Lucofin® 1400HN

Ethylene Butyl Acrylate Copolymer

Lucobit AG

Message:

Lucofin 1400HN is a polar copolymer consisting of ethylene and butyl acrylate with low crystallinity. Due to its chemical structure Lucofin 1400HN is softer and more flexible than ethylene homopolymeres with comparable density. Lucofin 1400HN is supplied as uncoloured granules.
Lucofin 1400HN is used as component in multi-layer film constructions or as a polymer modifier to improve splitting resistance, environmental stress crack resistance ESCR, resistance to low temperatures, weldability, and processability.
Product advantages
easy processing on standard processing equipment
flexibility
impact strength at low temperatures (- 40 °C)
thermal stability of polymer (no corrosive by products)
good mechanical properties high end use temperature
good compatibility and filler acceptance
good organoleptics
environmentally sound
Applications
Lucofin 1400HN is used primarily for extrusion applications. In the field of film extrusion it is used for films for the construction and agricultural industry, FFS bags, but also for food packaging films. In addition, Lucofin 1400HN is ideally suited as a base resin for compounds or as an impact modifier for stiff polymers. Compounds based on Lucofin 1400HN can be used for profile and cable extrusion purposes and for the production of sealing membranes. Furthermore Lucofin 1400HN is used for X-linked closed cell foam applications.
Food Legislation
Lucofin 1400HN meets the food contact regulations in most countries.

General Information	
Features	High ESCR (Stress Cracking Resistance)
	Copolymer
	Environmental protection
	Weldable
	Workability, good
	Crosslinkable
	Good sensory characteristics
	Good flexibility
	Good tear strength
	Low temperature impact resistance
	Thermal stability, good
	Soft
	Compliance of Food Exposure
Uses	Packaging
	Films
	Cable sheath
	Architectural application field
	Sealant
	Membrane

	Agricultural application
	Food packaging
	Plastic modification

Appearance	Natural color
Forms	Particles
Processing Method	Film extrusion
	Extrusion
	Injection molding

Physical	Nominal Value	Unit	Test Method
Density	0.924	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.4	g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (F0)	> 1000	hr	ASTM D1693
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness			ISO 868
Shaw A	90		ISO 868
Shaw D	34		ISO 868
Ball Indentation Hardness (H 49/30)	8.00	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	62.0	MPa	ISO 527-2
Tensile Stress (Yield)	4.00	MPa	ISO 527-2
Tensile Strain (Yield)	15	%	ISO 527-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	70.0	°C	ISO 306/A50
Melting Temperature (DSC)	96.0	°C	ISO 3146
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Comonomer BA	16	%	DIN 51451
Injection	**Nominal Value**	**Unit**	
Processing (Melt) Temp	180 - 250	°C	
Mold Temperature	10.0 - 40.0	°C	
Extrusion	**Nominal Value**	**Unit**	
Melt Temperature	160 - 200	°C	
Extrusion instructions			

Blown films: approx. 160° - 190 °CFlat-sheet composites: approx. 160° - 230 °CCoatings: approx. 160° - 270 °C

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China