

# Amodel® AE-8950

Polyphthalamide  
Solvay Specialty Polymers

Message:

Amodel AE-8133 is a 33% glass fiber reinforced polyphthalamide (PPA), which is specially used in modern automotive electronic environment. This brand of resin is characterized by high thermal deformation temperature, high flexural modulus and high tensile strength, and has good creep resistance and low moisture absorption.

-black: AE-8133 BK902

-natural color: AE-8133 NT

| General Information          |                                                       |                   |             |
|------------------------------|-------------------------------------------------------|-------------------|-------------|
| Filler / Reinforcement       | Glass fiber reinforced material, 50% filler by weight |                   |             |
| Features                     | Good dimensional stability                            |                   |             |
|                              | Low hygroscopicity                                    |                   |             |
|                              | Rigidity, high                                        |                   |             |
|                              | Rigid, good                                           |                   |             |
|                              | High strength                                         |                   |             |
|                              | High temperature strength                             |                   |             |
|                              | Good creep resistance                                 |                   |             |
|                              | Good chemical resistance                              |                   |             |
|                              | Heat resistance, high                                 |                   |             |
|                              | Ethylene glycol resistance                            |                   |             |
| Uses                         | Non-corrosive                                         |                   |             |
|                              | Electrical/Electronic Applications                    |                   |             |
|                              | Electrical components                                 |                   |             |
|                              | Connector                                             |                   |             |
| RoHS Compliance              | Automotive Electronics                                |                   |             |
|                              | Contact manufacturer                                  |                   |             |
|                              | Black                                                 |                   |             |
|                              | Particle                                              |                   |             |
| Processing Method            | Injection molding                                     |                   |             |
| Physical                     | Nominal Value                                         | Unit              | Test Method |
| Density                      | 1.68                                                  | g/cm <sup>3</sup> | ISO 1183/A  |
| Mechanical                   | Nominal Value                                         | Unit              | Test Method |
| Tensile Modulus (23°C)       | 19800                                                 | MPa               | ISO 527-2   |
| Tensile Stress (Break, 23°C) | 280                                                   | MPa               | ISO 527-2   |
| Tensile Strain (Break, 23°C) | 2.1                                                   | %                 | ISO 527-2   |
| Flexural Modulus (23°C)      | 18500                                                 | MPa               | ISO 178     |
| Flexural Stress (23°C)       | 400                                                   | MPa               | ISO 178     |

| Flexural Strain                                   | 2.3           | %                 | ISO 178     |
|---------------------------------------------------|---------------|-------------------|-------------|
| Impact                                            | Nominal Value | Unit              | Test Method |
| Charpy Notched Impact Strength (23°C)             | 12            | kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Unnotched Impact Strength (23°C)           | 80            | kJ/m <sup>2</sup> | ISO 179/1eU |
| Notched Izod Impact (23°C)                        | 12            | kJ/m <sup>2</sup> | ISO 180/1A  |
| Thermal                                           | Nominal Value | Unit              | Test Method |
| Heat Deflection Temperature (1.8 MPa, Unannealed) | 300           | °C                | ISO 75-2/A  |
| Glass Transition Temperature                      | 135           | °C                | DSC         |
| Melting Temperature                               | 325           | °C                | ISO 11357-3 |
| Flammability                                      | Nominal Value | Test Method       |             |
| Flame Rating <sup>1</sup> (3.20 mm)               | HB            | UL 94             |             |
| Injection                                         | Nominal Value | Unit              |             |
| Drying Temperature                                | 120           | °C                |             |
| Drying Time                                       | 4.0           | hr                |             |
| Suggested Max Moisture                            | 0.030 - 0.060 | %                 |             |
| Rear Temperature                                  | 316 - 330     | °C                |             |
| Middle Temperature                                | 316 - 330     | °C                |             |
| Front Temperature                                 | 324 - 340     | °C                |             |
| Processing (Melt) Temp                            | 330 - 350     | °C                |             |
| Mold Temperature                                  | 150 - 165     | °C                |             |
| Injection instructions                            |               |                   |             |
| 射出速度:3-4英寸/秒 (7.5-10 cm/秒)保压压力: 射出压力的50%          |               |                   |             |
| NOTE                                              |               |                   |             |

1.

These flammability ratings do not represent the risk of these materials or any other materials in actual fire situations.

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#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

