“DL-7900” antibacterial glass powder with improved antibacterial performance developed

Nippon Electric Glass Co., Ltd. (Head office: Otsu, Shiga, Japan; President: Motoharu Matsumoto) (NEG) has developed a new antibacterial glass powder with substantially improved initial antibacterial performance and antibacterial durability, and is now providing samples.

The demand for resin products with high antibacterial performance has been increasing for household equipment such as bathtubs and washbasins or other miscellaneous items frequently touched by human hands. NEG has produced and sold antibacterial glass powder capable of maintaining high antibacterial performance, after having eliminated the disadvantage of conventional silver-based antibacterial glass becoming reddish brown by reacting with resin. This time we have successfully developed “DL-7900”, a new material with substantially improved antibacterial performance.

Characteristics

• **High initial antibacterial performance and antibacterial durability**

To achieve high antibacterial performance, the amount of silver ion release should be maintained at a high level. DL-7900, with its optimized glass composition, can maintain a high level of silver ion release. Its high antibacterial ability can work effectively to reduce additive amount into resin.

• **Reduced discoloration of resin products**

Conventional silver-based antibacterial glass, when added to resin and used for a long time, may cause discoloration of the resin surface to reddish brown due to reaction with resin elements or light. Such discoloration of kitchen and sanitary space articles, for which white or ivory is preferably used, may ruin the product’s image of such equipment. NEG’s
antibacterial glass contains zinc along with silver to inhibit such discoloration of the resin surface.

**Product form**
- Powder, with average grain size of 10 μm (standard type)
  (Other sizes are also available.)

**Mass production and sales**
- Around autumn 2015 (scheduled)

Expecting further increased demand for more comfortable living environments, a further increase in demand for better antibacterial materials for kitchen and sanitary space articles is also expected not only inside Japan but also overseas.

Our antibacterial glass lineup also includes zinc-based antibacterial glass with no silver contained to satisfy the diverse needs of our customers. We intend to actively promote sales of a wide variety of antibacterial glass products.