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# HDPE-SRT001

# **DESCRIPTION**

**SRT001** is a polyethylene compound based on **HDPE** film grade which is formulated to be used in the production of shopping bags. It has high tensile strength with good dart impact strength, **high stiffness and good processability**.

# **APPLICATION**

- Shopping Bag
- Garbage Bag
- Counter Bag
- Wrapping Film







# **CHARACTERISTICS**

• Filler Type: No Filler

• Form: Pellets

Processing Method: Film Blowing

Extrusion

Colors: Transparent

Property	Value	Unit	Test Method
MFI (5.0 kg/190°C)	$0.3 \pm 0.01$	g/10min	ISO 1133
Density	$0.948 \pm 0.003$	g/cm³	ISO 1183
Tensile strength at yield (MD/TD)	22 / 23	MPa	ASTM D638
Tensile strength at break (MD/TD)	550 / 250	MPa	ASTM D638
Elongation at break (MD/TD)	450 / 500	%	ASTM D638
Tear strength (MD/TD)	200 / 400	mN	ISO 6383-2
Dart drop impact	250	g	ASTM D1709



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# LDPE-SRT002

### **DESCRIPTION**

**SRT002** is a polyethylene compound based on **LDPE** film grade which is formulated to be used in the production of

packaging application. It has excellent optical properties, high dart impact combined with excellent yield and tensile **strength and high stiffness** 

### **APPLICATION**

- General Purpose Bags
- Thin Film Packaging
- Carrier Bags
- Shrink Film



# CHARACTERISTICS

• Filler Type: No Filler

• Form: Pellets

Processing Method: Film Blowing

Extrusion

Colors: Transparent

Property	Value	Unit	Test Method
MFI (2.16 kg/190°C)	1.8 ± 0.02	g/10min	ISO 1133
Density	0.920 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield (MD/TD)	12 / 11	MPa	ASTM D638
Tensile strength at break (MD/TD)	22 / 20	MPa	ASTM D638
Elongation at break (MD/TD)	300 / 500	%	ASTM D638
Vicat softening point	> 93		ASTM D1525
Dart drop impact	130	g	ASTM D1709



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# HDPE-SRT003

### **DESCRIPTION**

**SRT003** is a polyethylene compound based on HDPE blow molding grade which is formulated to be used in the production of bottles and containers. Blow moulded items made from SRT003 exhibit high stiffness and impact as well

as good stress cracking resistance (ESCR).

### **APPLICATION**

- Bottles
- Containers (Up to 20 lit)
- Lightweight Jerry Cans





# **CHARACTERISTICS**

- Filler Type: No Filler
- Form: Pellets
- Processing Method: Injection Blow Molding, Sheet Extrusion
- Colors: Transparent

Property	Value	Unit	Test Method
MFI (5 kg/190°C)	1.1 ± 0.02	g/10min	ISO 1133
Density	0.948 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield	25	MPa	ASTM D638
Tensile strength at break	39	MPa	ASTM D638
Elongation at break	600	%	ASTM D638
Vicat softening point	> 110	°C	ASTM D1525
Izod impact strength (Notched, 23°C)	20	kJ/m²	ISO 180



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# PP-SRT004

### **DESCRIPTION**

**SRT004** is a polypropylene compound based on homopolymer raffia grade which is formulated to be used in the production of yarns and monofilaments. It has outstanding processability and **good mechanical properties such as high stiffness.** 

### **APPLICATION**

- Packaging twines and ropes
- Monofilament
- Brush and broom filling
- Monolayer and coextruded film packaging
- Folders
- Thermoforming sheets





# **CHARACTERISTICS**

Filler Type: No Filler

• Form: Pellets

• Processing Method: Fiber Extrusion, Cast Film

Extrusion, Sheet Extrusion, Thermoforming, Injection Molding

Colors: Transparent

Property	Value	Unit	Test Method
MFI (2.16 kg/230°C)	6 ± 1	g/10min	ISO 1133
Density	0.91 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield	32	MPa	ASTM D638
Flexural modulus	1400	MPa	ISO 178
Elongation at break	20 KA	%	ASTM D638
Vicat softening point	> 140	°C	ASTM D1525
Izod impact strength (Notched, 23°C)	6	kJ/m²	ISO 180



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# PP-SRT005

### DESCRIPTION

**SRT005** is a polypropylene compound based on random copolymer pipe grade which is formulated to be used in the

production of pipe and fittings. It is designed to produce items with superior toughness, excellent impact strength as

well as creep properties along with high temperature and pressure resistance.

