

| No. | Parameter                                      | Method / Reference                          | Sample Type |
|-----|------------------------------------------------|---------------------------------------------|-------------|
| 1   | Melt Flow Rate (MFR)                           | ASTM D1238 - 13 Procedure A                 | Polymer     |
| 2   | Pellet Appearance                              | MPC method No. HZ-F-119, UT Method PEG 504, | Polymer     |
| 3   | Density of Plastics Density-GradientTech       | ASTM D1505 - 18                             | Polymer     |
| 4   | Particle Size Distribution                     | ASTM D1921                                  | Polymer     |
| 5   | Polymer Content                                | MPC method                                  | Polymer     |
| 6   | High-Low Polymer (HP/LP)                       | MPC method HZ - F - 131                     | Polymer     |
| 7   | Carbon Black Content (%CB)                     | ASTM D4218                                  | Polymer     |
| 8   | Oxidative Induction Time (OIT)                 | ISO11357-6                                  | Polymer     |
| 9   | Transition Temperature ( Tm , Tc , Tg ) by DSC | ASTM D 3418, ISC                            | Polymer     |
| 10  | Ash content (Muffle furnace)                   | PEG 306                                     | Polymer     |
| 11  | Transition Temp. (Melt/Crystallization)        | ASTM D3418-99                               | Polymer     |
| 12  | Specimen preparation by Compression molding    | ASTM D 4703-03                              | Polymer     |
| 13  | Tensile Properties                             | ASTM D638 - 14                              | Polymer     |
| 14  | Vicat Softening Temperature                    | ASTM D 1525, AS                             | Polymer     |
| 15  | Hardness                                       | ASTM D 2240                                 | Polymer     |
| 16  | Izod Impact Strength                           | ASTM D256; Method A                         | Polymer     |
| 17  | Olsen Stiffness                                | ASTM D 747                                  | Polymer     |
| 18  | Heat Deflection Temperature ( HDT )            | ASTM D 648                                  | Polymer     |
| 19  | Environmental Stress Cracking Resistance       | UT Method PEG 316                           | Polymer     |
| 20  | Heat Seal Strength                             | ASTM D 638                                  | Polymer     |

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|-----|-------------------------------------------|---------------------------------|-------------|
| 21  | Inflation film processing (Extrudability) | MPC method No. HZ-P-204-1       | Polymer     |
| 22  | Gel Film note for Customer service        | Basell Test Method C.12         | Polymer     |
| 23  | Fish Eye for Cast Film (Visual)           | MPC method No. HZ-A-302         | Polymer     |
| 24  | Film Impact Strength                      | MPC Testing Method No. HZ-A-306 | Polymer     |
| 25  | Blow Molding Processing (Full Item)       | MPC method No. HZ-P-203         | Polymer     |
| 26  | Bulk density for liquid                   | Bulk density for liquid         | Polymer     |
| 27  | Monofilament Processing                   | MPC method No. HZ-P-206         | Polymer     |
| 28  | Tenacity of filament Sample               | In-house method                 | Polymer     |
| 29  | Shrinkage Test By Injection               | ASTM D-955                      | Polymer     |
| 30  | Metal Content in Polymer                  | In-house method                 | Polymer     |
| 31  | Water content of Solvent                  | ISO 15512                       | Polymer     |
| 32  | Moisture Content in Polymer               | ASTM D6869-17                   | Polymer     |
| 33  | Hexane Component                          | MPC method                      | Polymer     |
| 34  | Oligomer content                          | MPC Method no.                  | Polymer     |
| 35  | Transition Temp.(Melt/Crystallizat.Temp)  | ISO 11357                       | Polymer     |
| 36  | Melt Flow Rate ( MFR )                    | ASTM D1238 Procedure A          | Polymer     |
| 37  | Melt Flow Rate ( MFR )                    | ASTM D1238 - 13 Procedure B     | Polymer     |
| 38  | Melt Flow Rate ( MFR )                    | ISO 1133-2011                   | Polymer     |
| 39  | Carbon Black Content (%CB ISO)            | ISO 6964-1986                   | Polymer     |
| 40  | Carbon Black Content (CB)                 | ASTM D4218                      | Polymer     |
| 41  | High-Low Polymer ( HP/LP )                | MPC method No. HZ-F-131         | Polymer     |

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|-----|-----------------------------------------------------|---------------------------|-------------|
| 42  | Pellet Appearance                                   | MPC method No. HZ-F-119   | Polymer     |
| 43  | Polymer Content                                     | MPC method No. HZ-F-128   | Polymer     |
| 44  | Ash Content                                         | MPC method No. HZ-F-113   | Polymer     |
| 45  | Ash Content (Muffle furnace)                        | PEG 306                   | Polymer     |
| 46  | Ash Content                                         | Inhouse Method            | Polymer     |
| 47  | Volatile Matter ( VM )                              | EN 12099-1997             | Polymer     |
| 48  | Volatile Matter ( VM )                              | MPC method No. HZ-F-112   | Polymer     |
| 49  | Particle Size Distribution (PSD)                    | ASTM D1921                | Polymer     |
| 50  | Bulk Density ISO 60                                 | ISO 60                    | Polymer     |
| 51  | Bulk Density ( BD )                                 | ASTM D1895                | Polymer     |
| 52  | Color/Whiteness/Yellowness                          | ASTM D1925                | Polymer     |
| 53  | Non newtonian index (NNI)/g2                        | MPC method No. HZ-F-122-4 | Polymer     |
| 54  | Density by Gravimetric                              | ISO 1183-1:2004           | Polymer     |
| 55  | Density of Plastics Density-GradientTech            | ASTM D1505                | Polymer     |
| 56  | Volatile Matter ( VM )(Water in Hexane ใช้การระเหย) | MPC method No. HZ-F-112   | Polymer     |
| 57  | Non-Newtonian Index ,Gamma2                         | MPC method No. HZ-F-122-4 | Polymer     |
| 58  | Oxidative Induction Time (OIT)                      | ISO11357-6                | Polymer     |
| 59  | Hardness Shore A                                    | ISO 860                   | Polymer     |
| 60  | Flexural strength and Flexural modulus              | based on ASTM D790 - 17   | Polymer     |