



There Is Always a Better Way

ARIA POLYMER

Product Catalogue for the **Film & Packaging** Industry



THERE IS ALWAYS A BETTER WAY...



ARIA POLYMER is a multinational enterprise to provide technology research and manufacture top-notch additives and functional polymers, founded in 2009.

ARIA POLYMER is one of the few players in the region to develop series of products to meet domestic and international market needs, including:

- **MALEIC ANHYDRIDE GRAFTED POLYMERS** used as Coupling Agent and Compatibilizer, and
- **TIE LAYER ADHESIVES** used in Multilayer Structures, e.g., Multilayer Films, Pipes, Tubes, etc.;

In addition to these high-tech products, ARIA POLYMER manufactures a wide range of

- **ADDITIVE MASTERBATCHES** to improve specifications of different polymers.

Accordingly, our various products are widely used in:

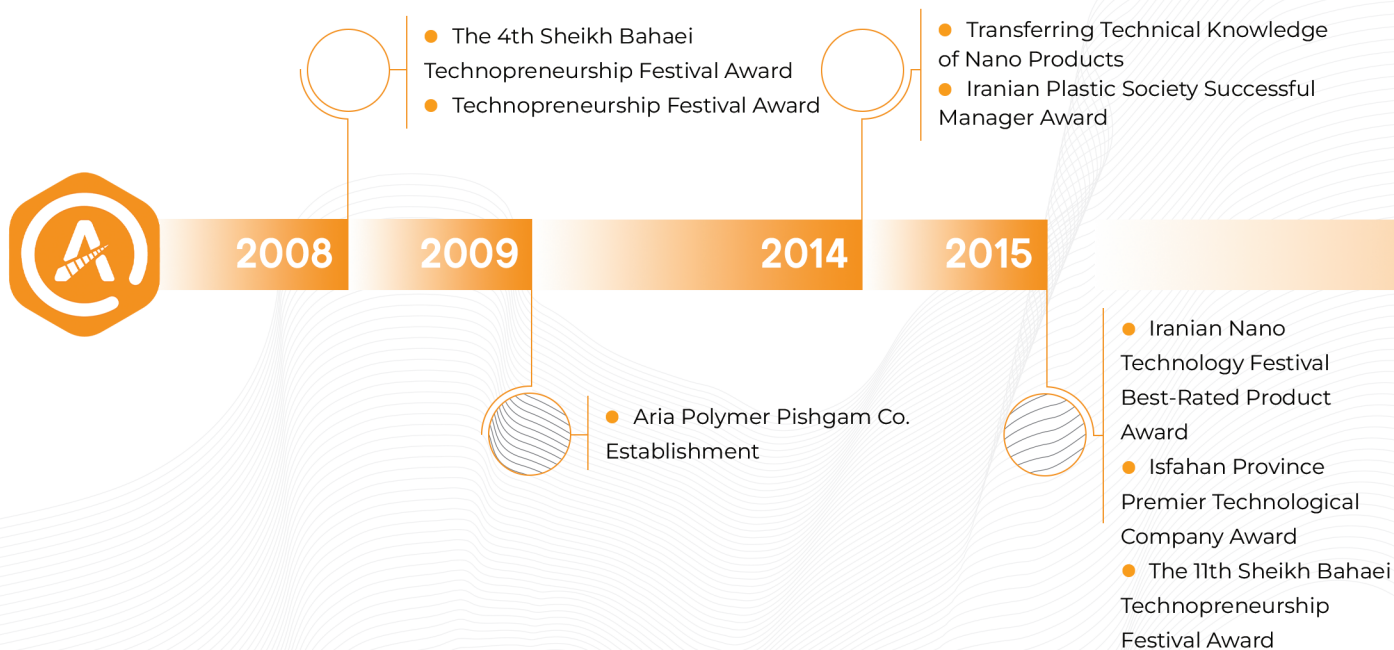
Automotive Compounds and Parts, Pipes, Packaging, Building and Civil Constructions, Medical Tools;
and Consumer Goods.

