



DIC Engineering Plastics (DIC EP)

DIC-PPS Product Portfolio Overview

Overview DIC Group



- DIC Europe GmbH is the European headquarter of **DIC Corporation** and since 30 years active in the European market.
- Our mother-company DIC is one of Japan's most diversified chemical companies and the core of the DIC Group with more than 25.000 employees.
It comprises approximately 213 subsidiaries and affiliates, including Sun Chemical Corp., in more than 60 countries worldwide.
- DIC EP (DIC Engineering Plastics) is one division of DIC Corporation, whereas PPS resins and compounds are the principal products of DIC EP.

Characteristics & Uses of DIC-PPS



Superior Properties

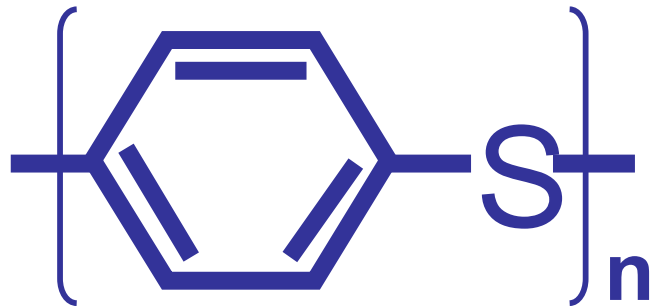
Heat resistance - long term service temperature up to 240°C
UL94 V-0 - flammability without flame retardant
Excellent Dimensional stability,
- low water absorption & low thermal expansion
Superior strength & modulus
Chemical resistance equal to PTFE

