

# EcoPaXX<sup>®</sup> Q-KS

## PA410 FR(30)

Flame Retardant (halogen–phosphorous–free)

Print Date: 2024–05–29

EcoPaXX<sup>®</sup> Q-KS is a versatile halogen–free flame–retarded long aliphatic polyamide with UL94 V0 & CTI 600V rating with high flow and ductility. It offers excellent retention of electric properties upon humidity uptake.

### Sustainability

Bio–based

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>			
<i>DRY / COND</i>			
Molding shrinkage (parallel)	1.1 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
<b>MECHANICAL PROPERTIES</b>			
<i>DRY / COND</i>			
Tensile modulus	3800 / 2200	MPa	ISO 527–1/–2
Nominal strain at break	6 / 30	%	ISO 527–1/–2
Yield stress	75 / 50	MPa	ISO 527–1/–2
Yield strain	4 / 12.5	%	ISO 527–1/–2
Tensile modulus (80°C)	1300 / –	MPa	ISO 527–1/–2
Charpy impact strength (+23°C)	75 / –	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	85 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	3 / 5	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (–30°C)	2.8 / 2.7	kJ/m <sup>2</sup>	ISO 179/1eA
Flexural modulus	3900 / 2300	MPa	ISO 178
Flexural strength	120 / 65	MPa	ISO 178
<b>THERMAL PROPERTIES</b>			
<i>DRY / COND</i>			
Melting temperature (10°C/min)	250 / *	°C	ISO 11357–1/–3

All the trademarks mentioned here are trademarks of Envalior.

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.

Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.

Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

Copyright © Envalior 2024. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.

## Property Data

# EcoPaXX<sup>®</sup> Q-KS

Print Date: 2024-05-29

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Temp. of deflection under load (1.80 MPa)	110 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	190 / *	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Oxygen index	36 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	960 / -	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75 / -	mm	IEC 60695-2-13
<b><i>ELECTRICAL PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Relative permittivity (100Hz)	3.85 / -	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.45 / -	-	IEC 62631-2-1
Dissipation factor (100 Hz)	140 / -	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	200 / -	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 7E11	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 6E13	Ohm	IEC 62631-3-2
Electric strength	32 / 27	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112
<b><i>OTHER PROPERTIES</i></b>	<b><i>DRY / COND</i></b>		
Water absorption	4.8 / *	%	Sim. to ISO 62
Water absorption in water at 23°C after 24h	0.6 / *	%	ISO 62
Humidity absorption	1.8 / *	%	Sim. to ISO 62
Density	1160 / -	kg/m <sup>3</sup>	ISO 1183

All the trademarks mentioned here are trademarks of Envalior.

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.

Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.

Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

Copyright © Envalior 2024. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.