

## XYRON™ AG213

Asahi Kasei Corporation - Polyamide + PPE

### General Information

#### Product Description

Modified PPE  
PA/PPE alloy  
30% Filler reinforced Non-Flame retardant

#### General

|                                          |                                     |
|------------------------------------------|-------------------------------------|
| Filler / Reinforcement                   | • Glass Fiber, 30% Filler by Weight |
| Processing Method                        | • Injection Molding                 |
| Part Marking Code (ISO11469) (ISO 11469) | • >PA66+PPE-GF30<                   |

### ASTM & ISO Properties <sup>1</sup>

| Physical                                                  | Nominal Value | Unit              | Test Method     |
|-----------------------------------------------------------|---------------|-------------------|-----------------|
| Density                                                   | 1.33          | g/cm <sup>3</sup> | ISO 1183        |
| Molding Shrinkage <sup>2</sup> (3.00 mm)                  | 0.30 to 1.0   | %                 | Internal Method |
| Mechanical                                                | Nominal Value | Unit              | Test Method     |
| Tensile Stress (Yield, 23°C)                              | 152           | MPa               | ISO 527         |
| Tensile Strain (Break, 23°C)                              | 3.0           | %                 | ISO 527         |
| Flexural Modulus (23°C)                                   | 8700          | MPa               | ISO 178         |
| Flexural Stress (23°C)                                    | 238           | MPa               | ISO 178         |
| Impact                                                    | Nominal Value | Unit              | Test Method     |
| Charpy Notched Impact Strength <sup>3</sup> (23°C)        | 11            | kJ/m <sup>2</sup> | ISO 179         |
| Thermal                                                   | Nominal Value | Unit              | Test Method     |
| Deflection Temperature Under Load<br>0.45 MPa, Unannealed | 252           | °C                | ISO 75-2/B      |
| CLTE                                                      |               |                   | ISO 11359-2     |
| Flow : -30 to 65°C                                        | 2.3E-5        | cm/cm/°C          |                 |
| Transverse : -30 to 65°C                                  | 8.9E-5        | cm/cm/°C          |                 |



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| Electrical                | Nominal Value | Unit    | Test Method |
|---------------------------|---------------|---------|-------------|
| Volume Resistivity (23°C) | 4.7E+15       | ohms·cm | IEC 60093   |
| Dielectric Constant       |               |         | IEC 60250   |
| 100 Hz                    | 3.50          |         |             |
| 1 MHz                     | 3.40          |         |             |
| Dissipation Factor        |               |         | IEC 60250   |
| 100 Hz                    | 5.0E-3        |         |             |
| 1 MHz                     | 0.010         |         |             |

| Processing Information             |               |      |
|------------------------------------|---------------|------|
| Injection                          | Nominal Value | Unit |
| Drying Temperature - Hot Air Dryer | 110 to 130    | °C   |
| Drying Time - Hot Air Dryer        | 2.0 to 4.0    | hr   |
| Processing (Melt) Temp             | 280 to 300    | °C   |
| Mold Temperature                   | 60 to 120     | °C   |

**Injection Notes**

Recommended processing (melt) temperature of XYRON™ Polyamide + PPE is 280-300°C. Lower temperatures may lead to local degradation in properties due to non-uniform plasticization, while higher temperatures tend to cause silver streaking, other appearance problems and decomposition.

- Notes**
- <sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 120x80x3 mm

<sup>3</sup> 4 mm

