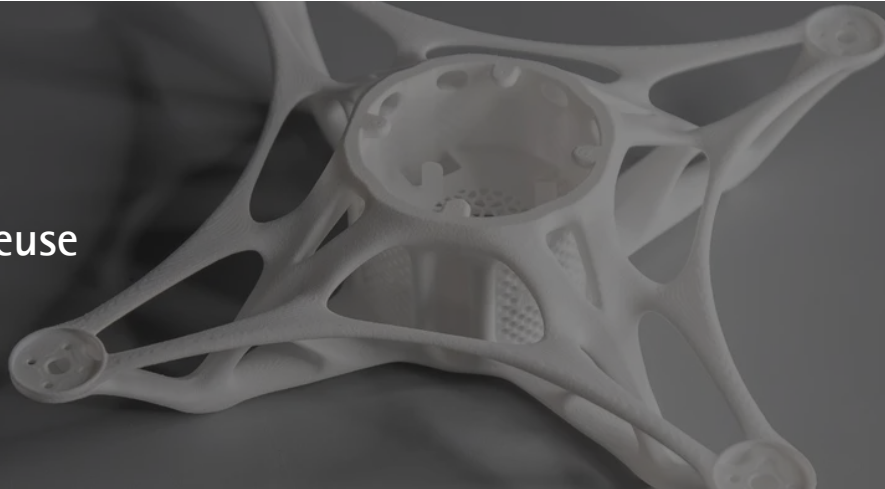


POLYMER SOLUTIONS

PA 2220 HighReuse

Material Data Sheet



PA 2220 HIGHREUSE

Product Description

EOS PA 2220 HighReuse is a highly efficient polyamide 12 material serving a broad variety of applications thanks to its balanced property profile.

With a reusability rate of 70% and a reduced powder carbon footprint, EOS PA 2220 HighReuse enables printing of leading quality production parts on the EOS P3 Next at competitive costs.

MAIN CHARACTERISTICS

- Highly efficient PA12
- Balanced property profile
- White multipurpose material
- Easy to color with state-of-the-art solutions

TYPICAL APPLICATIONS

- Eyewear in the consumer goods industry
- Structural components, e.g., brackets
- Production equipment like grippers, jigs and fixtures
- Spare parts like covers, e.g., in the automotive industry
- Functional parts for prototyping incl. integrated hinges or threads

| MECHANICAL PROPERTIES | DRY / CONDITIONED | UNIT | TEST STANDARD |
|---|-------------------|-------------------|---------------|
| Tensile Modulus | | | ISO 527-1/-2 |
| X Orientation | 1800 / 1500 | MPa | |
| Y Orientation | 1800 / 1500 | MPa | |
| Z Orientation | 1800 / 1300 | MPa | |
| Tensile Strength | | | ISO 527-1/-2 |
| X Orientation | 48 / 45 | MPa | |
| Y Orientation | 48 / 45 | MPa | |
| Z Orientation | 48 / 42 | MPa | |
| Strain at Break | | | ISO 527-1/-2 |
| X Orientation | 10 / 14 | % | |
| Y Orientation | 9 / 15 | % | |
| Z Orientation | 8 / 12 | % | |
| Charpy Impact Strength (+23°C) | | | ISO 179/1eU |
| X Orientation | 24 / - | kJ/m ² | |
| Y Orientation | 23 / - | kJ/m ² | |
| Z Orientation | 19 / - | kJ/m ² | |
| Charpy Impact Strength (-30°C) | | | ISO 179/1eU |
| Z Orientation | 18 / - | kJ/m ² | |
| Charpy Notched Impact Strength (+23°C) | | | ISO 179/1eA |
| X Orientation | 2,6 / - | kJ/m ² | |
| Y Orientation | 2,3 / - | kJ/m ² | |
| Z Orientation | 2,5 / - | kJ/m ² | |
| Charpy Notched Impact Strength (-30°C) | | | ISO 179/1eA |
| Z Orientation | 2,1 / - | kJ/m ² | |
| Shore D Hardness | | | ISO 7619-1 |
| X Orientation | 79 / - | - | |

| THERMAL PROPERTIES | DRY / CONDITIONED | UNIT | TEST STANDARD |
|--------------------|-------------------|------|---------------|
|--------------------|-------------------|------|---------------|

| | | | |
|----------------------------|-------|----|----------------|
| Melting Temperature | 176,5 | °C | ISO 11357-1/-3 |
|----------------------------|-------|----|----------------|

| OTHER PROPERTIES | VALUE | UNIT | TEST STANDARD |
|------------------|-------|------|---------------|
|------------------|-------|------|---------------|

| | | | |
|----------------|------|-------------------|-----------------|
| Density | 0.99 | g/cm ³ | DIN EN ISO 1183 |
|----------------|------|-------------------|-----------------|

| | | | |
|---------------------|-------|---|---|
| Powder Color | white | - | - |
|---------------------|-------|---|---|

| | | | |
|-------------------------|-------|---|---|
| Components Color | white | - | - |
|-------------------------|-------|---|---|

HEADQUARTERS

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