

Antibacterial Glass Powder

ZF-0 and DL-7900 are new types of antibacterial glass powders that are mainly composed of zinc. Compared to conventional antibacterial glass, which is mainly composed of silver, DL-7900 is especially advantageous in providing anti-bacterial performance, and the compounded quantity in resin can be reduced without compromising performance.

Properties

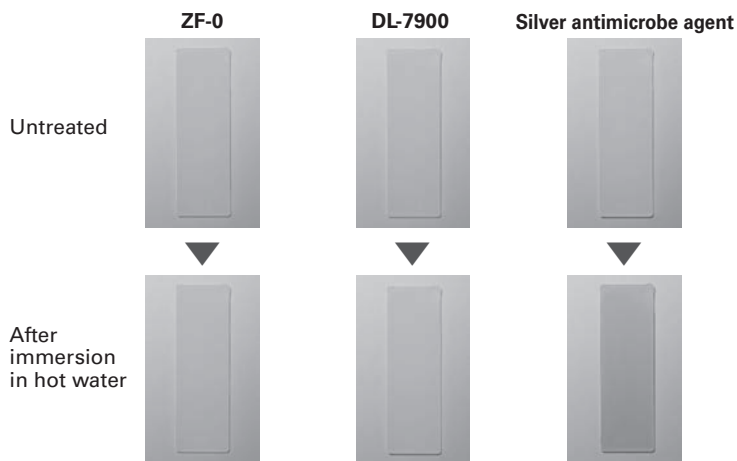
Properties/Glass Code	ZF-0	DL-7900
Glass type	ZnO-B ₂ O ₃	ZnO-B ₂ O ₃ -Ag ₂ O
Resin discoloration resistance	◎	◎
Durability of antibacterial property	◎	◎
Initial antibacterial property	△	◎

◎ : Excellent, ○ : Strong, △ : Good



Color change test with warm water immersion (60°C-48h)

The material was added to PP resin (0.5%).

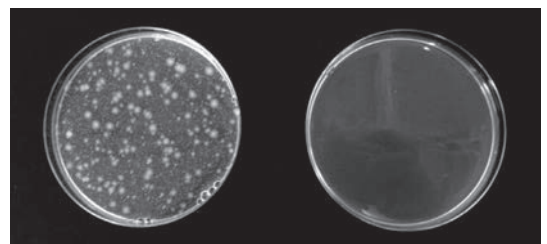


Antibacterial Activity Values

(JIS Z 2801: 2010)

Glass Code	ZF-0	DL-7900
Adding ratio into PP resin (wt%)	0.5	0.3
E. coli	3.4	4.2
S. aureus	4.1	2.9

*The above data was derived from a measuring example.



PP (No Additives)

PP (Containing ZF-0)

Applications

- Consumer electronics (refrigerators, air conditioners, vacuum cleaners, and other items)
- Daily use items (kitchenware, bathroom goods, and other items)

