

EF-3A Polymer Modifier**Technical Data Sheet****I. Description**

Lushan® EF-3A is anhydride-modified polyethylene product and is available in pellet form.

II. Chemical Structure

Composition: Maleic Anhydride Modified Polyethylene.

III. Applications

EF-3A is designed for five(5) layer films composed of polyethylene (PE) and EVOH or PA. These grades are based on LLDPE and are highly stabilized for multi-layer tube application like oxygen barrier pipe and cosmetic tube/hose. EF-3A created super adhesion between EVOH and PE while maintaining an excellent processability equivalent to that of common LLDPE.

IV. Main Characteristics

1. High bonding strength with PE and PA/EVOH;
2. Little crystal point/ gel content/ fish eye;
3. Dilution ratio---1:8 to 1:5

V. Typical Physical Properties

Item	Unit	Test Standard	Typical Value (EF-3A)
Appearance	/	Visual	Transparent Granule
Melting flow index	g/10min (190℃, 2.16kg)	ASTM D1238	1.0
Melting point	℃	ASTM D2117	130
Density	g/cm ³	ASTM D1505	0.930
Elongation at break	%	ASTM D638	700

Vicat softening point	°C	ASTM D1525	116
Tensile strength at break	MPa	ASTM D638	31.8
Water content	%	HG/T2751	0.03
Application	/	/	EVOH/ NYLON-Tie Resin-PE

Note:

- 1. These are typical properties and not intended as specification.*
- 2. Lushan® EF-3A complies with FDA 21CFR175.105 and suitable for food contact.*

VI. Processing Temperature (for recommendation)

Processing Technology	Processing Temperature (°C)			
	Zone I	Zone II	Zone III	Mould Head
Extrusion	190	220	230	235

VII. Packages and Storage

1. Packed in 25kgs Paper-plastic bags.
2. Stored in a dry, cool and ventilated environment; avoid direct exposure to water and strong light. Avoid bulk package and securely wrap the unused part.
3. Shelf Life: one year.