



## Data Sheet

# ULTEM 9085

## Alternative Designations

-

## Key Features

High impact strength • Resistant to heat • Flame retardant

## Description

This has a high strength – to – weight ratio, high impact strength with good heat resistance. It is highly flame retardant. ULTEM 9085 has excellent mechanical strength and stiffness, making it ideal for parts that need to withstand high loads. It is also resistant to chemicals and has a low coefficient of friction. It is used in the production of prototypes as well as tools such as jigs, fixtures, composite moulds etc. It is comparable to Nylon 6.68 (9800).

## Mechanical Properties

|                     |                 |
|---------------------|-----------------|
| Tensile modulus     | 2150 – 2270 MPa |
| Tensile strength    | 42 – 69 MPa     |
| Elongation at break | 2.2 – 5.8%      |
| Flexural strength   | 68 – 112 MPa    |
| Flexural modulus    | 2.05 – 2.3 GPa  |

## Thermal Properties

|  |       |
|--|-------|
| Heat deflection temperature (1.80 MPa) | 153°C |
| Softening temperature                  | 173°C |

## Physical Properties

|         |                        |
|---------|------------------------|
| Density | 1.34 g/cm <sup>3</sup> |
|---------|------------------------|

## Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://Materialdatacenter.com) for further information on this material.