

## PRODUCT INFORMATION

General Grade

# KOPA<sup>®</sup> KN120

Polyamide 6 resin,  
Middle viscosity, wide uses

| Property                                   | Test Method | Units                      | Value       |
|--------------------------------------------|-------------|----------------------------|-------------|
| <b>General</b>                             |             |                            |             |
| Relative viscosity                         | 96% H2SO4   | -                          | 2.65±0.04   |
| Moisture content                           | -           | %                          | 0.1 max     |
| Monomer content                            | -           | %                          | 0.8 max     |
| Color L                                    | -           | -                          | 74±4.0      |
| Color b                                    | -           | -                          | -1.8± 2.0   |
| Amino end group                            | -           | meq/kg                     | 53±10       |
| <b>Physical</b>                            |             |                            |             |
| Specific Gravity                           | ASTM D792   | -                          | 1.14        |
| Shrinkage                                  | ASTM D955   | %                          | 1.3-1.5     |
| Water Absorption 23℃, Equilibrium 60%RH    | ASTM D570   | %                          | 1.8         |
| <b>Thermal</b>                             |             |                            |             |
| Melting Point                              | ASTM D3418  | ℃                          | 220         |
| Heat Deflection Temperature under Load     | ASTM D648   |                            |             |
| HDT/A 0.45 MPa ( 4.6 kg/cm <sup>2</sup> )  |             | ℃                          | 180         |
| HDT/A 1.82 MPa ( 18.6 kg/cm <sup>2</sup> ) |             | ℃                          | 65          |
| Coeff. Of Linear Thermal Expansion         | ASTM D696   | × 10 <sup>-4</sup> cm/cm·℃ | 0.8         |
| Flammability                               | UL 94       |                            | HB          |
| <b>Mechanical</b>                          |             |                            |             |
| Tensile Strength 23℃                       | ASTM D638   | MPa (kg/cm <sup>2</sup> )  | 81(830)     |
| Tensile Elongation 23℃                     | ASTM D638   | %                          | 100         |
| Flexural Strength 23℃                      | ASTM D790   | MPa (kg/cm <sup>2</sup> )  | 123(1250)   |
| Flexural Modulus 23℃                       | ASTM D790   | MPa (kg/cm <sup>2</sup> )  | 2746(28000) |
| Notched Izod Impact Strength 23℃           | ASTM D256   | J/m (kg·cm/cm)             | 74(7.5)     |
| Rockwell Hardness R scale                  | ASTM D785   | g/cc                       | 120         |



|                     |           |                    |     |
|---------------------|-----------|--------------------|-----|
| <b>Electrical</b>   |           |                    |     |
| Arc Resistance      | ASTM D495 | sec                | 120 |
| Dielectric Constant | ASTM D150 | 10 <sup>6</sup> Hz | 3.4 |
| Dielectric Strength | ASTM D149 | KV/mm              | 20  |



**KOLON PLASTICS, Inc.**

