



# SM5508

# Monofilament

TDS-PE-204-SM5508-05

#### Product Description:

**Asrene® SM5508** is an HDPE resin which is supplied in natural pellet form and suitable for monofilament and flat yarn application, as well as for co-extrusion and lamination film requiring excellent process-ability, high tensile strength, good stretch-ability and elongation.

#### Product Characteristics:

- Excellent processability
- High tensile strength
- Good stretch-ability
- Good elongation

#### Applications:

- Monofilament : general ropes and nets
- Flat yarn : stretched tapes and tarpaulin
- Film : co-extrusion and lamination film

Physical Properties	Test Method*	Unit	Value
Density	ASTM D 1505	g/cm <sup>3</sup>	0.954
Melt Index (190 °C/2.16 kg)	ASTM D 1238	g/10 min	0.9
Vicat Softening Temperature	ASTM D 1525	°C	129
Melting Temperature	ASTM D 3418	°C	131
Brittleness Temperature	ASTM D 746	°C	< -70
ESCR [F <sub>50</sub> ]	ASTM D 1693	Hrs	155

Film Properties (@20 micron, BUR = 3.8 : 1)	Test Method*	Unit	Value
Dart Drop Impact, F <sub>50</sub>	ASTM D 1709	g	50
Elmendorf Tear Strength	MD/TD**	kgf/cm	10/40
Film Impact Strength	ASTM D 3420	kgf.cm/mm	160
Young's Modulus	MD/TD**	MPa	600/750
Tensile Strength @Yield	MD/TD**	MPa	70/60
Tensile Strength @Break	MD/TD**	MPa	30/30
Elongation @Break	MD/TD**	%	650/750

\*Polyethylene tested per ASTM D 1928

\*\*MD: Machine Direction; TD: Transverse Direction

Conversion: 1 MPa = 10.2 kgf/cm<sup>2</sup>  
1 kJ/m<sup>2</sup> = 0.01 kgf.cm/mm<sup>2</sup>

#### Recommended Processing Conditions:

Melt Temperature.....180-220 °C

Blow-up Ratio.....3-5 °C

#### Product Available Form:

Natural pellet

#### Packaging:

25 kg in FFS PE-bag

#### Safety:

- The product is not classified as a hazardous material.
- Please refer to our Safety Data Sheet (SDS) for details on various aspects of safety, recovery and disposal of the product.

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#### Storage:

- Product(s) should be stored in dry and dust free location at temperature below 50 °C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials, food and drink, as this may lead to quality deterioration, which results in odor generation and color changes and can have negative effects on the physical properties of this product.
- Keep packaging tightly closed and sealed until ready for use. Packaging that has been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled packaging. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.
- Please refer to our Safety Data Sheet (SDS) for details on storage and handling of the product.

#### Regulatory:

- This material complies with recommendations and statutory regulations regarding packaging materials intended to come in contact with foodstuff, such as:
  - FDA Regulation 21 CFR177.1520
  - Commission Regulation EU No.10/2011
  - BPOM Regulation No.20 year 2019
  - Halal Certificate from The Indonesian Council of Ulama
  - SNI No. 7808:2012
- Please refer to our Regulatory Data Sheet (RDS) for details on various aspects of regulatory of the product.

#### Product Stewardship:

PT Chandra Asri Petrochemical, Tbk. (CAP) has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health and environmental information on our products and then take appropriate steps to protect employee, public health and environment. The success of our Product Stewardship program rests with each and every individual involved with CAP products – from the initial concept and research, to manufacture, storage, sale, use and disposal of each product.

#### Disclaimer:

The nominal properties reported herein are typical on the product of CAP but do not reflect normal testing variance and therefore should not to be construed as specifications.

CAP reserves the right to make any improvement or amendments to the composition of any grade or product without alteration to the product code.

This document reports accurate and reliable information to the best of our knowledge on the products manufactured by CAP. Since CAP cannot anticipate or control the conditions under which this information and its product may be used, each user should review the information in the specific context of the intended application. CAP will not be responsible for damages of any nature resulting from the use of or reliance upon the information.

This technical datasheet is effective as from **Jul 2023** and supersedes all data previously published.

#### PT Chandra Asri Petrochemical, Tbk.

Site Office:  
Jl. Raya Anyer Km. 123, Ciwandan, Cilegon,  
Banten 42447, Indonesia  
P: +62 254 601501, F +62 254 601505

Head Office:  
Wisma Barito Pacific Tower A, 7<sup>th</sup> Floor  
Jl. Let. Jend. S. Parman Kav. 62-63  
Jakarta 11410, Indonesia  
[www.chandra-asri.com](http://www.chandra-asri.com)

P: +62 21 5307950, F +62 21 5308930  
E: Commercial inquiry : PSAccExecutive@capcx.com  
Technical inquiry : TSSGroup@capcx.com



QMS ISO	9001
EMS ISO	14001
OHSMS ISO	45001