

# DSM Engineering Plastics - Property Data

## Xantar® C CM 206

(PC+ABS)-unfilled...

General purpose, Vicat 110°C

| Properties | Typical Data | Unit | Test Method |
|------------|--------------|------|-------------|
|------------|--------------|------|-------------|

### RHEOLOGICAL PROPERTIES

|                              |     |                        |           |
|------------------------------|-----|------------------------|-----------|
| Melt volume-flow rate        | 40  | cm <sup>3</sup> /10min | ISO 1133  |
| Temperature                  | 260 | °C                     | ISO 1133  |
| Load                         | 5   | kg                     | ISO 1133  |
| Molding shrinkage (parallel) | 0.6 | %                      | ISO 294-4 |

### MECHANICAL PROPERTIES

|                                        |      |                   |              |
|----------------------------------------|------|-------------------|--------------|
| Tensile modulus                        | 2100 | MPa               | ISO 527-1/-2 |
| Yield stress                           | 45   | MPa               | ISO 527-1/-2 |
| Yield strain                           | 4    | %                 | ISO 527-1/-2 |
| Nominal strain at break                | >50  | %                 | ISO 527-1/-2 |
| Charpy impact strength (+23°C)         | N    | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy impact strength (-30°C)         | N    | kJ/m <sup>2</sup> | ISO 179/1eU  |
| Charpy notched impact strength (+23°C) | 35   | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Charpy notched impact strength (-30°C) | 15   | kJ/m <sup>2</sup> | ISO 179/1eA  |
| Flexural modulus                       | 2200 | MPa               | ISO 178      |
| Flexural strength                      | 75   | MPa               | ISO 178      |
| Izod notched impact strength (-20°C)   | 30   | kJ/m <sup>2</sup> | ISO 180/4A   |
| Izod notched impact strength (23°C)    | 65   | kJ/m <sup>2</sup> | ISO 180/4A   |
| Izod notched impact strength (-40°C)   | 25   | kJ/m <sup>2</sup> | ISO 180/4A   |

### THERMAL PROPERTIES

|                                              |     |        |                 |
|----------------------------------------------|-----|--------|-----------------|
| Temp. of deflection under load (1.80 MPa)    | 95  | °C     | ISO 75-1/-2     |
| Vicat softening temperature (50°C/h 50N)     | 110 | °C     | ISO 306         |
| Coeff. of linear therm. expansion (parallel) | 0.8 | E-4/°C | ISO 11359-1/-2  |
| Burning Behav. at 1.6 mm nom. thickn.        | HB  | class  | IEC 60695-11-10 |
| Thickness tested                             | 1.5 | mm     | IEC 60695-11-10 |
| Burning Behav. at thickness h                | HB  | class  | IEC 60695-11-10 |
| Thickness tested                             | 3   | mm     | IEC 60695-11-10 |
| Oxygen index                                 | 21  | %      | ISO 4589-1/-2   |
| Glow Wire Flammability Index GWFI            | 675 | °C     | IEC 60695-2-12  |
| GWFI (Thickness (1) tested)                  | 1.5 | mm     | IEC 60695-2-12  |
| Glow Wire Flammability Index GWFI            | 675 | °C     | IEC 60695-2-12  |
| GWFI (Thickness (2) tested)                  | 3   | mm     | IEC 60695-2-12  |
| Glow Wire Ignition Temperature GWIT          | 700 | °C     | IEC 60695-2-13  |
| GWIT (Thickness (1) tested)                  | 1.5 | mm     | IEC 60695-2-12  |
| Glow Wire Ignition Temperature GWIT          | 700 | °C     | IEC 60695-2-13  |
| GWIT (Thickness (2) tested)                  | 3   | mm     | IEC 60695-2-12  |

### ELECTRICAL PROPERTIES

|                               |       |       |           |
|-------------------------------|-------|-------|-----------|
| Relative permittivity (1 MHz) | 2.9   | -     | IEC 60250 |
| Volume resistivity            | >1E13 | Ohm*m | IEC 60093 |

DSM Product

Unlimited. DSM



# Xantar® C CM 206

(PC+ABS)-unfilled...

|                                  |       |       |             |
|----------------------------------|-------|-------|-------------|
| Surface resistivity              | >1E15 | Ohm   | IEC 60093   |
| Electric strength                | 35    | kV/mm | IEC 60243-1 |
| Comparative tracking index       | 275   | -     | IEC 60112   |
| Comparative tracking index (PLC) | 0     | class | UL 746A     |

## OTHER PROPERTIES

|                  |      |       |                |
|------------------|------|-------|----------------|
| Water absorption | 0.7  | %     | Sim. to ISO 62 |
| Density          | 1120 | kg/m³ | ISO 1183       |

## RHEOLOGICAL CALCULATION PROPERTIES

|                              |      |         |   |
|------------------------------|------|---------|---|
| Thermal conductivity of melt | 0.22 | W/(m K) | - |
|------------------------------|------|---------|---|

