

June 18, 2010

ADK STAB NA-27

— Nucleating agent —

Identification

This is a mixture product. The main component is phosphate ester compound.

Features

- Is a new high-performing blend nucleating agent which improve physical and mechanical properties of PP. It shows better performance than ADK STAB NA-11, especially when loaded to PP as one-pack granule form.
- Enhances crystallization rate of PP, resulting in improved processing-cycle time and productivity.
- No odor problem in end-use applications.
- Improves clarity of PP. It also exhibits resistance to extraction from the polymer.
- Approved in indirect food contact additives in US, EU, and Japan. Potential application is food packaging. (In additional information such as kind of adaptable polymers, please ask our Sales Department.)

applications

- Homo PP and Block PP
- Automotive parts, food packages, electric appliance parts.

Physical and chemical properties

- Appearance White powder
- Melting point $\geq 210\text{ }^{\circ}\text{C}$ (softening point)
- Thermal stability (TGA, $10^{\circ}\text{C}/\text{min}$, Air $200\text{ml}/\text{min}$) 10% weight loss temperature: 317°C
- Solubility (g/100g solvent at $25\text{ }^{\circ}\text{C}$) Water: insoluble

* Above value of properties are just typical, not specific

Performance

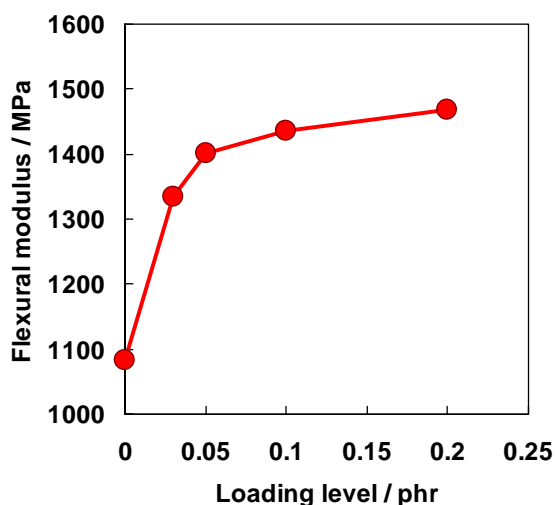


Fig.1 Stiffness of PP-b without Talc

Formulation:

PP-b MFR-25 (100), AO-60 (0.1), 2112 (0.1),
Ca-St (0.05), NA-27 (See graph)

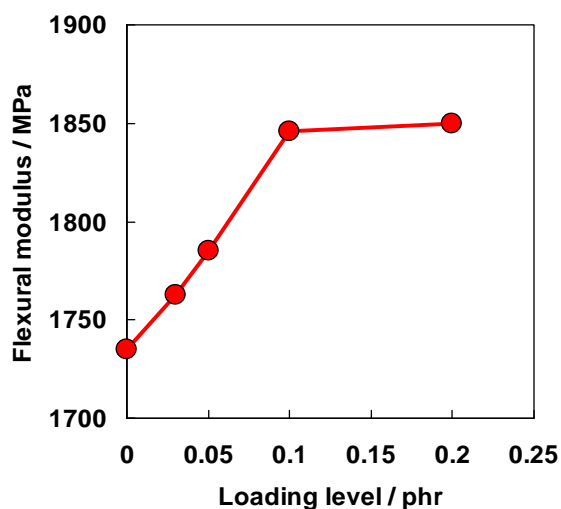


Fig.2 Stiffness of talc-filled PP-b

Formulation:

PP-b MFR-25 (90), Talc (10), AO-60 (0.1)
2112 (0.1), Ca-St (0.05), NA-27 (See graph)

Handling and storage

- This product tends to absorb moisture. Store in the original container securely under cool and dry condition. After opening, use immediately.
- Protective clothing should be worn when operators are handling, or being exposed to, this product. See the MSDS for further detailed advice.