



FORGEWAY
GLUE WITH HIGH IQ



Technical Data Sheet: Pyrok 803

Product Description

Pyrok 803 is a Fire-Retardant structural polyurethane adhesive. It is designed for applications that need a rigid and low-flex adhesive with fire retardant properties.

Key Features

- Fire Retardant
- Rigid once Cured
- Very High Strength



Applications

- Bonding a wide variety of metals, plastics and composite materials used in vehicle and aerospace manufacturing.

Volumes Available.

Cartridges
50ml
200ml
400ml



Bulk





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Typical Physical Properties

Uncured

Properties	Pyrok 803 FR
Chemistry	Polyurethane
Mix Viscosity (mPas)	75000
Nozzle Life (mins)	18
Handling Time (mins)	30-40
Full Cure (@23°C)	7 days
Tensile Strength (MPa)	25
Tensile Elongation (%)	10
Tensile Shear Strength (MPa)	20-22
Shore D Hardness	70-80
Temperature Resistance	-20°C - 70°C
Shelf Life	12 months
Fire Resistance	Conforms to FAR/JAR/CS 25.853 (a)

Typical Performance Characteristics

Overlap Shear Strength

In accordance with ISO4587

Disclaimer:

We bonded overlap shear specimens with overlap dimensions of 12.5 (length) x 25 (width) x 0.5 (thickness) mm.

We allowed each specimen to cure for 3 days at 20°C and 50% relative humidity. We then pulled the test pieces apart at a rate of 6mm/min for metals. And 50mm/min for composites and plastics.

Substrate	Pyrok 803 FR
Aluminium / Polycarbonate	SF - Polycarbonate
Polycarbonate / Polycarbonate	SF
Aluminium / ABS	SF - ABS
ABS / ABS	SF
Aluminium / FRP (Polyester)	SF - FRP
FRP (Polyester) / FRP	SF
ALU / FRP (Epoxy)	SF - FRP
FRP (Epoxy) / FRP (Epoxy)	SF
ALU / XHR Sabic	SF - Sabic XHR
XHR Sabic / XHR Sabic	SF
ALU / Kydex	SF - Kydex



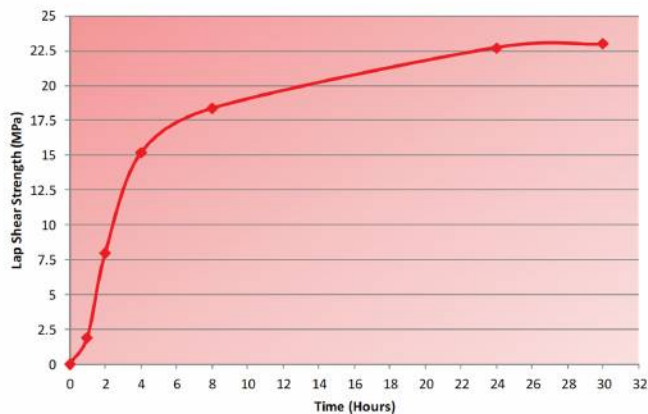
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Typical Performance Characteristics

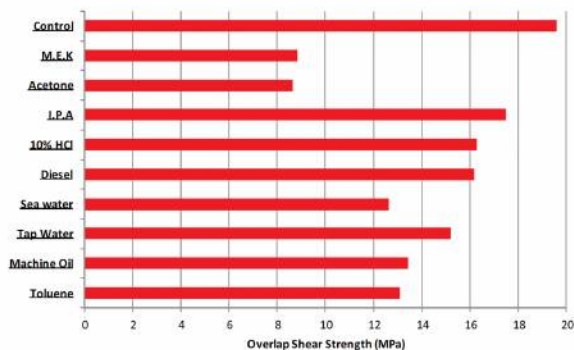
Rate of Strength Build Up



Typical Performance Characteristics

Resistance to Chemicals

Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis, aromatic solvents, concentrated acids and chlorinated hydrogens





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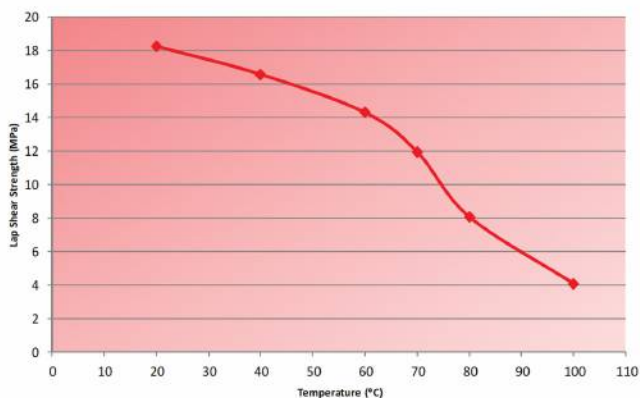


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Typical Performance Characteristics

Temperature Resistance

Overlap shear test conducted across a range of temperatures to determine temperature resistance.



Remarks, Disclaimer & Health and Safety

Disclaimer - The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by ForgeWay, of its products, services, recommendations and suggestions for the specific application need, and must accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end user.

Health and safety - Refer to Safety Data Sheet (SDS) for further information. Apply the usual industrial hygiene.

Reviewed October 2024