Holding **ISO 9001, ISO 10004 and ISO 17025**, Food and Drug Compliance, Oil Ministry Confirmation, being a member of different associations in Plastic and Polymer fields, having a well-equipped internal lab, accessing a wide range of petrochemical companies and a powerful supply chain, accessing university, knowledge poles and gifted graduated students, are all juxtaposed to enable ARIA POLYMER to provide the customers with state-of-the-art products.

And all these make us believe **THERE IS ALWAYS A BETTER WAY...**

Aria Polymer: from the Beginning to 2030

Timeline



2016



- Asian Science Park Association Grand Prize

2021



- Isfahan Province's Knowledge-Based Award
- Selected Exporter of Iran Polymer Industry

2022



- Selected Exporter of Iran Polymer Industry
- Excellence Award of Iran Polymer Industry

2030

70% Share of Innovative Products in Gross Sales

ADDITIVE MASTERBATCH

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Aria Add 2161
Optical Brightener
Masterbatch

Additive Masterbatch

ARIA ADD

ARIA ADD is a category of concentrated mixture of additives dispersed in a carrier resin, designed to impart specific properties or functionalities to plastic products. These additives are incorporated during the manufacturing process to enhance the plastic's performance, durability, or appearance. Essentially, it's a convenient way to introduce desired characteristics into plastics without directly handling and dispersing the often difficult-to-process additives. **ARIA ADD** products are widely used in every typical plastic process, such as injection molding, blow molding and extrusion molding.

Anti-Block Agent Masterbatch

Aria Add 2124

• Description

Aria Add 2124 is an economical anti-block agent masterbatch, containing additives which create separation between the surfaces and improve performance characteristics in blown film and cast application. Typically, anti-block additives have low compatibility with the polymer, allowing migration to the film surface



• Product Application

Anti-block agent for blown film and cast application

• Advantages

- Increase separation of film layers
- Improve performance characteristic
- Melt flow control

• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Active Ingredients	>10%	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	4.5±1.5 g/10min	ASTM D1238
Usage Level	0.5-5%	-

Anti-block Agent Masterbatch

Aria Add 2123

• Description

Aria Add 2123 is an economical inorganic anti-blocking agent masterbatch containing additives to create separation between the surfaces and improve performance characteristics in PE film, Cast, food packaging and FFS films.

• Product Application

Anti-block agent for PE film, Cast, and FFS films

• Advantages

- Increase separation of film layers
- Improve performance characteristic
- Enhanced Productivity



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Active Ingredients	15%	-
Density	0.94±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	1±0.5 g/10min	ASTM D1238
Usage Level	0.5-2.5%	-

Slip Agent Masterbatch Aria Add 2126

• Description

Aria Add 2126 is an economical slip agent masterbatch based on polyethylene, containing additives which manage the coefficient of friction and create separation between the surfaces and improve performance characteristics in blown film and cast application

• Product Application

Slip agent for blown film and cast application

Mold release agent for injection molding

• Advantages

- Friction reduction, fast slip
- Increase separation of film layers
- Improve performance characteristic
- Melt flow control
- Improve surface finish
- Improve flow dispersion of filled polymers
- Reduce machine wear and cleaning time
- Increase production rate



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Active Ingredients	>10%	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	4.5±1.5 g/10min	ASTM D1238
Usage Level	0.5-5%	-

Slip & Anti-Block Agent Masterbatch

Aria Add 2125

• Description

Aria Add 2125 is an economical slip agent masterbatch, containing additives which manage the coefficient of friction and create separation between the surfaces and improve performance characteristics in blown film and cast application

• Product Application

Slip & anti-block for blown & cast films

• Advantages

- Easily opening
- Improve melt flow control
- Lower coefficient of friction (COF)
- Enhance both appearance and function



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Active Ingredients	>10%	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	4.5±1.5 g/10min	ASTM D1238
Usage Level	0.5-5%	-

Slip & Anti-Block Agent Masterbatch

Aria Add Mix 2126

• Description

Aria Add Mix 2126 is a slip and anti-block agent masterbatch, containing additives which manage the coefficient of friction and create separation between the surfaces and improve performance characteristics in blown film and cast application. It provides an optimal mix between the slip agent and the anti-block agent



