# POLIMAXX 2300NC

**IRPC Public Company Limited - *Polypropylene Impact Copolymer***

## General Information

**Product Description**

2300NC is a Polypropylene Impact Copolymer (ICPP) with the characteristic of good impact strength and stiffness balance. It is designed for injection molding processing such as appliance & electronic parts, automotive parts (Interior parts) and household products.

Industry:

- Appliance & Electronic Parts
- Interior Parts
- Housewares
- Containers and Pails

Product Features:

- Good Impact Strength
- Good Stiffness
- Good Processability

Regulation Compliance:

- FDA US 21 CFR 177.1520
- Commission Regulation (EU) No. 10/2011
- RoHS Directive 2011/65/EU
- REACH Regulation (EC) No. 1907/2006
- UL Yellow Card E132283
- Halal Certificate

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Availability | • Asia Pacific | • Europe | • North America |
| Features | • Food Contact Acceptable<br>• High Impact Resistance | • High Stiffness<br>• Impact Copolymer | |
| Uses | • Automotive Applications<br>• Containers | • Electrical Parts<br>• Household Goods | • Pails |
| Agency Ratings | • EC 1907/2006 (REACH)<br>• EU 2011/65/EC | • EU No 10/2011<br>• FDA 21 CFR 177.1520 | |
| RoHS Compliance | • RoHS Compliant | | |
| Processing Method | • Injection Molding | | |

## Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity [2] | 0.902 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 10 | g/10 min | ASTM D1238 |
| Molding Shrinkage | 0.80 to 1.5 | % | Internal Method |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength [3] (Yield, 0.126 in) | 3770 | psi | ASTM D638 |
| Tensile Elongation [3] (Yield, 0.126 in) | 7.0 | % | ASTM D638 |
| Flexural Modulus - 1% Secant [4] (0.126 in) | 174000 | psi | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact | | | ASTM D256 |
| -4°F, 0.126 in | 0.94 | ft·lb/in | |
| 73°F, 0.126 in | 2.6 | ft·lb/in | |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (R-Scale, 0.126 in) | 88 | | ASTM D785 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |

| | | | |
|---|---|---|---|
| Deflection Temperature Under Load (66 psi, Unannealed, 0.126 in) | 208 | °F | ASTM D648 |

| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
|---|---|---|---|
| Flame Rating (0.06 in) | HB | | UL 94 |

## Processing Information

| **Injection** | **Nominal Value** | **Unit** |
|---|---|---|
| Mold Temperature | 122 to 176 | °F |
| Injection Rate | Slow-Moderate | |

| **Extrusion** | **Nominal Value** | **Unit** |
|---|---|---|
| Cylinder Zone 1 Temp. | 374 to 464 | °F |
| Cylinder Zone 2 Temp. | 374 to 464 | °F |
| Cylinder Zone 3 Temp. | 374 to 464 | °F |
| Cylinder Zone 4 Temp. | 374 to 464 | °F |
| Cylinder Zone 5 Temp. | 374 to 464 | °F |

## Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 23°C

[3] 2.0 in/min

[4] 0.051 in/min