

General HDPE and PP Polyolefin Properties

Mechanical

- Excellent flexibility for unstable soils
- Excellent fatigue resistance
- Excellent abrasion resistance
- Excellent balance of stiffness and impact resistance
- Excellent low specific weight
- Good slurry abrasion resistance
- Excellent flow capacity and reduced friction loss (no deposits and encrustations)
- Excellent impact resistance to external loads and vibrations
- Excellent creep strength
- Excellent pressure resistance up to 25 bar (special products up to 50 bar)
- Excellent scratch tolerant during transport, stocking, installation and in operation

Chemical

- Excellent resistance to almost all kind of microbiological attack
- Excellent chemical resistance to most chemical and aggressive media
- Excellent Corrosion resistance
- Excellent resistance to water absorption and swelling
- Non-toxic
- Non-tasting (food approval)
- Non-contaminating
- Fair gas permeability (might be increased by incorporated aluminium layer)

Thermal

- Wide Service temperature range of -40°C to 80°C
- Excellent low brittleness in low temperatures
- Excellent Frost resistance
- Fair thermal expansion coefficient

Weather Resistance

Excellent weather-resistance of uv-stabilised material grades

Excellent micro-crack resistance of stabilised material grades

Excellent heat resistance of stabilised material grades

Economical

Excellent maintenance free design life

Excellent durability with life expectancy of up to 125 years depending on application

Excellent cost saving fast and easy installation

Excellent narrow trenches or installation area needed only

Excellent light weight in view of transport and installations

Environmental

Excellent suitability for potable water

Excellent low noise emission

Excellent energy neutral end-recycling without emissions

Excellent recycling for material multiuse in lower quality products

Excellent energy ratio during raw material production

Good energy ratio during product manufacturing

Electrical

Excellent electrical isolation

Production

Wide range of production methods as extruding, injection-moulding, blow-moulding,

Connections

Excellent fully fused jointing with zero leak-rate

Wide range of jointing techniques

Design

Multiple color choice depending on products available

Excellent product surfaces

Unlimited product designs

Unlimited size variety

Approvals / Experiences

Listed, normed and approved materials

Experienced and reliable materials

Available materials