• Product Application

Slip and anti-block agent for blown film and cast application

• Advantages

- Friction reduction, slow slip
- Increase separation of film layers
- Improve performance characteristic
- Melt flow control
- Polyethylene (PE) based slip & antiblock agent masterbatc

• Technical Specifications

Properties	Value	Method
Appearance	Milky Granules	-
Carrier Resin	PE	-
Active Ingredients	>10%	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	4.5±1.5 g/10min	ASTM D1238
Usage Level	0.5-5%	-

Slip & Anti-Block Masterbatch

Aria Add 2136

• Description

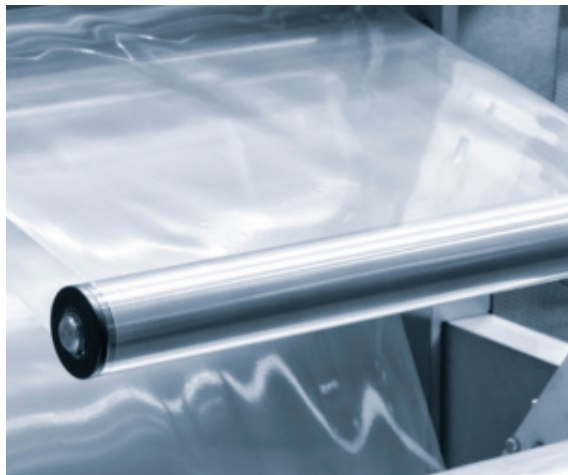
Aria Add 2136 is a slip & anti-block masterbatch agent, containing additives which manage an optimal mix between the slip agent and anti-block agent and improve the coefficient of friction and create separation between the surfaces

• Product Application

Slip & anti-block for blown & cast films

• Advantages

- High slip
- Friction reduction
- Improve melt flow control
- Excellent open-ability



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Anti-Block Agent Content	>10%	-
Slip Content	>7%	-
Density	0.99±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	7±2 g/10min	ASTM D1238
Usage Level	0.5-2%	-

Slip Agent Masterbatch Aria Add 2226

• Description

Aria Add 2226 is an economical slip agent masterbatch based on polypropylene, containing additives which manage the coefficient of friction and create separation between the surfaces and improve performance characteristics in film and cast application



• Product Application

Slip agent for film and cast application

• Advantages

- Friction reduction
- Product processing: sheet, film & other extrusion processes (PP)
- Increase production rate
- Improve flow & dispersion of filled polymers

• Technical Specifications

Properties	Value	Method
Appearance	Milky Granules	-
Carrier Resin	PP	-
Active Ingredients	>10%	-
Density	0.91±0.01 g/cm ³	ASTM D792
Melt Flow Index @230°C /2.16kg	6±2 g/10min	ASTM D1238
Usage Level	0.5-2%	-

Anti-Block Agent for CPP & BOPP

Aria Add 2424

• Description

Aria Add 2424 is an inorganic anti-blocking agent masterbatch, containing additives which create separation between the surfaces and improve performance characteristics in CPP and BOPP application

• Product Application

Anti-block agent for CPP & BOPP films

• Advantages

- High clarity film properties
- Increase separation of film layers
- Polypropylene (PP) based masterbatch
- General purpose anti-block for plain films with excellent anti-blocking effect



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PP	-
Active Ingredients	>5%	-
Density	0.93±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	19±2 g/10min	ASTM D1238
Usage Level	2-4%	-

Slip & Anti-Block Agent Masterbatch

Aria Add 2236

• Description

Aria Add 2236 is a slip & anti-block agent masterbatch based on polypropylene and contains additives which manage an optimal mix between slip agent and anti-block agent and provide the coefficient of friction and create separation between the surfaces. It improves performance characteristics in blown film and cast applications

• Product Application

Slip & anti-block for blown and cast applications

• Advantages

- Friction reduction
- Melt flow control
- Increase separation of film layers
- Improve performance characteristic



