



**HARKE**  
Pharma

# Alternatives to Titanium Dioxide

For Pharmaceutical & Nutraceutical Applications



Pharma

## YOUR BENEFITS

- ▶ Titanium Dioxide free formulations
- ▶ Non-genotoxic
- ▶ Opacifying and whitening properties
- ▶ Synergistic effects for your coating formulation

**YOUR DOSAGE FORM EXPERTS**

## Replacing Titanium Dioxide – why is it important?

- Titanium Dioxide/TiO<sub>2</sub> (E171) is considered genotoxic because genotoxicity could not be ruled out and a safe daily intake could not be established.
- The EFSA has updated its safety assessment of TiO<sub>2</sub> to “no longer considered safe as a food additive”.
- TiO<sub>2</sub> can be easily replaced by galenIQ™720 or Talc Micro Ace P-3 for pharmaceutical and nutraceutical applications.



TiO<sub>2</sub> free coating formulation

### Talc Micro Ace P-3

- Whiteness of 95%
- Opacifying properties
- High surface area for lower Talc inclusion levels in coating formulations
- Asbestos free
- Absence of black particles
- Anti tacking properties

### TYLOPUR® – HPMC

- Cellulose based coating polymer
- Non-ionic character
- Organic-free coating solutions possible
- Approved for nutraceutical applications
- Safe and sustainable coating process

### More possibilities

- galenIQ™720 (Isomalt)
- Gohsenol™EG (PVA)
- Polyglykol (PEG)



Tableting



Coating