Target

Alternative to Metals
Alternative to Thermo-set resins

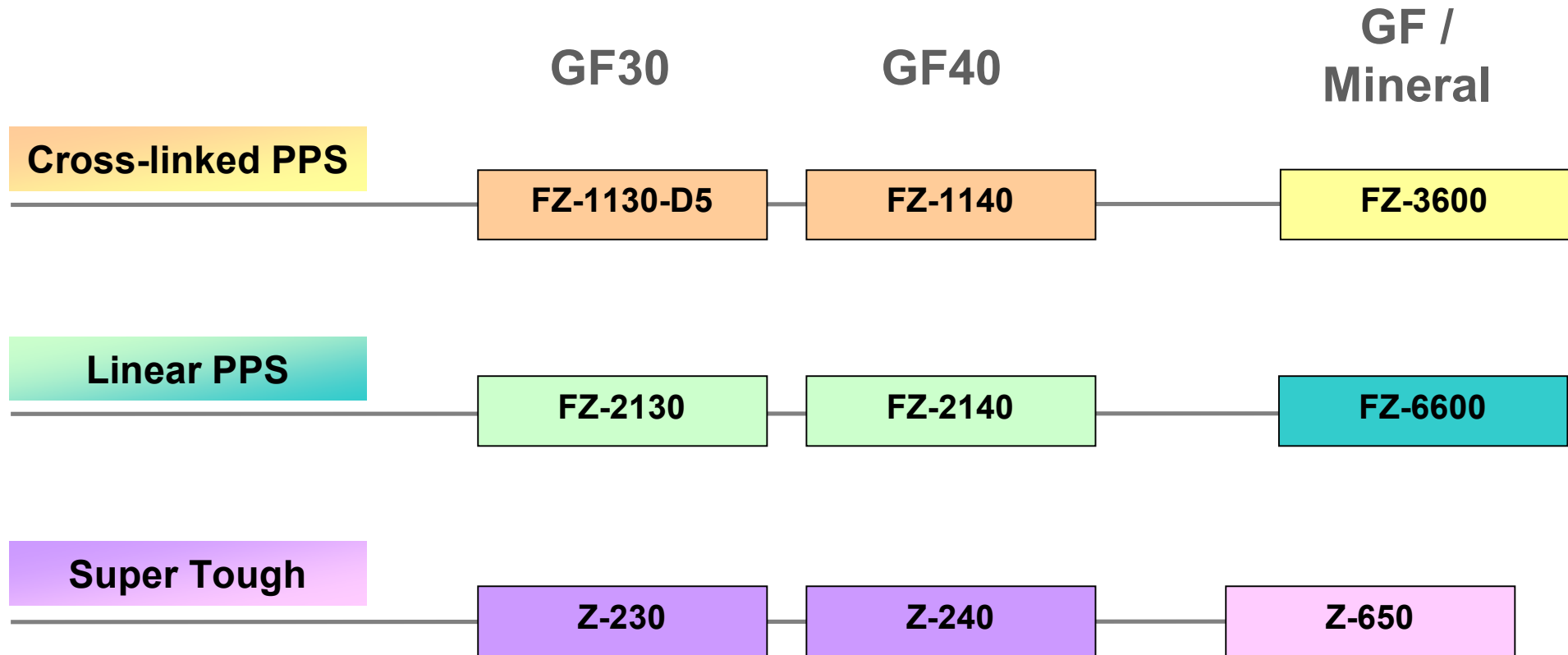
Used for

Automotive parts
E & E parts
Home appliances

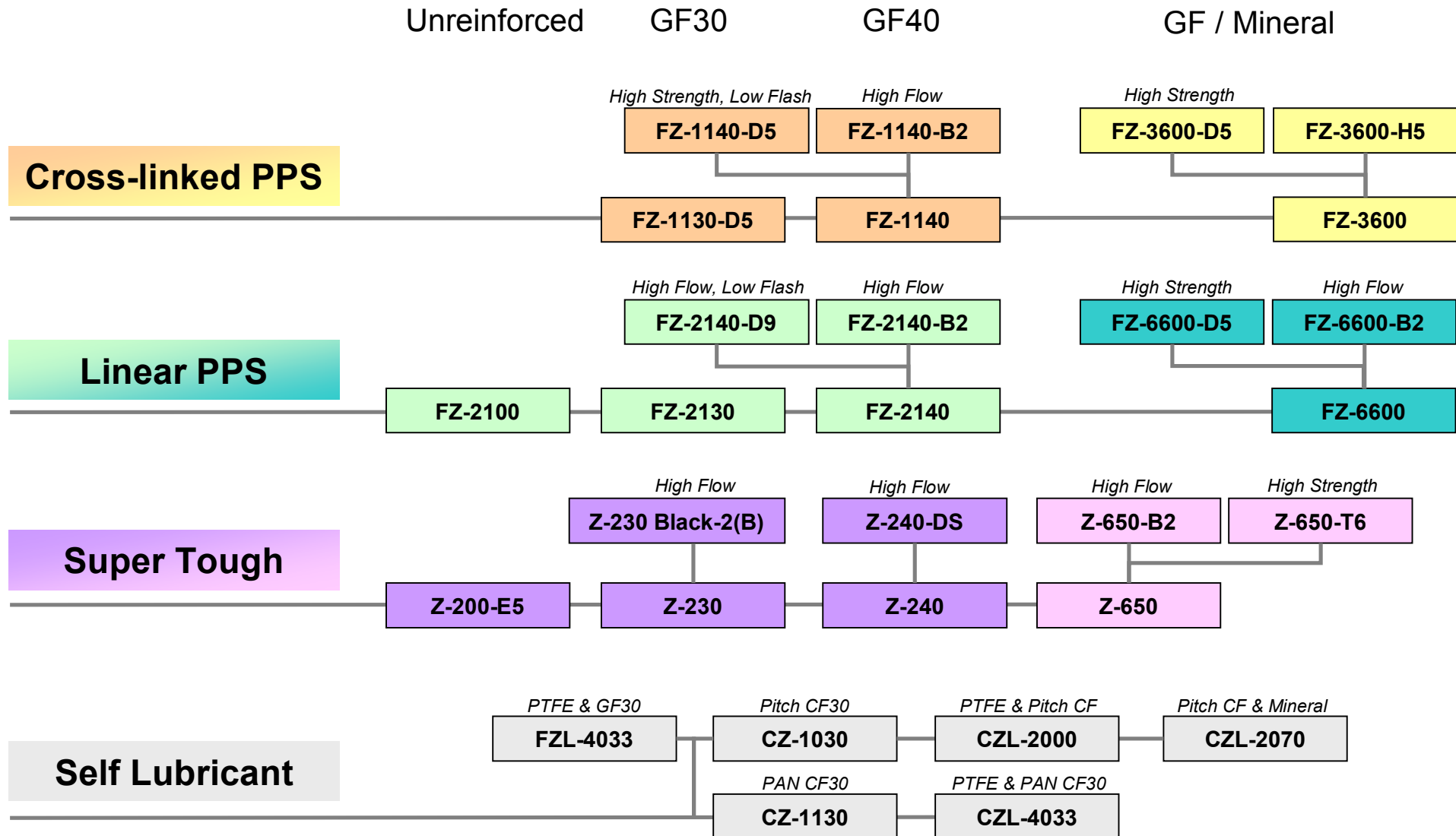


DIC-PPS are compounds based on PPS resin (Polyphenylene sulfide)

