Evolution Fasteners (UK) Ltd Clyde Gateway Trade Park Dalmarnock Road, Rutherglen, Glasgow G73 1AN

Tel: +44 (0)141 647 7100 Fax: +44 (0)141 647 5100 Email: technical@evofas.com











# PRODUCT DATASHEET INSULATION RETAINING WASHER

#### **Product Details**

Designed For:

Evolution Insulation Washers are used in conjunction with various screw types to secure rigid PIR (Polyisocyanurate) and PUR (Polyurethane) insulation panels/ boards to various substrates (commonly timber, steel and masonry).

All washers have a recessed mounting point for the screw heads: this ensures that the screw head is below the surface of the washer and aids in reducing cold-bridging

**Technical Information:** 

Both Polycaprolactam (commonly referred to as "Nylon 6") and Polypropylene are polymers which are stable under exposure to low levels of ionising radiation (Ultraviolet, X-Ray, etc).

They are also stable under exposure to certain aggressive chemicals.

Products have radial holes and other head surface features to allow render to "key" (mechanically adhere) to the washers.

### Technical Data

SKU	Nominal Head Diameter (mm)	Nominal Body Length (mm)	Extension to Fixing Length (mm)	Material	Colour	Encapsulated Head
RW5	46.0	5.0	2.0	Polycaprolactam	White	No
RW18	46.0	18.0	13.0	Polycaprolactam	Black	No
RW35	50.0	35.0	20.0	Polycaprolactam	White	No
RW65	50.0	65.0	50.0	Polycaprolactam	White	No
RW105	50.0	105.0	80.0	Polycaprolactam	Red	No
RW165	50.0	165.0	140.0	Polycaprolactam	Red	No
EVPPW50	50.0	N/A	N/A	Polypropylene	Black	No
ECW60	60.0	12.0	10.0	Polycaproclactam	White	Yes
*ECW90	90.0	N/A	N/A	Polycaproclactam	White	Yes

<sup>\*</sup>ECW90 is used with ECW60

## **Polycaprolactam Chemical and Physical Properties**

Parameter	Data		
Chemical Formula	(C6H11NO)n		
Density	1.084 g/ml		
Melting Point	493 K		
Autoignition Temperature	707 K		
Tensile Strength	10.5 MPa		

## Polypropylene Chemical and Physical Properties

Parameter	Data		
Chemical Formula	(C3H6)n		
Density	0.855 g/ml		
Melting Point	403 K		
Autoignition Temperature	533 K		
Tensile Strength	40 MPa		

NOTE: The results expressed in this document are determined from empirical testing. Specifiers, end-users and other third parties should make their own decision(s) on what safety factors to use relevant to their design(s)/ application(s). This document is provided, strictly: without prejudice, without recourse, without liability, non-assumpsit, no assured value, errors and omissions excepted, subject to change without notice and all rights reserved.

©Evolution Fasteners UK Ltd, 2021.