# SCONA TSPOE 1002 CMB 1-2

Impact strength modifier for polyamide.

## Product Data

**Composition**
Ethylene-octene copolymer functionalized with maleic acid anhydride

**Typical Properties**
The values indicated in this data sheet describe typical properties and do not constitute specification limits.

| | |
|---|---|
| MFR (190 °C, 21 kg): | 8-14 g/10 min |
| Drying loss (3h, 110 °C): | < 0.5 % |
| MAH content: | > 0.45 % |
| Supplied as: | Transparent granulate |

**Food Contact Legal Status**
For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

**Storage and Transportation**
Storage < 40 °C. Protect from moisture. Store the tightly sealed containers in a dry, cool, and well-ventilated location.

## Applications

### Thermoplastics

**Special Features and Benefits**
SCONA TSPOE 1002 CMB 1-2 is an effective impact strength modifier for polyamide 6, polyamide 6.6, and polyamide 12. It can also be used in colorless compounds.

## Recommended Levels

See following table:

Polyamide 6 was compounded in a ZSK 25 with varying proportions of SCONA TSPOE 1002 CMB 1-2. Testing was conducted on standardized injection-molded items in a freshly molded state. The following properties were achieved:

| **Physical Data** | **Unit** | **Standard** | **PA 6 Solution viscosity 2.6** | **With SCONA TSPOE 1002 CMB 1-2** | | |
|---|---|---|---|---|---|---|
| | | | 0 | 6 | 10 | 15 |
| Melt index MFI (230 °C/5 kg) | g/10 min | ISO 1133 | 60 | 42 | 38 | 30 |
| Tensile elastic module | N/mm² | ISO 527 | 3190 | 3000 | 2610 | 2590 |
| Tensile strength | N/mm² | ISO 527 | 79.6 | 68.8 | 65.2 | 53.7 |
| Tensile elongation | % | ISO 527 | 13.6 | 29.7 | 23.9 | 58.8 |
| Bending stress | N/mm² | ISO 178 | 87.1 | 74 | 65.8 | 58.3 |
| Bending E module | N/mm² | ISO 178 | 2520 | 2070 | 1910 | 1750 |
| Charpy notched impact strength (23 °C) | kJ/m² | ISO 179/1eA | 3 | 16.3 | 25.1 | 59.9* |

* = partially no fracture

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.



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