Variations of DIC-PPS, Standard Types



DIC-PPS Detailed Product Portfolio

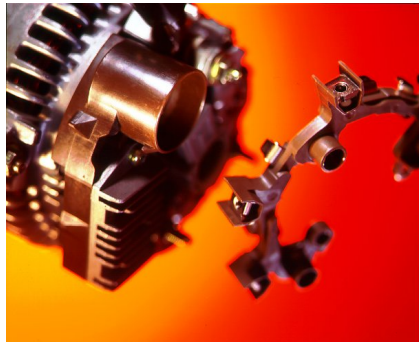


DIC-PPS vs. Ryton & Fortron



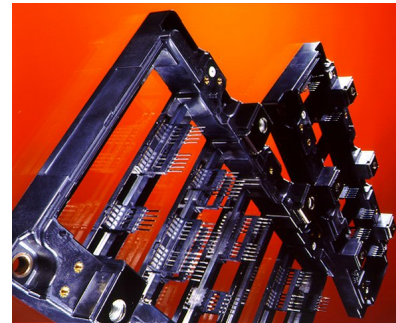
Type of polymer	Key Properties	DIC-PPS	Ryton	Fortron
<i>Cross-linked</i>	GF40%, general purpose	FZ-1140	R-4	
<i>Cross-linked</i>	GF40%, high strength, low flash	FZ-1140-D5	R-4-200 Family	
<i>Cross-linked</i>	GF/Filler, dimensional stability	FZ-3600-L4	R10 ~ R-7	
<i>Cross-linked</i>	GF/Filler, general purpose	FZ-3600	R7 ~ R-7-120	
<i>Cross-linked</i>	GF/Filler, high strength	FZ-3600-D5		
<i>Linear</i>	GF30%, general purpose	FZ-2130		1130L4
<i>Linear</i>	GF40%, general purpose	FZ-2140		1140L4
<i>Linear</i>	GF40%, high flow	FZ-2140-B2		1140L6
<i>Linear</i>	GF/Filler, general purpose	FZ-6600		6165A4
<i>Linear</i>	GF/Filler, high flow	FZ-6600-B2		6165A6
<i>Linear</i>	GF/Filler, high strength	FZ-6600-D5	BR111	
<i>Elastomer modified</i>	GF30%, super tough	Z-230		
<i>Elastomer modified</i>	GF40%, super tough	Z-240		
<i>Elastomer modified</i>	GF/Filler, super tough	Z-650		

Automotive Applications



Alternator Parts

- IC regulator & rectifier
- GF40 & High Filler grades
- Heat & chemical resistances, High strength & modulus, Creep resistance, Electric insulation



Intelligent Power Module

- Power controller of hybrid car
- High Filler grades
- Heat resistance, High modulus, Low warp, Electric insulation



Electronic Sensor

- Pressure, position, velocity and temperature sensors
- Super tough grade
- Heat & chemical resistances, Toughness



Pencil Type Coil

- Distributor-less ignition coil
- Super tough grade
- Heat resistance, Electric insulation, Thin wall flow ability, Toughness, Adhesive bonding to epoxy resin

Home Appliance and Others



Hot Water Supply System

- Valve, connector and pump
- Super tough PPS
- Toughness, Hot water resistances, High strength & modulus, Creep resistance



Watch Base

- Watch base replaced from metal
- GF30-40 Modified PPS
- Precision molding ability, High strength & modulus, Creep resistance



General Purpose Pump

- Impeller & housing
- Super tough PPS
- Water & chemical resistances, High strength & toughness, Creep resistance



Connectors

- SMT connectors
- GF30-40 low flash grade
- Heat resistance, High strength & modulus, Creep resistance, Electric insulation



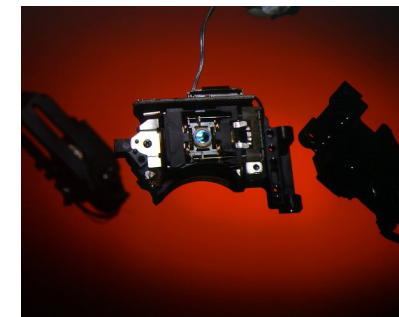
Lamp Housing

- LCD projector & LCD projection TV
- GF40 & High Filler grades
- Heat resistance, Low out-gas at elevated temperature, High strength & modulus



Pick-up Sliding Base

- CD & DVD pick-up slide bases
- High Filler grade
- Dimensional stability, High modulus, Creep resistance





Thank you very much for your attention!

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