

# HANWHA

## Ethylene Vinylacetate Copolymer

# 1159

Extrusion Coating Grade

**MELT INDEX 18.0**

**VA CONTENT 28.0**

HANWHA EVA 1159 is manufactured by high pressure autoclave process and designed for variety of extrusion coating application such as thermal film(Laminex film) and flexible film etc.. EVA 1159 is well known for its excellent processability and high quality assurance.

This product complies with U.S. FDA regulation 21 CFR 177.1350(a)(1)

▣ **Outstanding Properties**

Very Low Heat Seal Temperature  
 Good Drawability  
 Good adhesion to Various Plastic Films  
 Good Optical Property

▣ **Processing Conditions**

Cylinder: 160 ~ 220°C  
 Adapter/Head: 220°C  
 T-Dies: 220°C

▣ **Additives**

Antioxidant

▣ **Physical Properties**

| Physical Properties                             | Unit               | Test Method               | Value |
|---|--------------------|---------------------------|-------|
| Melt Index                                      | g/10min            | ASTM D1238                | 18.0  |
| VA Content                                      | wt%                | HCC Method <sup>(3)</sup> | 28.0  |
| Density   | g/cm <sup>3</sup>  | ASTM D1505                | 0.949 |
| Vicat Softening Point                           | °C                 | ASTM D1525                | 46    |
| Melting Point                                   | °C                 | ASTM D3417                | 71    |
| Tensile Strength at Break                       | Kg/cm <sup>2</sup> | ASTM D638                 | 140   |
| Elongation at Break                             | %                  | ASTM D638                 | 920   |
| Brittleness Temperature, F <sub>0</sub>         | °C                 | ASTM D746                 | <-76  |
| Neck-in <sup>(4)</sup>                          | cm                 | -                         | 9.0   |
| Allowable Coating Speed <sup>(4)</sup>          | m/min              | -                         | >300  |
| Heat Seal Initiation Temperature <sup>(5)</sup> | °C                 | -                         | 70    |

1. These are typical properties: not to be construed as specification.
2. The value for this property is dependent on part geometry and fabrication conditions.
3. Elemental Analyzer and FT-IR
4. Melt Temperature: 260°C, Line Speed: 100m/min, Output: 80kg/hr
5. Layer Structure: PET(50 μm)/LDPE(25 μm)/EVA 1159(25 μm)

Time/Pressure of Sealing: 1.0sec./2kg/cm<sup>2</sup>