• Technical Specifications

Properties	Value	Method
Appearance	White to Grayish Granules	-
Carrier Resin	PP	-
Active Ingredients	>15%	-
Density	0.92±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	6±2 g/10min	ASTM D1238
Usage Level	0.5-2.5%	-

Anti-Block for CPP & BOPP Metalizable Films

Aria Add 2224T101

• Description

Aria Add 2224T101 is an organic anti-block agent masterbatch, containing additives which create separation between the surfaces and improve performance characteristics in CPP & BOPP film

• Product Application

Anti-block agent for CPP & BOPP metalizable films

• Advantages

- Consistent low COF & high optics
- Suitable for heat-sealable metallizable films
- Non migratory Slip/Antiblock for BOPP films



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PP	-
Active Ingredients	>6%	-
Density	0.9±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	7.5±1 g/10min	ASTM D1238
Usage Level	1-5%	-

Anti-UV Masterbatch Aria Add 2173

• Description

ria Add 2173 is a polyethylene-based masterbatch designed to provide long-lasting protection for PE products. It is a light stabilizer masterbatch containing a mixture of HALS (Hindered Amide Light Stabilizer) & UV absorbers

• Product Application

UV protection, especially for PE films, sheets & parts

• Advantages

- Increasing product lifetime
- Increasing color stability
- Preserving physical and mechanical degradation



• Technical Specifications

Properties	Value	Method
Appearance	Yellowish Granules	-
Carrier Resin	LDPE	-
Active Ingredients	>20%	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C /2.16kg	4.5±1 g/10min	ASTM D1238
Usage Level	0.5-10%	-

Black Masterbatch

Aria Add 2191

• Description

- Aria Add 2191 is a carbon black polyethylene based masterbatch, specially designed for coloring of polyethylene in injection molding and compounding applications, and also increase the UV-resistance of plastic products
- The black masterbatch based on a mixture of polyethylene filled with 40% carbon black is mainly used for any pipe productions, packaging film, and geomembrane industries



• Product Application

Black Masterbatch for pipe, packaging film, and geomembrane

• Advantages

- High dispersion
- High thermal stability
- Completely miscible vast range of plastic

• Technical Specifications

Properties	Value	Method
Appearance	Black Granules	-
Carbon Black Pigment	40±1%	ASTM D4218
Carrier Resin	PE	-
Density	1.1±0.1 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	15±3 g/10min	ASTM D1238
Absorption Moisture	<0.1%	ASTM D570
OIT (200°C)	40 min ≤ OIT	ISIRI 7186-6
Usage Level	According to condition and requirements	

White Masterbatch Aria Add 2113-1

• Description

Aria Add 2113-1 is a white masterbatch containing 70% finely dispersed white pigment and PE carrier resin, which provides optimum opacity for blown and cast films, extrusion, and injection parts

• Product Application

White masterbatch for film, extrusion, tube, and injection

• Advantages

- Well Dispersed
- Very high color strength
- Excellent Whiteness
- Good Melt strength



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
White Pigment	70±2%	ASTM D4218
Carrier Resin	PE	-
Density	1.9±0.2 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	30±10 g/10min	ASTM D1238
Moisture	Max 0.1%	ASTM D644
Usage Level	According to condition and requirements	

White Masterbatch

Aria Add 2113-4

• Description

Aria Add 2113-4 is a white masterbatch containing more than 60% finely dispersed white pigment, PE carrier resin, and Optical brightener, which provides optimum opacity for blown and cast films, extruded sheet, and injection or blow molded parts

• Product Application

White masterbatch for Film, Injection, and extruded sheet

• Advantages

- Well Dispersed
- Excellent Hiding Power
- Excellent Whiteness
- Good Melt strength



• Technical Specifications

Properties	Value	Method
Appearance	Bluish Color Shade Granules	
White Pigment	60±2%	ASTM D4218
Carrier Resin	PE	-
Density	1.8±0.1 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	45±10 g/10min	ASTM D1238
Moisture	Max 0.1%	ASTM D644
Usage Level	According to condition and requirements	

