

## Grilamid XE 4208 black 9992

PA612-I

EMS-GRIVORY | a unit of EMS-CHEMIE AG

### Product Texts

Product-nomenclature according to ISO 1874:

PA612-HIP, E, 22-010

| Mechanical properties                  | dry / cond             | Unit              | Test Standard |
|----------------------------------------|------------------------|-------------------|---------------|
| Tensile Modulus                        | <b>920 / 640</b>       | MPa               | ISO 527-1/-2  |
| Stress at 50% strain                   | <b>35 / 30</b>         | MPa               | ISO 527-1/-2  |
| Strain at break                        | <b>&gt;50 / &gt;50</b> | %                 | ISO 527-1/-2  |
| Charpy impact strength (+23°C)         | <b>N / N</b>           | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Charpy impact strength (-30°C)         | <b>N / N</b>           | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Charpy notched impact strength (+23°C) | <b>N / N</b>           | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Charpy notched impact strength (-30°C) | <b>16 / 16</b>         | kJ/m <sup>2</sup> | ISO 179/1eA   |

| Mechanical properties (TPE) | dry / cond     | Unit | Test Standard |
|-----------------------------|----------------|------|---------------|
| Ball indentation hardness   | <b>55 / 40</b> | MPa  | ISO 2039-1    |

| Thermal properties                           | dry / cond      | Unit  | Test Standard   |
|----------------------------------------------|-----------------|-------|-----------------|
| Melting temperature (10°C/min)               | <b>213 / -</b>  | °C    | ISO 11357-1/-3  |
| Temp. of deflection under load (1.80 MPa)    | <b>50 / -</b>   | °C    | ISO 75-1/-2     |
| Temp. of deflection under load (0.45 MPa)    | <b>100 / -</b>  | °C    | ISO 75-1/-2     |
| Coeff. of linear therm. expansion (parallel) | <b>230 / -</b>  | E-6/K | ISO 11359-1/-2  |
| Coeff. of linear therm. expansion (normal)   | <b>130 / -</b>  | E-6/K | ISO 11359-1/-2  |
| Burning Behav. at thickness h                | <b>HB / -</b>   | class | IEC 60695-11-10 |
| Thickness tested                             | <b>0.8 / -</b>  | mm    | IEC 60695-11-10 |
| Max. usage temperature (long term)           | <b>90 - 100</b> | °C    | ISO 2578        |
| Max. usage temperature (short term)          | <b>130</b>      | °C    | EMS             |

| Electrical properties      | dry / cond       | Unit  | Test Standard |
|----------------------------|------------------|-------|---------------|
| Volume resistivity         | <b>1E8 / 1E8</b> | Ohm*m | IEC 60093     |
| Surface resistivity        | <b>- / 1E10</b>  | Ohm   | IEC 60093     |
| Electric strength          | <b>37 / 37</b>   | kV/mm | IEC 60243-1   |
| Comparative tracking index | <b>- / 600</b>   | -     | IEC 60112     |

| Other properties    | dry / cond      | Unit              | Test Standard  |
|---------------------|-----------------|-------------------|----------------|
| Water absorption    | <b>2 / -</b>    | %                 | Sim. to ISO 62 |
| Humidity absorption | <b>0.8 / -</b>  | %                 | Sim. to ISO 62 |
| Density             | <b>1030 / -</b> | kg/m <sup>3</sup> | ISO 1183       |

### Characteristics

#### Processing

Other Extrusion, Profile Extrusion

#### Product Attributes

High viscosity, Hydrolysis resistant

#### Delivery form

Granules

#### Automotive

Air intake systems, Compressed air systems, Hydraulic systems, Automotive electr. and electronics, lighting, Cooling and climate control

#### Additives

Plasticizer

#### Electricals & Electronics

#### Special Characteristics

High impact or impact modified, Improved heat resistance

Cables & Tubes



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**Regional Availability**

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

**Industry & Consumer goods**

Hydraulics & Pneumatics

