This datasheet of **ACRYMID® TT70** from **Röhm GmbH** is provided by the international plastics database **CAMPUS**.

ACRYMID® TT70 | PMMI | Röhm GmbH

Product Texts

Productprofil:

ACRYMID® TT70 is a highly heat distortion-resistant poly(n-methyl methacrylimide) (PMMI).

Besides showing the properties common to all ACRYMID® molding compounds, such as

• excellent transmission and clarity,
• very high mechanical strength and rigidity,
• good weather resistance.

ACRYMID® TT70 has the following specific characteristics:

• high stability of the optical characteristics at long-lasting thermal load,
• highest heat deflection temperature under load.

Application:

ACRYMID® molding compound is particularly suitable for injection molding of items meant for applications that involve maximum thermal loads.

Example:

lenses, light guides, lighting fixtures, covers.

Processing:

ACRYMID® molding compound can be processed on injection molding machines with standard 3-zone general purpose screws for thermoplastics.

Physical Form / Packaging:

ACRYMID® is supplied as pellets of uniform size in aluminum-laminated, 25kg polyethylene bags.

Rheological properties	Value	Unit
Melt volume-flow rate, MVR	**1.7**	cm³/10min
Temperature	**260**	°C
Load	**10**	kg

Mechanical properties	Value	Unit
Tensile modulus	**4000**	MPa
Stress at break	**80**	MPa

Strain at break	**3**	%
Charpy impact strength, +23°C	**20**	kJ/m²
Charpy notched impact strength, +23°C	**1.4**	kJ/m²

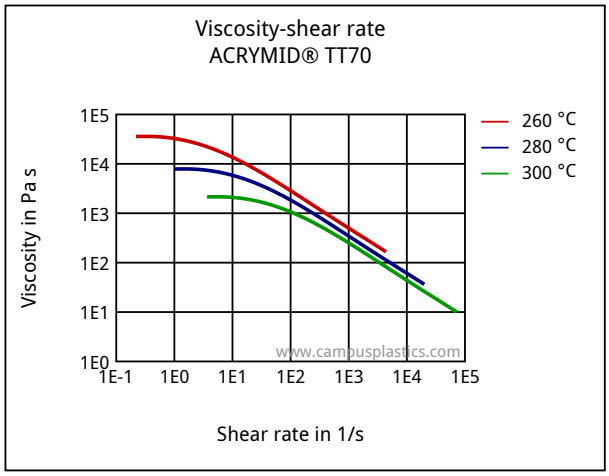
Thermal properties	**Value**	**Unit**
Temp. of deflection under load, 1.80 MPa	**149**	°C
Temp. of deflection under load, 0.45 MPa	**158**	°C
Vicat softening temperature, 50°C/h 50N	**170**	°C
FMVSS	**B**	-

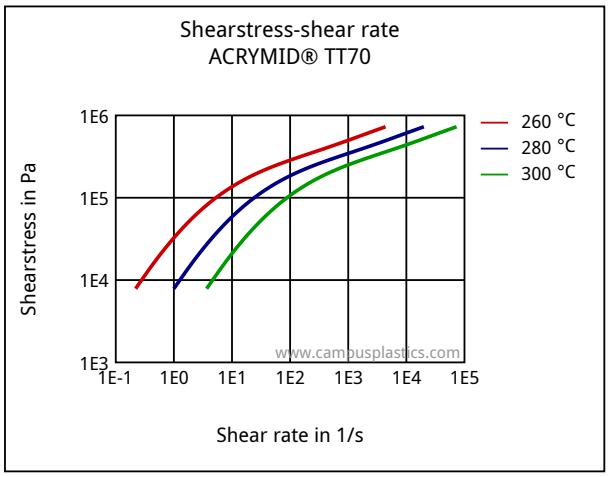
Other properties	**Value**	**Unit**
Water absorption	**6**	%
Density	**1210**	kg/m³

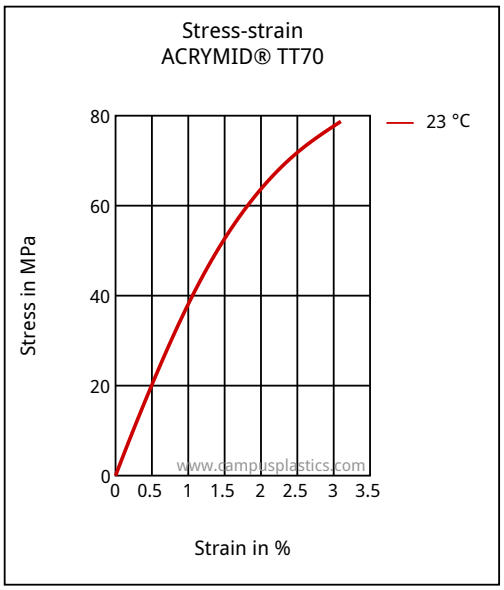
Material specific properties	**Value**	**Unit**
Luminous transmittance	**91**	%

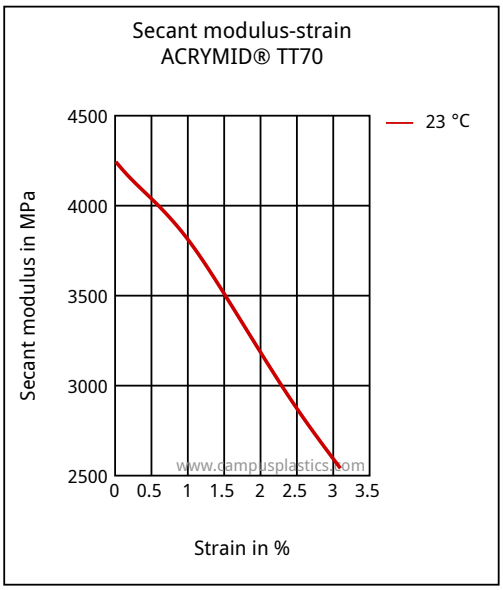
Rheological calculation properties	**Value**	**Unit**
Density of melt	**1150**	kg/m³

Diagrams









Characteristics

Processing
Injection Molding

Delivery form
Pellets

Special Characteristics
Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Transparent

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

PREPROCESSING

Predrying temperature: max. 120 °C

Predrying time in a desiccant-type drier: 2 - 3 h

PROCESSING

Melt temperature: 260 - 290°C

Mold temperature: approx. 130°C

Chemical Media Resistance

Acids

Acetic Acid (5% by mass) (23°C)

Lactic Acid (10% by mass) (23°C)

Sulfuric Acid (38% by mass) (23°C)

Sulfuric Acid (5% by mass) (23°C)

Alcohols

Isopropyl alcohol (23°C)

Hydrocarbons

n-Hexane (23°C)

Mineral oils

SAE 10W40 multigrade motor oil (23°C)

Standard Fuels

Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)

Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)

Diesel fuel (pref. ISO 1817 Liquid F) (23°C)

Other

Water (23°C)

All listed technical data are typical values intended for your guidance.
They are given without obligation and do not constitute a materials specification. Should you have any further questions concerning material behavior or properties, please contact us at the following address :

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checked with the producer of this material.