



**High  
Performance  
Polymer™**

**ENGINEERED POLYMER SOLUTIONS**

## **Polyvinyl Chloride (PVC) Fastener Data Sheet**

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## Polyvinyl Chloride (PVC) Fastener Properties:

Mechanical Properties	Unit	Method	Value
Tensile Strength	MPa	JIS K 7113	53.7
Tensile Elongation	%	JIS K 7113	185.0
Charpy Impact Strength	KJ/M <sup>2</sup>	JIS K 7111	9.8
Vicat Softening Point	Celcius	JIS K 7206	83
Specific Gravity	-	JIS K 7112	1.32
Rockwell Hardness	M Scale	JIS K 7202	103 R

Torsional Rupture Torque (N*m)								
Metric size (M)	M3	M4	M5	M6	M8	M10	M12	M16
Standard Head Types	0.15	0.34	0.62	0.98	2.36	4.77	8.25	20.00

\*Numerical Values are calculated using mean average.

\*The recommended fastening torque for each screw type is 50% of the Torsional Rupture Torque value shown in the table.

Tensile Rupture Force (N)								
Metric size (M)	M3	M4	M5	M6	M8	M10	M12	M16
Standard Head Types	225	425	683	950	1751	2793	3959	7522

## Polyether Ether Ketone (PEEK) Chemical Resistance Data:

Acid	Resistance
Hydrochloric acid 10%	○
Sulphuric acid 10%	○
Sulfuric acid 50%	X
Nitric acid 10%	○
Nitric acid 50%	X
Hydrofluoric acid 10%	-
Hydrofluoric acid 50%	-
Phosphoric acid	○
Formic acid	Conditional
Acetic acid	Conditional
Citric acid	○
Chromic acid	○
Boric acid	○

Alcohol	Resistance
Methanol	○
Butanol	-
Glycol	-

Aldehyde and Ketone	Resistance
Acetaldehyde	-
Acetone	-
Formalin	-
Methyl ethyl ketone	-

Base – Alkali	Resistance
Ammonia	○
Sodium hydroxide 10%	○
Calcium hydroxide	○

Halogenated organics	Resistance
Carbon tetrachloride	-
Perchloro ethylene	-
Freon 12	-

Hydrocarbon	Resistance
Benzene	-
Toluene	-
Xylene	-
Cyclohexane	-
Naphthalene	-

Inorganic chemicals	Resistance
Water	○
Hydrogen sulphide (gas)	-
Sulphur dioxide	-
Sodium chloride	-
Ammonium nitrate	-
Sodium nitrate	-
Sodium acetate	-
Calcium carbonate	-
Calcium chloride	○
Magnesium chloride	○
Magnesium sulphate	-
Zinc sulphate	-
Hydrogen peroxide	○

Other Chemicals	Resistance
Urea	-
Detergent	-

- : Can be used  
 X : Cannot be used  
 - : No data

\* Chemical test data shown conducted at room temperature (23°C) \*

\* Chemical resistance changes in line with operating environment, ensure to test under actual use environment beforehand. \*

### Storage conditions

- Avoid direct sunlight and store at room temperature
- Keep fasteners in the original plastic bag to avoid dust.
- Please store in a sealed container if removed from zip lock bag.
- Do not place heavy objects on fasteners to avoid damage