

# PHIMER ABUS DS



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# PHIMER ABUS DS



## Key Features

- Food-contact safe, approved by FSSAI
- Water resistant
- Heat sealing properties
- OTR/WVTR/Odour barriers

## Applications



Extrusion film blowing



Surface coated paper

## APPROVED & CERTIFIED BY



## Typical Parameters

TECHNICAL PARAMETERS	UNIT	TYPICAL VALUE	STANDARD
MFI (190°C & 2.16kg)	g/10min	6-8	ASTM D1238
Tensile strength (Speed of test -50 mm/min)	MPa	8-10	ASTM D638
Tensile Modulus	MPa	20-50	ASTM D638
Flexural strength	MPa	3 - 4	ASTM D790
Flexural Modulus	MPa	93	ASTM D790
Elongation @ yield	%	>600	ASTM D638
Elongation @ break	%	>300	ASTM D638
Notched Impact Strength	kJ/m <sup>2</sup>	32-38	ASTM D256
Heat Deflection Temperature at 0.455 MPa	°C	47.5	ASTM D648
Vicat Softening Temperature (Load 10N at heating rate of 120°C/h)	°C	78.7	ASTM D1525
Density	g/cc	1.2-1.3	ASTM D792
Moisture	%	0.2-0.5	Gravimetric

\* Typical characteristics and not to be taken as specifications

## Storage

Bags should be stored in dry/closed conditions at temperature below 50°C and protected from UV/direct sunlight. During transportation and storage temperature may no exceed 70°C at anytime.

## Shelf-life

- For granules: 12 months from date to loading under proper storage conditions. If customers need to open bags and use them partially, we recommend sealing again properly and using it within 3 months.
- For film: We suggest customers use it within 12 months.

## Packaging

In 25kg bag, liner: PE/PWS.

## Pre-drying

It is recommended to pre-dry the material prior to getting the best processing performance. If the moisture of the resin is less than 0.05% pre-drying may not be needed. Typical drying conditions 1 hour at 90°C (194°F).

## Application

Phimer material is mainly used to make biodegradable materials, which are applicable to blow moulding processing of film products, typical products include but not limited to are supermarket shopping bags, courier bags, clothing bags and industrial packaging.

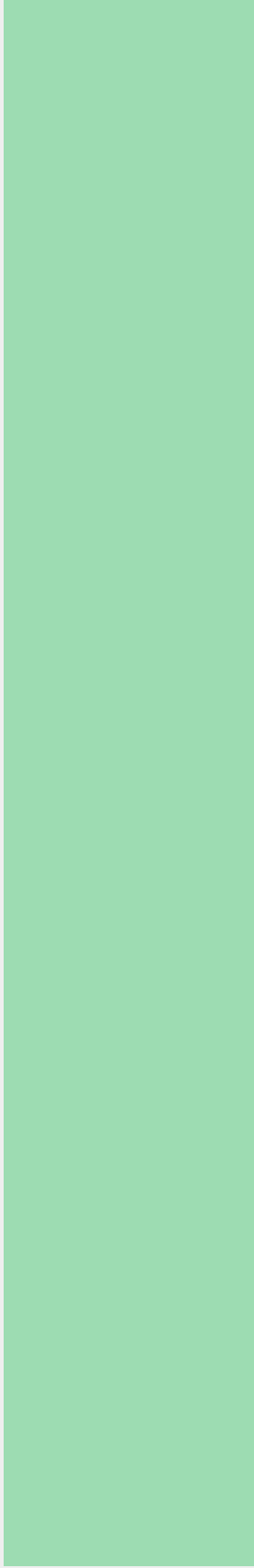
## Process data for films

Selection of extruder: Single screw extruder is applicable, length-diameter ratio of film blowing machine should be  $\geq 30$ .

Barrel zone 1	95°C
Barrel zone 2	105°C
Barrel zone 3	115°C
Candle filter zone	120°C
Rotating body unit	125°C
Die zone 1	120°C
Die zone 2	135°C
Extruder speed	50 RPM
NIP roller speed	25 RPM
Melt pressure	20 bar
Pneumatic pressure	7 bar
Blowing pressure	1 bar
Thickness of film	50 $\mu$ to 250 $\mu$

## Residence time

The residence time for Phimer ABUS - D55 in the extruder should remain less than five minutes. The extruded material will look darker or yellow with long residence time.



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