

**【Inquiries】**

AsahiKASEI Engineering Plastics Information Comprehensive Site  
URL : <https://www.asahi-kasei-plastics.com/en/contact/>

# AsahiKASEI



## DELPET™ 80NR-S

Asahi Kasei Corporation - Polymethyl Methacrylate Acrylic

Tuesday, February 27, 2024

### General Information

#### General

|                 |                        |                |          |
|-----------------|------------------------|----------------|----------|
| Material Status | • Commercial: Active   |                |          |
| Availability    | • Africa & Middle East | • Asia Pacific | • Europe |
| Forms           | • Pellets              |                |          |

### ASTM & ISO Properties<sup>1</sup>

| Physical                                     | Nominal Value | Unit              | Test Method     |
|----------------------------------------------|---------------|-------------------|-----------------|
| Density                                      | 1.19          | g/cm <sup>3</sup> | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)     | 2.2           | g/10 min          | ISO 1133        |
| Spiral Flow <sup>2, 3</sup>                  | 28.0          | cm                | Internal Method |
| Molding Shrinkage                            | 0.20 to 0.60  | %                 | Internal Method |
| Water Absorption (Equilibrium, 23°C, 50% RH) | 0.30          | %                 | ISO 62          |
| Mechanical                                   | Nominal Value | Unit              | Test Method     |
| Tensile Modulus                              | 3300          | MPa               | ISO 527-1/1A/1  |
| Tensile Stress (Break)                       | 77.0          | MPa               | ISO 527-2/1A/5  |
| Tensile Strain (Break)                       | 6.0           | %                 | ISO 527-2/1A/5  |
| Flexural Modulus                             | 3300          | MPa               | ISO 178         |
| Flexural Stress                              | 130           | MPa               | ISO 178         |
| Impact                                       | Nominal Value | Unit              | Test Method     |
| Charpy Notched Impact Strength               | 1.4           | kJ/m <sup>2</sup> | ISO 179/1eA     |
| Charpy Unnotched Impact Strength             | 22            | kJ/m <sup>2</sup> | ISO 179/1eU     |
| Hardness                                     | Nominal Value | Unit              | Test Method     |
| Rockwell Hardness (M-Scale)                  | 100           |                   | ISO 2039-2      |
| Thermal                                      | Nominal Value | Unit              | Test Method     |
| Vicat Softening Temperature                  | 108           | °C                | ISO 306/B50     |
| Heat Deflection Temperature                  | 100           | °C                | ISO 75-2        |
| Optical                                      | Nominal Value | Unit              | Test Method     |
| Refractive Index                             | 1.490         |                   | ISO 489         |
| Light Transmittance (Total)                  | 92.0          | %                 | ISO 13468-1     |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Mold Temperature: 60°C, Melt Temperature: 250°C, Injection Pressure: 750 bar

<sup>3</sup> Thickness : 2mm

#### Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.