



AquaFlex B-HWS #005

Blown film application
hot water grade

PRODUCT DESCRIPTION

- AquaFlex™ is a polymer product based on polyvinyl alcohol, which are water-soluble polymers.
- These materials are environmentally friendly materials with water solubility and biodegradable properties, they can be completely dissolved in water. In natural environment, microbes ultimately break the products into carbon dioxide and water. After returning to the natural environment, they are non-toxic to the plants and animals.
- Water soluble temperature and speed of the materials can be customized to meet customer requirements, and can be dissolved in hot water (about 70°C).
- Supply in pellet form.

TECHNICAL DATA

| Parameter | Analysis method | Result |
|--------------------------------|-------------------------|------------------------|
| Color | Organoleptic evaluation | Natural color |
| Odor | Organoleptic evaluation | Neutral |
| Form | | Pellets |
| Density | ASTM D618 | 1.29 g/cm ³ |
| Melt flow index (230°C/2.16kg) | ASTM 1238 | 5.5-6.5 g/10min |
| Melting temperature (DSC) | ASTM D 3418 | 215°C |
| Water Content | ASTM D6980 | <0.5% |

| Technical performance of the film | | |
|-----------------------------------|------------------|-------------------|
| Tensile strength MD/TD | ASTM D 638 | >25 Mpa |
| Elongation MD/TD | ASTM D 638 | >150% |
| Water temperature | Dispersion (sec) | Dissolution (sec) |
| Solubility of 25 microns film | | |
| Beacker 600ml - 70°C water | 12 | 120 |
| Solubility of 60 microns film | | |
| Beacker 600ml - 70°C water | 20 | 200 |

PROCESSING INFORMATION

- Blowing instruction: to preheat the extruder to 220°C, then input the material from the silo, when there is molten resin coming out from the extruder, then lower the temperature to 200-220°C. Please adjust the temperature within this range according to the blowing film situation.
- General Processing Information: it is normally processed at melt temperatures ranging from 200°C - 220°C

| Processing Temperature Profile | |
|--------------------------------|---------|
| Melt Temperature | 215°C |
| Feed Throat | 223 °C |
| Feed Temperature | 223 °C |
| Compression Section | 223 °C |
| Metering Section | 221 °C |
| Adapter | 220 °C |
| Die | 218 °C |
| Screw Speed | 9-12 HZ |

STORAGE AND HANDLING

- Pellets are packed and shipped in vacuum bags put inside a carton and are ready to use as supplied. They should be stored in a sealed container with desiccant in a dry location away from heat.
- If pellets are exposed to a humid environment, they will absorb moisture from the air. If needed, dry pellets by introducing warm dry air at 60°C for 1-4 hours. Pellets should be <0.5% moisture content prior to processing.

Regional Centers

For help finding a local representative, please contact the following regional customer contact centers:

PVA PRO JSC

Add: 504 Nguyen Tat Thanh, District 4, HCMC

Tel: (+84) 774 833 230

Email: info@pva-pro.com