### **APPLICATION**

- Hot and cold water supply systems
- Weldable fittings
- Pipes for electrical appliances





# **CHARACTERISTICS**

• Filler Type: No Filler

• Form: Pellets

Processing Method: Film Blowing

Extrusion

Colors: White

Property	Value	Unit	Test Method
MFI (2.16 kg/230°C)	0.3 ± 0.02	g/10min	ISO 1133
Density	0.91 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield	28	MPa	ASTM D638
Tensile modulus of elasticity	800	MPa	ASTM D638
Elongation at yield	15 R A	% D	ASTM D638
Vicat softening point (9.8 N)	> 130	°C	ASTM D1525
Izod impact strength (Notched, 23°C)	No break	J/m	ASTM D256
Izod impact strength (Notched, 0°C)	No break	J/m	ASTM D256



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# HDPE-SRT006

# **DESCRIPTION**

**SRT006** is a polyethylene compound based on **HDPE** pipe grade which is formulated to be used in the production of

pipe and fittings. It has excellent creep resistance, good heat aging resistance, satisfactory UV resistance, good wear

resistance beyond high environmental stress cracking resistance (ESCR).

### **APPLICATION**

- Drainage pipe
- Drinking water pipe
- Gas pipe
- Sheet, Soil & Waste pipe





# **CHARACTERISTICS**

• Filler Type: No Filler

• Form: Pellets

Processing Method:: Pipe Extrusion, Injection

Molding, Compression Molding, Sheet Extrusion

Colors:Black (RAL 9004)

Property	Value	Unit	Test Method
MFI (5 kg/190°C)	0.27 ± 0.02	g/10min	ISO 1133
Density	0.957 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield	22	MPa	ISO 527-2
Tensile modulus of elasticity	1100	MPa	ISO 527-1, -2
Elongation at break	> 600	%	ISO 527-2
Carbon black content	2.25 ± 0.25	%	ISO 6964
Carbon black dispersion	≤ 3A1	Grade	ISO 18553
Oxidation induction time (OIT)	≥ 20	min	ISO 11357-6



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# HDPE-SRT007

### **DESCRIPTION**

**SRT007** is a polyethylene compound based on **HDPE** injection molding grade which is formulated to be used in the

production of injection molding plastic parts which combines **high stiffness with good physical properties.** 

### **APPLICATION**

- Crates
- Pallets
- Boxes
- Seats
- Caps & Closures





# **CHARACTERISTICS**

- Filler Type: No Filler
- Form: Pellets
- Processing Method: Injection

Molding

Colors: Transparent

Property	Value	Unit	Test Method
MFI (2.16 kg/190°C)	6 ± 1	g/10min	ISO 1133
Density	0.956 ± 0.002	g/cm³	ISO 1183
Tensile strength at yield	28	MPa	ASTM D638
Tensile strength at break	12	MPa	ASTM D638
Elongation at break	700	%	ASTM D638
Flexural modulus	1400	MPa	ASTM D790
Izod impact strength (Notched, 23°C)	60	J/m	ASTM D256



# COMPOUND

# **PROPERTIES TABLE**

PROPERTIES	VALUE	UNIT	METHOD
Density	0.935-0.938	gr/cm³	ASTM D1505
MFI (190 °C /2.16kg)	4	g/10 min	ASTM D1238
MFI (190 °C /5kg)	10	g/10 min	ASTM D1238
Oxidation Induction Time	>40	Min@210°C	ASTM D3895
Tensile Strength at Yield	>20	MPa	ASTM D638
Elongation at Break	>900	%	ASTM D638
Flexural Modulus (-1% Secant)	>400	MPa	ASTM D790
ESCR (100 % Igepal, F <sub>50</sub> )	>400	hr	ASTM D1693
Vicat Softening Temperature	116	°C	ASTM D1525
Charpy Impact Resistance	18	KJ/m²	ASTM D256
Melting Point	123	°C	ASTM D2117

# **Product Description:**

Polyethylene Compound-RM is a medium density polyethylene (MDPE) in powder form for rotational molding. This compound is available in different colors.

# **Product Characterize:**

Excellent ESCR
Good Impact Strength
High Stiffness
High Thermal Stability
Excellent External Surface Finish
High UV Protection for Outdoor Use



# **OLYETHYLENE COMPOU**



# **Typical Applications:**

Industrial and Common Storage Tanks (Portable Water, Septic, Agricultural and...)

