

Human-Friendly Quick-Setting-Accelerator for Wet Gunning "Activator F2"

Sodium silicate and sodium aluminate have been widely used as Quick-Setting-Accelerator for wet gunning application. These accelerators have both advantages and disadvantages in terms of skin irritation and strength generation.

Krosaki Harima Corp. has developed the human-friendly Quick-Setting-Accelerator "Activator F2" which satisfies both of the above conditions.

Features of "Activator F2"

1. Non-irritating to the skin
2. Faster setting



Fig. 1 Wet gunning to ceiling application with Activator F2

1 Non-irritating to the skin

- In evaluation test (OECD TG439 study using a model simulating human skin) for cosmetics, etc., Activator F2 is classified to be non-irritating as well as sodium silicate.
- Sodium aluminate is classified to be irritating, and it was designated as a deleterious substance in July 2018 in Japan.

2 Faster setting

- Activator F2 shows similar strength generation behavior to sodium aluminate.
- Sodium silicate is not suitable for ceiling application due to its slow strength generation.

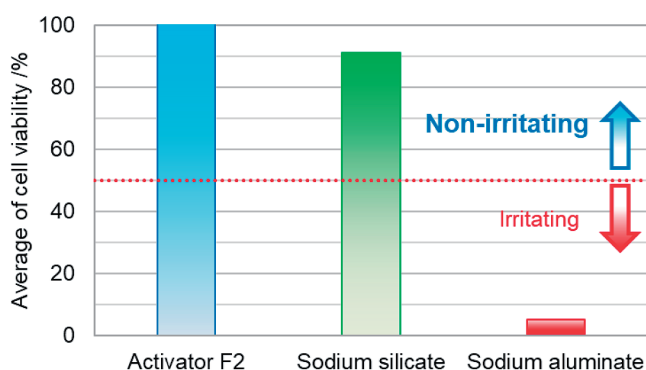


Fig. 2 Results of OECD test

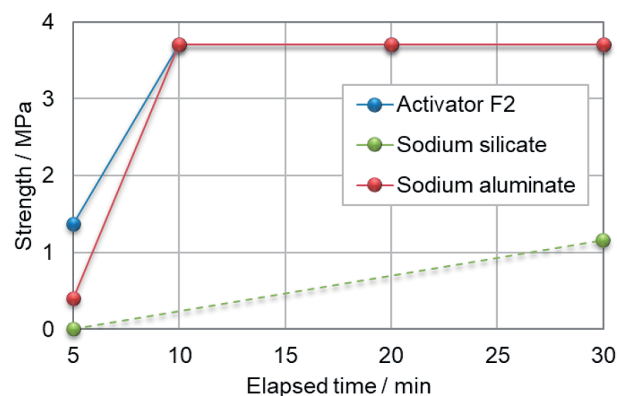


Fig. 3 Strength generation by mixing with wet gunning material (strength with penetrometer)

Table 1 Packing style and Application procedure

Item	Contents
Packing style	13kg / 20L Plastic Pail
pH	About 11 to 12
Application procedure	① Mix with portable mixer for homogenization. ② Discharge the accelerator into accelerator pump.



Fig. 4 Appearance of Activator F2

Application

Supply record : Cement Plants, Various Incinerators, and Melting Furnaces

Remarks : It can be used in various furnaces in steel making industry.