

## REACTIVE MODELING, SPACKLING, FILLING AND CASTING COMPOUND

### BACKGROUND

State of the art compositions for the use of modelling, spackling, filling and casting are applied in a wide range of different industries, such as construction, electronic, automotive and aerospace industry. However, all current solutions show at least one of the following major drawbacks: mixing step required for 2K systems (resin + hardener), short processing window before curing, long curing time, very energy-intensive curing process. The described invention offers a solution to those issues.



### TECHNOLOGY

The invention stands out due to the fact, that an initially liquid or deformable compound (variable viscosities) comprising the given compositions can be cured extremely quickly on-demand using a short, localized UV or heat impulse. The possibility of activating the curing process via this technique is extremely energy-efficient in contrast to conventional methods involving expensive ovens and autoclaves. In addition to that, the handling of such compositions before curing is drastically facilitated for the user, due to much longer processing windows (one-pot system). Modeling, spackling, filling and casting compounds comprising the given compositions can be used in thermal/electrical isolation applications as well as in repair work of different materials (ceramics, wood, stone, plastics,...). Furthermore, the technology could find its way into art, model making and rapid prototyping.

### BENEFITS

- Storage stable 1K (one pot) system
- Easy handling due to nearly unlimited processing window
- On-demand curing using a short, localized UV/heat trigger
- Extremely fast and energy efficient curing

**REFERENCE:**  
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### APPLICATIONS:

Modeling compounds  
Spackling compounds  
Filling compounds  
Casting compounds  
Putty

### DEVELOPMENT STATUS:

Basic technology  
mature, overall process  
in optimization phase

### KEYWORDS:

Modeling compound  
Spackling compound  
Filling compound  
Casting compound  
On-demand curing  
Curable compositions  
Epoxy resins

### IPR:

AT and PCT pending

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