

# Qapco

## HDPE

### Q 50100

#### Product information

|                    |  |
|--------------------|--|
| Manufacturer       | Qatar Petrochemical Company (QAPCO) QSC  |
| Material Shape     | Pellets  |
| Process            | Blow molding Thermoforming   |
| Polymer            | Copolymer  |
| Molecular Weight   | Ultra High Molecular Weight  |
| Material Attribute | Food Contact grade Cold resistance grade C6  |
| Features           | High Melt StrengthHigh stiffnessLow Temperature Impact ResistanceStress crack resistanceEthylene-hexene copolymer  |
| Application        | Fuel tanksAutomotive dunnageTruck-bed linerPalletsChemical tanksLarge-sized blowing molding partsAgricultural tanksBoatsLarge part blow moldingShipping containersThermoformed parts |

| Hardness            | Condition  | Standard   | Value | Unit              |
|---------------------|--|------------|-------|-------------------|
| Shore               | Hardness D   | ASTM D2240 | 62    |                   |
| Mechanical behavior | Condition  | Standard   | Value | Unit              |
| Elongation          | Break 50mm/min Type IV                             | ASTM D638  | 600   | %                 |
| Flexural            | Modulus Secant                                     | ASTM D790  | 1170  | MPa               |
| Tensile             | Strength Yield 50mm/min Type IV                    | ASTM D638  | 26    | MPa               |
| Physical property   | Condition  | Standard   | Value | Unit              |
| Density             |  | ASTM D792  | 0.948 | g/cm <sup>3</sup> |
| Environmental       | Stress Crack Resistance F50 100%Igepal Condition A | ASTM D1693 | 600   | hr                |
| Environmental       | Stress Crack Resistance F50 100%Igepal Condition B | ASTM D1693 | 600   | hr                |
| Melt                | Index 190°C 2.16kg                                 | ASTM D1238 | 0.06  | g/10min           |
| Melt                | Index 190°C 21.6kg                                 | ASTM D1238 | 10    | g/10min           |
| Thermal             | Condition  | Standard   | Value | Unit              |
| Low                 | Temperature Brittleness                            | ASTM D746  | -75.0 | °C                |