



## COMBIPRINT-PP7™

**NEW GENERATION**  
*of an oil-free powder thickener*

SeattleChem, USA and **ZIMMER AUSTRIA** | DIGITAL PRINTING SYSTEMS developed an oil-free thickener which is perfect for preparing dyes for **CHROMOJET**.

**COMBIPRINT-PP7™** is a newly developed „broadband“ thickener system for all kinds of carpet and textile printing technologies. It has excellent print properties and in addition it has a number of major advantages in comparison to oil-based thickeners:

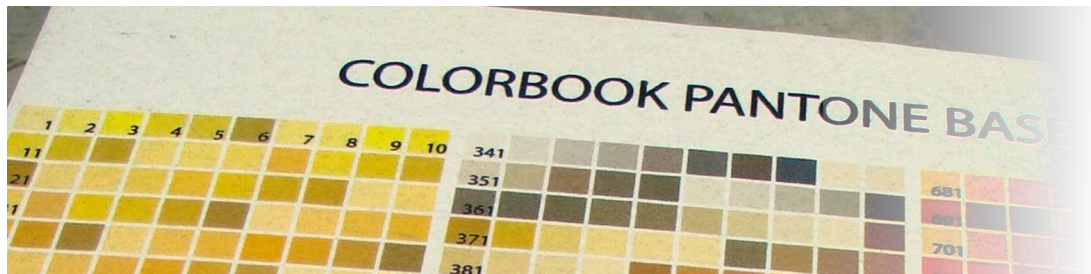
- excellent print definition and penetration with best color yield
- high performance and thickening properties
- easy washing, cleaning & drying properties
- environmental-friendly, non-toxic and non-hazardous
- extremely low amount needed and therefore very cost effective
- for **CHROMOJET** and **SCREEN.PRINTING**

### PACKAGE & SHIPPING

- packed in PU bags which are inserted in cardboard boxes with 20 kg, easy for shipment, transportation and handling
- each palette contains 16 - 24 cardboard boxes with 20 kg each (320 - 480 kg in total)
- bags can be emptied completely - no settlement - no waste of product
- cardboard boxes can be recycled - no need to clean and return them
- no special papers for shipping required, because the product is non-hazardous
- storage and shipping temperature (-40°C - +50°C | -40°F - 122°F) has no influence on properties
- boxes can be stored for 24 months as long as an open bag is not exposed to humidity. Humidity can change specific weight and can build lumps and skin on the powder, but it will not effect thickening properties.



INTERNATIONAL	USA & CANADA	CHINA	TECHNICAL SUPPORT FOR CHROMOJET
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## CHARACTERISTICS

- fluffy, loose white powder with about 170 - 240 kg/m<sup>3</sup> piled density
- based on cross-linked carboxyl chemistry
- highly-efficient thickener which can swallow up to 1,000 times by binding water
- works in a pH range from 3.5 up to 8
- very high viscosity drop during shear effects for best penetration
- easy to mix before neutralization with a 3 % caustic soda solution
- no additional chemicals needed (only PP7 + water + dye + caustic soda)
- no bacteria and no alginates in stock gum and ready-made dye, even after long storage in hot environment
- higher viscosity can be used due to the high viscosity drop under shear stress (when the dye comes out of the jet and during penetration into the pile)
- no blockage of filters by „fish eyes“; practical size is much smaller than the smallest opening of filters and jets
- suitable for 16, 25 and 76 dpi **CHROMOJET** printing systems
- no dripping and splashing due to high viscosity at low shear stress
- wider range of pressures possible - related to viscosity reduction under shear stress
- no contamination of the system by oil/thickener sludge
- no chlorine bleach cleaning or detergent cleaning needed
- system and jets can be washed much faster and with less water
- better penetration - due to viscosity breakdown under shear stress
- no frosting, excellent color yield
- thermostable in the steamer (no frosting and no bleeding)
- faster and better fixation and higher fastness levels - because no oil blocks the fibre
- carpet dries much faster and with lower energy because no oil and thickener are left after the washing process
- carpet contains no oily residuals which would attract stain
- carpet dries much faster when it is used in polyester print process (printing > drying > steaming > washing > drying)