**Decorative Products** 

Playground Facilities and Toys

Road Safety and Construction

Canoes and Boats

### **Other Information:**

Anti-Oxidant

**UV Stabilizer** 

Impact Modifier

Containing I-Butane as Comonomer

Narrow Molecular Weight Distribution

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# PVC-SRT009

# **Technical Data Sheet**

- **Granule Type:** AFC
- Description: PVC compound for fittings
- Olor: White

# **PHYSICAL PROPERTIES**

Property	Typical Value	Unit	Standard and Test Method
Density	1.46-1.48	3gr/cm	ISO 1183
Izod Impact Notched	7-9	2KJ/m	ASTM D256
Tensile strength at peak	50	MPa	ASTM D638
Elongation at peak	8-10	%	ASTM D638
Tensile strength at Break	33	MPa	ASTM D638
Elongation at Break	25-30	%	ASTM D638





Processing Guidelines
Typical processing temperature
(Die Zone):

### Die Zone:

Max (°C) | Min (°C) Zone 5: 210 | Zone 4: 180 | 180

Zone 3: 190 | 160 Zone 2: 190 | 160 Zone 1: 190 | 160

# **PROCESSING TEMPERATURE**

Die Zone	Max (°C)	Min (°C)
Zone 5	210	
Zone 4	180	180
Zone 3	190	160
Zone 2	190	160
Zone 1	190	160



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# PVC-SRT010

### **Technical Data Sheet**

Type: APC

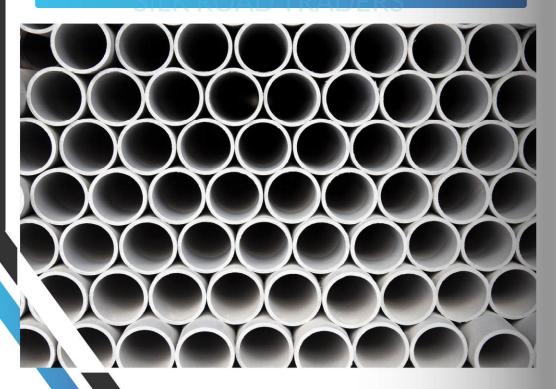
**Description:** PVC compound for pipes

Color: White

Appearance: Powder

# **PHYSICAL PROPERTIES**

Property	Typical Value	Unit	Standard and Test Method
Congo red	Min 30 minutes		ISO 182-1
Bulk density	0.88-0.90	3gr/cm	ASTM D7481
Volatile content	Max 0.1%		ISO 787





### **Processing Guidelines**

Typical processing temperature (Die Zone):

### Die Zone:

Max (°C) | Min (°C)

Zone 5: 200

Zone 4: 180 | 180 Zone 3: 190 | 170 Zone 2: 190 | 170

Zone 1: 190 | 170

# PROCESSING TEMPERATURE

Die Zone	Max (°C)	Min (°C)
Zone 5	200	
Zone 4	180	180
Zone 3	190	170
Zone 2	190	170
Zone 1	190	170



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# PVC-SRT011

### **Technical Data Sheet**

Granule Type: AWC

**Description:** High Speed Insulation Compound for Flexible Cables

• Specification: IEC 6022: PVC/D, BS 674: TI2

Color: Natural and Color

# **PHYSICAL PROPERTIES**

Property	Typical Value	Unit	Standard and Test Method
Hardness (Shore A)	92		ASTM D2240(15sec)
Density	1.435	3gr/cm	ASTM D792 / IEC 60811-1-3
Heat Stability at 200°C	Min 136		VDE 0472/9.71
Tensile strength	Min 15.98	2N/mm	IEC 60811-1-1
Elongation at break	Min 317.98	%	IEC 60811-1-1





### **Processing Guidelines**

The actual extrusion conditions will depend on the type of equipment used.

used.
The following conditions may be used as a guide when starting up the extruder:
Screw Die Head Zone 4 Zone 3 Zone 2
Zone 1

Max (°C) 80 70 180 150 170 150 160 140 190 160 160 130 150 130 Min (°C)

# **PROCESSING TEMPERATURE**

Die Zone	Max (°C)	Min (°C)
Zone 5	80 ADTDAI	70 0
Zone 4	180	150
Zone 3	170	150
Zone 2	160	140
Zone 1	190	160



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# PVC-SRT012

# Storage

- Packaging should be kept closed during storage
- Ambient temperature should not exceed more than 40°C
- - Avoid direct exposure to sunlight and humid weathering
- Shelf life of the compound is 12 months from the date of manufacture.

# Safety:

**AWC** is classified as a non-dangerous material.

Packaging: It is available in the form of pellets and supplied in PP bags with a net content of 25 kg.

# SILK ROAD TRADERS



