as TCO) are deposited. Glass is also the basis for mirrors used to concentrate sunlight, although new technologies avoiding glass are emerging. Most commercial glasses are oxide glasses with similar chemical composition.

What raw materials are used in Photovoltaic Glass production?

The raw materials used in the production of photovoltaic glass include soda ash, quartz sand, feldspar, dolomite, limestone, mirabilite, etc. Quartz sand and soda ash are not only the main components in material input, but also the two types of raw materials that have a significant impact on material costs.



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