

# Ghaed ABS ABS-40

Acrylonitrile Butadiene Styrene  
Ghaed Basir Petrochemicals Co.

Message:

Classification: General purpose  
Characteristic: High Impact Resistance  
Characteristic: Automobile parts(radiator grill &etc.),Helmets,Toys,Suitcase,shoe heels,skis,Golf club heads, Sports equipment,suitcases,&etc.

| General Information                                     |                         |                   |                         |
|---------------------------------------------------------|-------------------------|-------------------|-------------------------|
| Features                                                | General Purpose         |                   |                         |
|                                                         | High Impact Resistance  |                   |                         |
| Uses                                                    | Automotive Applications |                   |                         |
|                                                         | Footwear                |                   |                         |
|                                                         | Luggage                 |                   |                         |
|                                                         | Safety Helmets          |                   |                         |
|                                                         | Sporting Goods          |                   |                         |
|                                                         | Toys                    |                   |                         |
| Processing Method                                       | Injection Molding       |                   |                         |
| Physical                                                | Nominal Value           | Unit              | Test Method             |
| Specific Gravity                                        | 1.04                    | g/cm <sup>3</sup> | ASTM D792               |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)               | 18 to 28                | g/10 min          | ASTM D1238              |
| Molding Shrinkage - Flow                                | 0.40 to 0.70            | %                 | ASTM D955               |
| Hardness                                                | Nominal Value           | Unit              | Test Method             |
| Rockwell Hardness (R-Scale)                             | 90 to 110               |                   | ASTM D785               |
| Mechanical                                              | Nominal Value           | Unit              | Test Method             |
| Tensile Strength <sup>1</sup> (Yield, 23°C)             | > 38.2                  | MPa               | ASTM D638               |
| Tensile Elongation <sup>2</sup> (Break, 23°C)           | > 25                    | %                 | ASTM D638               |
| Flexural Modulus <sup>3</sup> (23°C)                    | > 1470                  | MPa               | ASTM D790               |
| Flexural Strength <sup>4</sup> (23°C)                   | > 52.0                  | MPa               | ASTM D790               |
| Impact                                                  | Nominal Value           | Unit              | Test Method             |
| Notched Izod Impact Strength <sup>5</sup>               | > 26                    | kJ/m <sup>2</sup> | ASTM D256               |
| Thermal                                                 | Nominal Value           | Unit              | Test Method             |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | > 82.0                  | °C                | ASTM D648               |
| Vicat Softening Temperature                             | > 93.0                  | °C                | ASTM D1525 <sup>6</sup> |
| Flammability                                            | Nominal Value           |                   | Test Method             |
| Flame Rating (3.20 mm)                                  | HB                      |                   | UL 94                   |
| Injection                                               | Nominal Value           | Unit              |                         |

|                        |               |    |
|------------------------|---------------|----|
| Drying Temperature     | 80.0 to 95.0  | °C |
| Drying Time            | 3.0           | hr |
| Suggested Max Moisture | < 0.10        | %  |
| Rear Temperature       | 190 to 200    | °C |
| Middle Temperature     | 200 to 220    | °C |
| Front Temperature      | 210 to 220    | °C |
| Nozzle Temperature     | 215 to 225    | °C |
| Processing (Melt) Temp | 230           | °C |
| Mold Temperature       | 60.0 to 80.0  | °C |
| Injection Rate         | Slow-Moderate |    |

#### NOTE

- |    |                                   |
|----|-----------------------------------|
| 1. | 50 mm/min                         |
| 2. | 50 mm/min                         |
| 3. | 2.8 mm/min                        |
| 4. | 2.8 mm/min                        |
| 5. | 6.4mm                             |
| 6. | Rate A (50°C/h), Loading 2 (50 N) |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### 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



WECHAT