

## G500.A50.B.ABS

### PRODUCT DESCRIPTION

A soft , black SEBS based thermoplastic elastomer (TPE) compound specially designed for excellent adhesion to ABS/PC/PMMA/SAN/ASA/PET and PET-G.

| GENERAL PROPERTIES |   |  |
|--------------------|---|--|
| Material Status    | Active  |  |
| Availability       | Europe<br>North America<br>Asia- Pasific<br>Africa & Middle East  |  |
| Features           | Designed for Excellent Adhesion to ABS, PC, PMMA, SAN, ASA, PET AND PET-G<br>Insert Molding or 2K Molding Possible<br>Designed for Soft Touch Applications<br>Ozone Resistance<br>Compliant with RoHS Directive |  |
| Certification      | RoHS  |  |
| Appearance         | Black   |  |
| Form               | Pellets   |  |
| Processing Method  | Injection   |  |

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|-------------------------------------|-------------------------|------------------------|------------------------------|--|
| Property                            | Typical Value (English) | Typical Value (SI)     | Test Method                  |  |
| Density                             | 1.10 g/cm <sup>3</sup>  | 1,10 g/cm <sup>3</sup> | ASTM D 792                   |  |
| Durometer Hardness, 3 sec (Shore A) | 50.00                   | 50,00                  | ASTM D 2240                  |  |
| Tensile Strength at Break           | 653 Psi                 | 4,50 MPa               | ASTM D412, Method A          |  |
| Mod.of Elasticity %100              | 218 Psi                 | 1,50 MPa               | ASTM D412, Method A          |  |
| Mod.of Elasticity %300              | 435 Psi                 | 3,00 MPa               | ASTM D412, Method A          |  |
| Elongation at break                 | 550.00 %                | 550,00 %               | ASTM D412, Method A          |  |
| Compression Set (at 73 °F, 22 h)    | 15.00 %                 | 15,00 %                | ASTM D 395, Type 2, Method B |  |
| Compression Set (at 158 °F, 22 h)   | 68.00 %                 | 68,00 %                | ASTM D 395, Type 2, Method B |  |
| Compression Set (at 212 °F, 22 h)   | 82.00 %                 | 82,00 %                | ASTM D 395, Type 2, Method B |  |
| Tear Resistance                     | 142.75 lbf/in           | 25,00 N/mm             | ASTM D624                    |  |
|                                     |                         |                        |                              |  |

| Shrinkage           |                         |                    |             |  |
|---------------------|-------------------------|--------------------|-------------|--|
| Property            | Typical Value (English) | Typical Value (SI) | Test Method |  |
| Flow                | 1.42%                   | ASTM D955          |             |  |
| Across Flow         | 0.80% 0.80%             |                    | ASTM D955   |  |
|                     | Flammability            |                    |             |  |
| Property            | Typical Value (English) | Typical Value (SI) | Test Method |  |
| Flammability Rating | HB                      | HB                 | UL 94       |  |

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| Ageing Tests                  |                                  |  |             |  |
|-------------------------------|----------------------------------|--|-------------|--|
| Additional Information        | Typical Value (English) Typ      |  | Test Method |  |
| Ozone Resistance-Stressed     | ne Resistance-Stressed No cracks |  | ASTM D 1149 |  |
| Bondable to                   |                                  |  |             |  |
| PMMA-ABS/PC-ASA-SAN-PET-PET-G |                                  |  |             |  |

### Additional Informatior

Elastron products are not compatible with PVC and Acetal. Regrinding level up to %20 is recommended with minimum property loss.

| Processing            |                         |       |                    |            |  |
|-----------------------|-------------------------|-------|--------------------|------------|--|
| Injection Molding     | Typical Value (English) |       | Typical Value (SI) |            |  |
| Drying temperatures   | 194                     | °F    | 90                 | °C         |  |
| Drying time           | 2                       | hours | 2                  | hours      |  |
| Rear Zone temp.       | 356-392                 | °F    | 180- 200           | °C         |  |
| Middle Zone temp.     | 374-410                 | °F    | 190- 210           | °C         |  |
| Front Zone temp.      | 401-428                 | °F    | 205- 220           | °C         |  |
| Nozzle Temperature    | 428-446                 | °F    | 220- 230           | °C         |  |
| njection Speed        | Mod/ High               | -     | Mod/ High          | -          |  |
| njection Time         | 1-4                     | sec.  | 1-4                | sec.       |  |
| njection Pressure     | 10- 40                  | bar   | 10- 40             | bar        |  |
| Hold Pressure         | 5- 20                   | bar   | 5- 20              | bar        |  |
| Back Pressure         | 5- 40                   | bar   | 5- 40              | bar        |  |
| Screw Speed           | 50- 200                 | rpm   | 50- 200            | rpm        |  |
| Mold Temperature      | 77-122                  | °F    | 25- 50             | °C         |  |
| Screw Comp. ratio     | 2.0:1- 4.0:1            | -     | 2.0:1- 4.0:1       | -          |  |
| Screw L/D ratio       | 18- 24                  | -     | 18- 24             | -          |  |
| Residence time        | 1-2 shot                | -     | 1-2 shot           | -          |  |
| Cushion size          | 0.3120                  | inc   | 8                  | mm         |  |
| Suggested Max Regrind | 20                      | %     | 20                 | %          |  |
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