

## ROWAFLEX® TH 4

Highly efficient, VOC free synthetic Thickener for aqueous pastes and polymerdispersions

|   |   |
|---|---|
| <b>Type</b>                             | Thickener   |
| <b>Chemical character</b>               | Polyacrylic acid derivative   |
| <b>pH value</b>                         | 8.5   |
| <b>Ionogenity</b>                       | anionic   |
| <b>Appearance</b>                       | Slight yellowish, low-viscous liquid dispersion   |
| <b>Product viscosity</b>                | <5000 mPa.s (Brookfield (23°C))   |
| <b>Ratio of renewable raw materials</b> | 0 %   |
| <b>Biodegradability</b>                 | yes (89%)   |
| <b>Properties</b>                       | <p>ROWAFLEX® TH 4 is a thickener for polymer dispersions. The excellent efficiency of ROWAFLEX® TH 4 makes it possible to significantly reduce the amount of use compared to conventional thickeners. To achieve the high efficiency of the product is in the neutral and in the alkaline range. ROWAFLEX® TH 4 gives the polymer dispersion following properties:</p> <ul style="list-style-type: none"> <li>• reaches the final viscosity after short mixing time in high field intensity</li> <li>• improves the dispersing ability of thermoplastic powders</li> <li>• gives stability to the paste</li> <li>• has a positive influence on the rheological behavior of the paste</li> <li>• extends the storage times of the finished paste</li> <li>• high viscosities can be reduced with water</li> <li>• excellent solubility in water</li> <li>• is self thickening , no adding of ammonia necessary</li> <li>• VOC free (low fume)</li> </ul> |
| <b>Application</b>                      | <p>ROWAFLEX® TH 4 is a special thickener for thermoplastic powder/aqueous dispersions that are applied on rotary printing equipment. The required quantity of the finished product varies depending on the print template (mesh number/CP) and is between 0.4 and 0.6% in relation to the total paste quantity (evaluate a final viscosity of approx. 7.500-10.500 mPas).</p>   |

Die vorstehenden Angaben entsprechen dem derzeitigen Stand unserer Erkenntnisse und Erfahrungen. Wir beraten Sie damit unverbindlich und bitten Sie, alle Angaben über die Verwendung unserer Produkte auf die bei Ihnen vorliegenden Verhältnisse abzustimmen und den verwendeten Materialien anzupassen.

All information provided is based on our experience and current know-how but is given without guarantee and obligation. Recommendations on the application and use of our products should be adapted to the particular conditions and other materials employed.

**Recipe recommendation****Copolyamide paste**

|                          |        |
|--------------------------|--------|
| Water / H <sub>2</sub> O | 55 kg  |
| ROWAFLEX® DF 2           | 0.2 kg |
| ROWAFLEX® X 572          | 1 kg   |
| ROWALIT® 200-1, 0-80     | 30 kg  |
| ROWAFLEX® TH 4           | 0.4 kg |
| ROWAFLEX® X 100          | 10 kg  |

**Copolyamide paste with plasticizer**

|                          |        |
|--------------------------|--------|
| Water / H <sub>2</sub> O | 55 kg  |
| ROWAFLEX® DF 2           | 0.2 kg |
| ROWAFLEX® X 502          | 3 kg   |
| ROWALIT® 200-2, 0-80     | 30 kg  |
| ROWAFLEX® TH 4           | 0.4 kg |
| ROWAFLEX® X 100          | 10 kg  |

**Crosslinkable paste system**

|                          |        |
|--------------------------|--------|
| Water / H <sub>2</sub> O | 55 kg  |
| ROWAFLEX® DF 2           | 0.2 kg |
| ROWAFLEX® X 600          | 3 kg   |
| ROWALIT® 200-63, 0-80    | 30 kg  |
| ROWAFLEX® TH 4           | 0.4 kg |
| ROWAFLEX® X 100          | 10 kg  |

**Polyethylene Paste**

|                          |        |
|--------------------------|--------|
| Water / H <sub>2</sub> O | 55 kg  |
| ROWAFLEX® DF 2           | 0.2 kg |
| ROWAFLEX® X 502          | 3 kg   |
| ROWALIT® N 100-20, 0-80  | 30 kg  |
| ROWAFLEX® TH 4           | 0.4 kg |
| ROWAFLEX® X 100          | 10 kg  |

**Polyurethane paste**

|                          |        |
|--------------------------|--------|
| Water / H <sub>2</sub> O | 55 kg  |
| ROWAFLEX® DF 2           | 0.2 kg |
| ROWAFLEX® X 502          | 3 kg   |
| ROWALIT® 500-37, 0-80    | 30 kg  |
| ROWAFLEX® TH 4           | 0.4 kg |
| ROWAFLEX® X 100          | 10 kg  |

The addition of ROWAFLEX® TH 4 should be done slowly to securely reach the required viscosity.

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