

# ORGALLOY® LT 4060 NAT

**Orgalloy® LT 4060 NAT resin** is a polyamide alloy especially designed for mandrel extrusion. This natural grade dedicated to extrusion offers good thermal resistance, cold performance and is very flexible.

| PROPERTIES                                 | DRY /<br>COND       | UNIT                   | TEST<br>STANDARD   |
|--------------------------------------------|---------------------|------------------------|--------------------|
| RHEOLOGICAL PROPERTIES                     |                     |                        |                    |
| Melt Volume-Flow Rate                      | 2.5 / *             | cm <sup>3</sup> /10min | ISO 1133           |
| Temperature                                | 235 / *             | °C                     | -                  |
|                                            | 455 / *             | °F                     | -                  |
| Load                                       | 5 / *               | kg                     | -                  |
|                                            | 11 / *              | lb                     | -                  |
| Molding Shrinkage, parallel                | 0.7 / *             | %                      | ISO 294-4,<br>2577 |
| Molding Shrinkage, normal                  | 0.9 / *             | %                      | ISO 294-4,<br>2577 |
| MECHANICAL PROPERTIES                      |                     |                        |                    |
| Tensile Modulus                            | 600 / 300           | MPa                    | ISO 527-1/-2       |
|                                            | 87000 / 43500       | psi                    |                    |
| Stress at 50% Strain                       | 20 / 16             | MPa                    | ISO 527-1/-2       |
|                                            | 2900 / 2320         | psi                    |                    |
| Strain at Break                            | >50 / >50           | %                      | ISO 527-1/-2       |
| Shore D Hardness                           | 50 / *              | -                      | ISO 868            |
| Charpy Impact Strength, +23°C              | No Break / No Break | kJ/m <sup>2</sup>      | ISO 179/1eU        |
| Charpy Notched Impact Strength, +23°C      | 80 / 84             | kJ/m <sup>2</sup>      | ISO 179/1eA        |
|                                            | 38.1 / 40           | ftlb/in <sup>2</sup>   |                    |
| THERMAL PROPERTIES                         |                     |                        |                    |
| Melting Temperature, 10°C/min              | 220 / *             | °C                     | ISO 11357-1/-3     |
| Temp. of Deflection Under Load, 0.45 MPa   | 60 / *              | °C                     | ISO 75-1/-2        |
|                                            | 140 / *             | °F                     |                    |
| Vicat Softening Temperature, 50°C/h 50N    | 62 / *              | °C                     | ISO 306            |
|                                            | 144 / *             | °F                     |                    |
| Burning Behav. at 1.5 mm Nominal Thickness | HB / *              | class                  | IEC<br>60695-11-10 |
| Thickness Tested                           | 1.6 / *             | mm                     | -                  |
|                                            | 0.0630 / *          | in                     |                    |
| Burning Behav. at Thickness h              | HB / *              | class                  | IEC<br>60695-11-10 |
| Thickness Tested                           | 3.2 / *             | mm                     | -                  |
|                                            | 0.1260 / *          | in                     |                    |

# ORGALLOY<sup>®</sup>

## LT 4060 NAT

### ELECTRICAL PROPERTIES

|                            |         |   |           |
|----------------------------|---------|---|-----------|
| Comparative Tracking Index | * / 600 | - | IEC 60112 |
|----------------------------|---------|---|-----------|

### OTHER PROPERTIES

|                     |             |                   |                |
|---------------------|-------------|-------------------|----------------|
| Water Absorption    | 5 / *       | %                 | Sim. to ISO 62 |
| Humidity Absorption | 1.1 / *     | %                 | Sim. to ISO 62 |
| Density             | 1040 / 1040 | kg/m <sup>3</sup> | ISO 1183       |
|                     | 1.04 / 1.04 | g/cm <sup>3</sup> |                |

### MAIN APPLICATIONS:

- Mandrel for rubber industry

### PACKAGING:

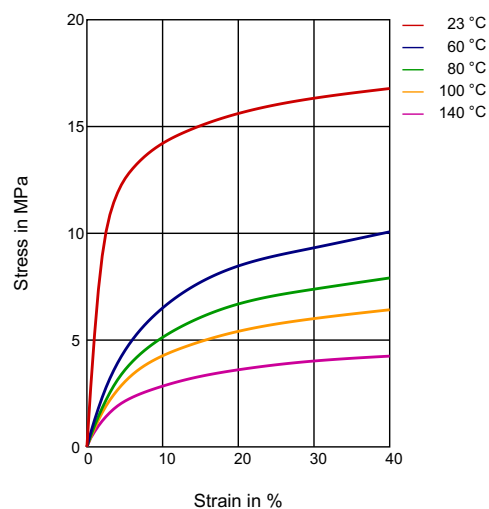
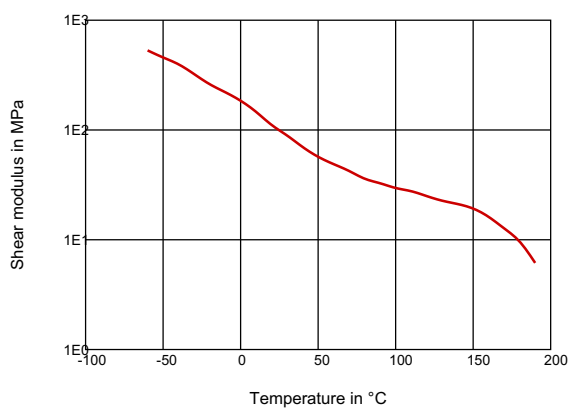
This grade is delivered dried in sealed packaging (25kg bags) ready to be processed.

### SHELF LIFE:

Two years from the date of delivery. For any use above this limit, please refer to our technical services.

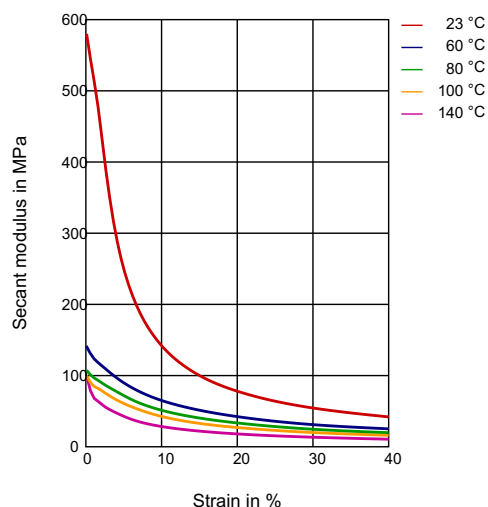
### DIAGRAMS

### DYNAMIC SHEAR MODULUS-TEMPERATURE STRESS-STRAIN



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## SECANT MODULUS-STRAIN



### Processing conditions:

- Drying time (only necessary for bags opened for more than two hours): 4-8 hours at 80°C
- Extrusion melt temperature (min-recommended-max): 250-260-270°C

### PROCESSING

Profile Extrusion, Sheet Extrusion, Other Extrusion,  
Transfer Molding

### DELIVERY FORM

Pellets

### SPECIAL CHARACTERISTICS

Heat Stabilized, Light Stabilized

### REGIONAL AVAILABILITY

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