



PERFORMANCE PROPERTIES

NOFIA CO3000

DESCRIPTION

Nofia CO3000 is a poly(phosphonate-co-carbonate) and is part of a family of products that can be produced in a range of compositions from high to low phosphonate content. The copolymers have good impact resistance and glass transition temperatures while maintaining high melt flow and a high limiting oxygen index.

BENEFITS AND FEATURES

- *Achieves solid flame retardant performance: UL-94 V0 rating at 0.4 mm*
- *Full transparency*
- *High melt flow*
- *Toughness comparable to PC at < 2 mm*

RESIN SYSTEMS

Polycarbonate and polycarbonate blends

PRODUCT APPLICATIONS

Thin, transparent, high flow molding electronic equipment and consumer electronics applications and extruded films and sheet for building & construction and transportation applications

TYPICAL PROPERTIES

Typical Properties	Nofia CO3000
MVR (260°C/2.16kg):	12 cm ³ /10 min
Tensile Stress at Yield:	65 MPa
Tensile Stress at Break:	53 MPa
Elongation at Yield:	5 %
Elongation at Break:	60 %
Tensile Modulus:	2,800 MPa
Flex Modulus @ 5% Strain:	2,800 MPa
Flex Stress @ Yield:	110 MPa
Notched Izod at 23°C and 1.6 mm:	1300 J/m
Unnotched Izod at 23°C and 1.6 mm:	1600 J/m
HDT @ 0.45 MPa:	125°C
HDT @ 1.82 MPa:	115°C
Light Transmittance:	>88%
UL 94 @ 0.4 mm:	V0
LOI:	45
TGA Decomposition 5wt% (air) [°C]	≥ 480
Specific Gravity:	1.2
Pellet Density:	0.74 g/cm ³

HANDLING AND USE

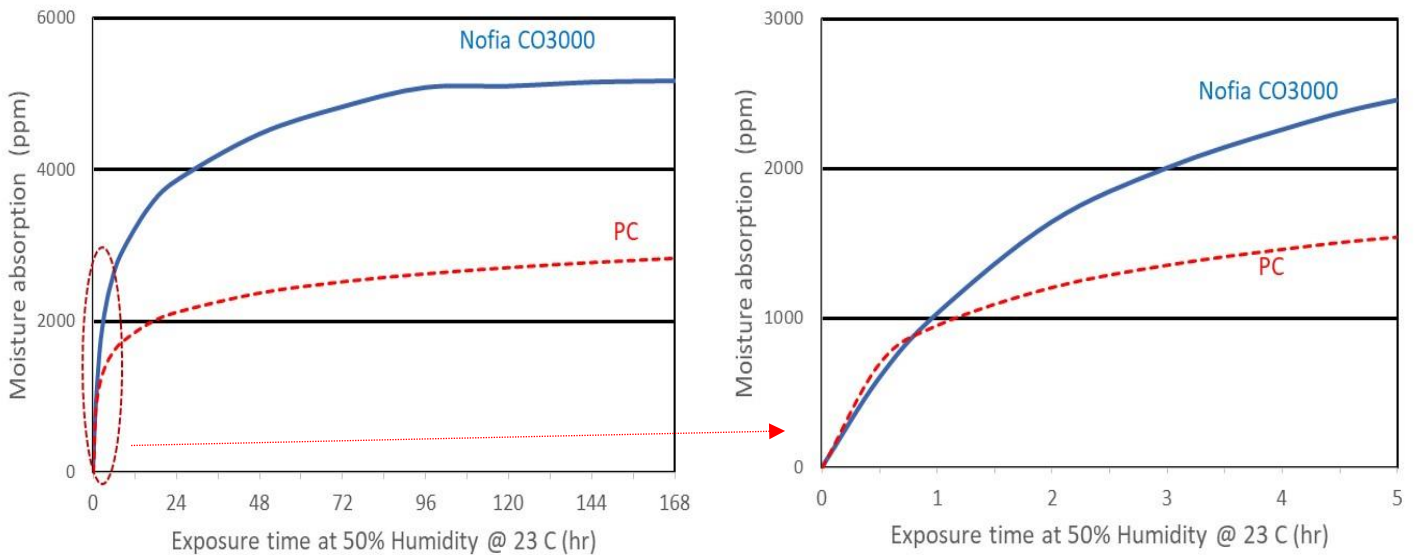
Nofia flame-retardants are considered non-hazardous materials when handled in accordance with standard industrial hygiene practices. Material Safety Data Sheets are available. You are encouraged to read and understand these documents before using the product.

DRYING CONDITIONS

Nofia phosphonates are hygroscopic materials and quickly absorb moisture from the atmosphere. The presence of moisture will hydrolyze the polymer in the melt phase, reducing the molecular weight. Therefore, it is critical that the material is thoroughly dried prior to melt processing (<50 – 200 ppm moisture). For recommendations on drying, please refer to FRX Polymers' Technical Bulletin "Nofia Phosphonates Drying Recommendations".

Drying: 110°C for at least 6 Hours
 Desiccant dryer with dew point -40°C
 Max Moisture Content 0.02 wt%

Moisture Absorption of Nofia CO3000



The information presented herein is believed to be accurate and reliable but is subject to change. It is presented without guarantee or responsibility on the part of FRX Polymers. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. Additional information relating to the product can be obtained from the Material Safety Data Sheet. Nothing in this Data Sheet shall be construed to modify any of FRX Polymers standard terms and conditions of sale nor shall be construed to constitute a representation or warranty, express or implied, regarding the product's characteristics use, quality safety merchantability or fitness for a particular purpose. Nothing contained herein shall constitute permission or recommendation to practice any intellectual property without the permission of the owner.

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