

**Polypropylene**

PP, PPs



Resistant to chemicals

Colour: PP  
Colour: PPsLight grey RAL 7032  
grey RAL 7037 (flame retardant)

Flame retardant

PP and PPs are light, universal thermoplastics which have the perfect properties for a range of conditions. In particular, their extensive, chemical resistance to salts, acids and alkalis ensure that they can be used in a wide range of applications. Continuous temperature:



Temperature range

Fault-free up to 80°C, although shock resistance is reduced at lower temperatures. PP is physiologically inoffensive and is therefore suitable for use in contact with foodstuffs. PP and PPs are not stabilised with UV absorbers and are therefore not suitable for outdoor use.



Physiologically inoffensive

Typical areas of use:

- Air conditioning systems
- Ventilators
- Apparatus and system construction
- Tank construction
- Exhaust air scrubbers
- Pipeline construction

**Polyethylene**

PE



Chemically resistant

Colour: PE                      black

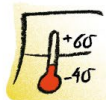


Light and Weather resistant

PE comes from the same family as PP and as a result, the chemical properties are also similar. PE black is UV stabilised and is therefore an ideal material for outdoor use. Even at very low temperatures, PE does not become brittle, but rather remains impact resistant. At temperatures above 60°C, PE can no longer be used for statically or dynamically stressed components. The excellent gliding properties are also typical of this environmentally-friendly material.



Impact resistant



Temperature range

Typical areas of use:

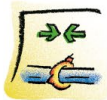
- Systems in outdoor areas
- Exhaust air scrubbers
- Tank construction
- Pipeline construction



Physiologically inoffensive

**Polyvinylchloride**

PVC

Resistant  
to chemicalsFlame  
retardantEasy to  
bondTemperature  
range

Colour: PVC

dark grey RAL 7011

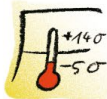
Based on its excellent chemical and mechanical properties, PVC is a popular and long-lasting material. It is highly inflammable and shows good resistance levels against many acids and base solutions.

PVC performs better than PP in outdoor uses, although when used below freezing point, PVC becomes very brittle and sensitive to impact. Unlike other thermoplastics, PVC can be bonded.

Typical areas of use: Apparatus design  
Laboratory equipment  
Tank construction  
Pipeline construction

**Polyvinylidene fluoride**

PVDF

Resistant  
to chemicalsFlame  
retardantLight and weather  
resistantTemperature  
rangePhysiologically  
inoffensive

Colour:

milky

PVDF exceeds all chemical, mechanical and thermal properties of PP, PE and PVC. This fluoride plastic is practically completely resistant to chemical solutions and has a high temperature limit of 140°C. It also shows good resistance to atmospheric conditions, and is physiologically inoffensive and highly inflammable. As a result of its high price, PVDF is only used for extreme requirements. In combination with polyester laminates, PVDF can also be used as a liner material to absorb extreme forces at high temperatures.

Typical areas of use: Tanks for highly aggressive materials  
Clean room technology  
Ventilators  
Composite structures with thermoset materials  
Pipeline construction