White Masterbatch Aria Add 2114

• Description

- Aria Add 2114 is a well-dispersed polyethylene based masterbatch
- Aria Add 2114 has very high color strength and good flow properties

• Product Application

White masterbatch for PE

• Advantages

- Well Dispersed
- Excellent Hiding Power
- Excellent Whiteness
- Good Melt strength



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
White Pigment	70±2%	ASTM D4218
Carrier Resin	PE	-
Density	1.8±0.2 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	3±1 g/10min	ASTM D1238
Moisture	Max 0.1%	ASTM D644
Usage Level	According to condition and requirements	

White Masterbatch Aria Add 2112

• Description

Aria Add 2112 is a white masterbatch containing 50% finely dispersed TiO₂, PE carrier resin, and Optical brightener, which provides optimum opacity for blown and cast films

• Product Application

White masterbatch for cast and blown film

• Advantages

- Well Dispersed
- Excellent Hiding Power
- Excellent Whiteness
- Good Melt strength



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
White Pigment (TiO ₂)	>50%	ASTM D4218
Carrier Resin	PE	-
Density	1.8±0.1 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	38±3 g/10min	ASTM D1238
Moisture	Max 0.1%	ASTM D644
Usage Level	According to condition and requirements	

White Masterbatch **Aria Add 2415**

• Description

Aria Add 2415 is a white masterbatch containing finely dispersed white pigment and polyolefin carrier resin, which provides optimum opacity for Raffia bags

• Product Application

White Masterbatch for Raffia Bags

• Advantages

- Easily processable
- Excellent whiteness & dispersion
- Chemical stability, permanence, and high coloring ability



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	
White Pigment	70±2%	ASTM D4218
Density	1.8±0.1 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	4±1 g/10min	ASTM D1238
Moisture	Max 0.2%	ASTM D644
Usage Level	According to condition and requirements	

Processing Aid Masterbatch

Aria Add 2105

• Description

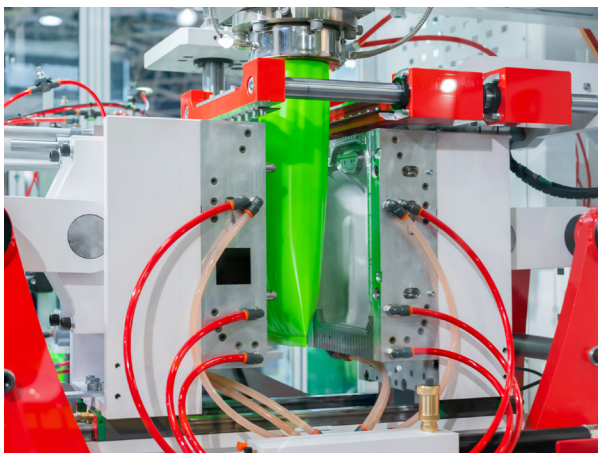
Aria Add 2105 is a processing aid (PPA) masterbatch, containing fluoropolymer (PVDF) based in a polyethylene carrier. It can improve PE processing and be recommended for polyolefin films, sheets, pipes, tubes, extrusion processes and stone paper

• Product Application

PPA for polyolefin films, sheets, pipes, tubes and paper stone

• Advantages

- Surface smoothness
- Less machine-direction drawing
- Improve the processability of recycled polymer
- Die build-up monitoring in Cast Film Line
- Improve processing lower MFI resins
- Melt fracture elimination
- Reduce operating pressure and temperature
- Increase output and energy saving



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	PE	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	2±1 g/10min	ASTM D1238
Usage Level	0.5-2.5%	-

Optical Brightener Masterbatch

Aria Add 2161

• Description

- Optical brightener masterbatch (fluorescent whitening agent) absorbs some part of the UV ray and re-emits it in the blue region of the visible spectrum.
- Aria Add 2161 is added in polymers to reduce yellowing, improve whiteness, and enhance the brightness of a product

• Product Application

PE films, sheets, parts and other extrusion processes

• Advantages

- Mask natural yellowing plastics
- Improve initial color
- Get brilliancy of colored articles
- It gives a smooth & glossy surface to film
- Absorbs UV radiation



