

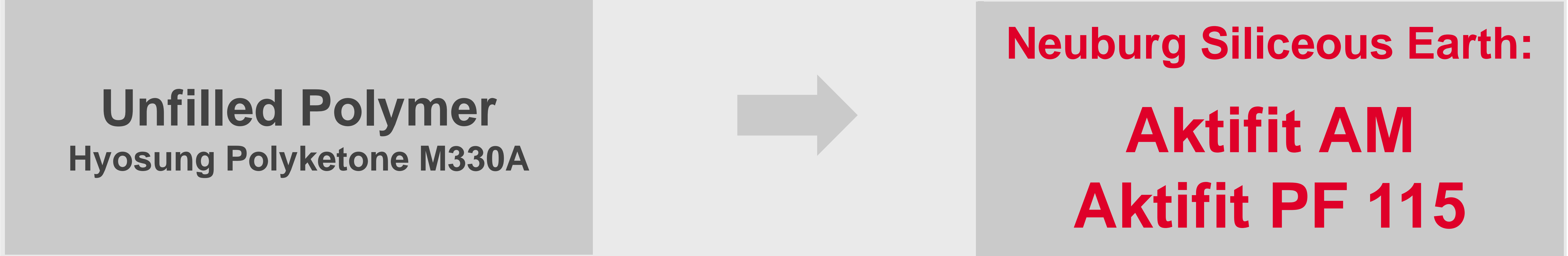
# CALCINED NEUBURG SILICEOUS EARTH

## POLYKETONE (PK)

### 30 % FILLER CONTENT

#### OBJECTIVE

#### Performance of Aktifit AM and Aktifit PF 115



#### RESULTS

			M330A unfilled	Aktifit AM	Aktifit PF 115
Melt Volume-flow Rate		cm³/10 min	53.2	9.3	6.9
Crosslinking during Processing			No	No	No
Tensile Modulus		GPa	1.74	2.85	2.88
Tensile Yield Stress		MPa	65.5	67.8	69.1
Tensile Yield Strain		%	17.0	16.5	16.2
Flexural Modulus		GPa	1.5 *	3.08	3.16
Flexural Strength		MPa	57 *	89.2	90.0
Impact Strength	23 °C	kJ/m²	No break	No break	No break
Charpy, 1eU	-30 °C	kJ/m²	-	No break	No break
Notched Impact Strength	23 °C	kJ/m²	8 *	10.2	10.6
Charpy, 1eA	-30 °C	kJ/m²	2 *	3.1	3.4

\* acc. data sheet

#### SUMMARY

Benefits vs. the unfilled polymer:

- Higher stiffness
  - Slightly higher strength at comparable yield strain
  - Markedly higher flexural strength
- Similar or slightly higher notched impact strength
  - Good unnotched impact strength: no break with 4 J pendulum, even at low-temperature

**Aktifit AM** and **Aktifit PF 115** are attractive mineral fillers for polyketone, because they do not cause premature crosslinking during processing.

In addition, **Aktifit PF 115** leads to brighter, more color neutral compounds.