• Technical Specifications

Properties	Value	Method
Appearance	Phosphoric Granules	
Carrier Resin	HDPE	-
Density	0.92±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	5±1 g/10min	ASTM D1238
Usage Level	0.2-1%	

Optical Brightener Masterbatch

Aria Add 2162

• Description

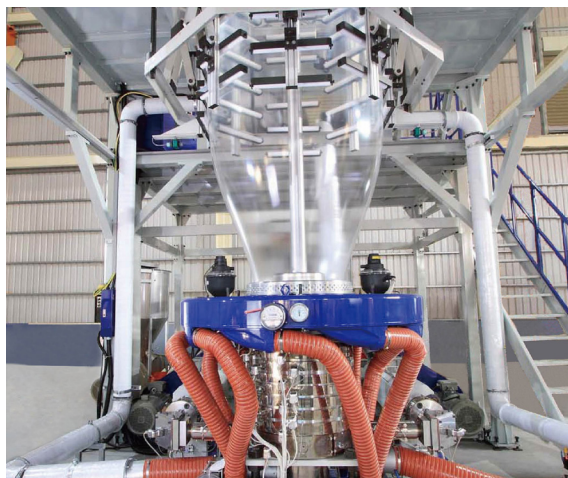
- Optical brightener masterbatch (fluorescent whitening agent) absorbs some part of the UV ray and re-emits it in the blue region of the visible spectrum
- Aria Add 2162 is added in polymers to reduce yellowing, improve whiteness, and enhance the brightness of a product

• Product Application

PE films, sheets, parts and other extrusion processes

• Advantages

- Mask natural yellowing plastics
- Improve initial color
- Get brilliancy of colored articles
- It gives a smooth & glossy surface to film
- Absorbs UV radiation



• Technical Specifications

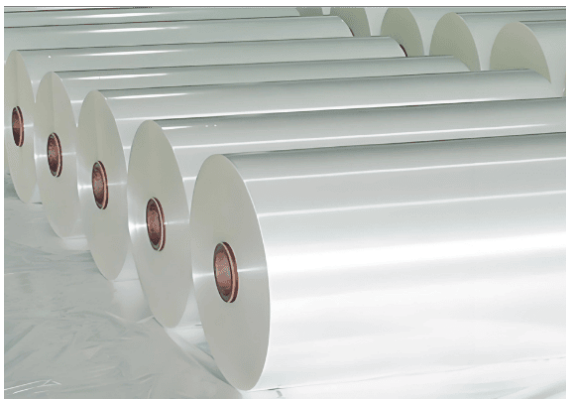
Properties	Value	Method
Appearance	Phosphoric Granules	
Carrier Resin	HDPE	-
Density	0.92±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	5±1 g/10min	ASTM D1238
Usage Level	0.2-1%	-

Anti-Static Masterbatch for CPP films

Aria Add 2215

• Description

Aria Add 2215 is an anti-static masterbatch with anti-static additive for neutralizing the surface charges of polypropylene polymers. Anti-static additives can reduce or eliminate static electrical charges to prevent problems such as dust accumulation and electronic static discharge damaging electronic equipment



• Product Application

Anti-static for CPP films

• Advantages

- Reduces Surface Resistivity of Plastics
- Prevents dust attraction to plastic parts
- Reduces risk of electrical discharge causing fire or explosion

• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Active Ingredients	>10 %	-
Carrier resin	PP	-
Density	0.9±0.01 g/cm ³	ASTM D792
Melt Flow Index @230°C/2.16kg	7±1 g/10min	ASTM D1238
Usage Level	2-10%	-

Desiccant Masterbatch Aria Add 2180

• Description

Aria Add 2180 is a desiccant masterbatch designed to absorb the moisture in plastics and nylon in order to eliminate moisture-related problems

• Product Application

Desiccant masterbatch

• Advantages

- Improves product quality and yield
- Increase productivity and reduce energy consumption
- Reduce prevention of moisture-related problems, including lacing and porosity of the molded problem
- Minimizes down glossing and hazing under high humidity application conditions



• Technical Specifications

Properties	Value	Method
Appearance	Granules	-
Active Ingredients	>70%	-
Carrier Resin	PE	-
Density	1.9±0.1 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	1±0.5 g/10min	ASTM D1238
Usage	0.5-1.5%	-

Dimensional Stabilizer Masterbatch

Aria Add 2451

• Description

Aria Add 2451 is a special additive package containing nanoparticles and carriers.

It has been primarily designed to act as a dimensional stabilizer and PP clarifier

• Product Application

Dimensional stabilizer and PP clarifier

• Advantages

- Dimensional stabilizer in PP bag, fibers, and PP packaging, especially PP woven bags
- PP clarifier in PP injection parts



• Technical Specifications

Properties	Value	Method
Appearance	Glassy Granules	-
Carrier Resin	PP	-
Density	0.92±0.01 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	10±2 g/10min	ASTM D1238
Usage Level	1-4%	-

Matting Agent for CPP & BOPP films

Aria Add 2160

• Description

Aria Add 2160 is a matte compound utilized in the production of all types of PP films created through various extrusion processes (BOPP and CPP films) when strict final optical properties are required

• Product Application

Matting agent for CPP & BOPP films

• Advantages

- Low gloss and optimal haze
- Good co-extrusion features
- Matt compound special for matt film



• Technical Specifications

Properties	Value	Method
Appearance	White Granules	-
Carrier Resin	Polyolefin	-
Density	0.91±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	2±1 g/10min	ASTM D1238
Usage	Matt Compound can be used 100%	



Compound **ARIA COMP**

ARIA COMP is a basic and widely-used category of polymers to enable the customers use their required material in the simplest possible way.

ARIA COMP includes a grade of **3LPE Top Coat Compound**, and some **Polyolefin Impact Modifiers**.



Impact Modifier and Stitching Improver Based Polyolefin **Aria Comp 4203**

• Description

Aria Comp 4203 polymer resin is a polyolefin base compound. It has been primarily designed to act as an impact modifier of polypropylene and polyethylene containers and parts

• Product Application

- Containers and parts
- Sealant film
- PE film
- Stretch film

• Advantages

- Improving impact properties of polyolefin containers without changing in transparency
- Increase in film stretch and elongation



• Technical Specifications

Properties	Value	Method
Density	0.90±0.02 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	2.7±0.5 g/10min	ASTM D1238
Usage Level	1-5 %	-



Coupling Agent

ARIA COUPLE

ARIA COUPLE has revolutionized numerous industries, due to its functionalized nature. It is a Maleic Anhydride (MAH) grafted polymer in granular form. These polar materials have been specifically designed to provide well dispersion and compatibility between non-polar polymers, e.g. polyolefins and fillers such as wood, glass fiber, ATH, Talc, etc. in addition, **ARIA COUPLE** is also used as an impact modifier in Polyamide compounds.

ARIA COUPLE includes various high-tech products based on **PE, PP, ABS and TPE**.

Maleic Anhydride Grafted Polypropylene

Aria Couple 1432

Description

- Maleic anhydride functionalized polypropylene produced by reactive extrusion
- Coupling agent & compatibilizer between polyolefin & polar polymers, fillers, etc.

Product Application

COUPLING AGENT FOR PP &

- Reinforcing materials e.g., GF in PP/GF compounds 1.5-2.5%
- Fillers e.g., CaCo3 polyolefin-based compounds 1.5-3%

COMPATIBILIZER BETWEEN PP &

- Polar polymers e.g., polyamide 1.5-3%

Advantages

DISPERSION

Achieve optimum dispersion & distribution of polar polymer, fillers, starch, glass fiber, etc. in non-polar polymer matrix

MECHANICAL PROPERTIES

Improve mechanical properties e.g., tensile strength, impact resistance & flexural modulus in polyolefin & biodegradable containers

OTHER

- Eliminate output variation
- Increase permeability of polyolefin
- Achieve dimensional stability
- Increase surface smoothness of final products

Technical Specifications

Properties	Value	Method
Density	0.91 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	75±25 g/10min	ASTM D1238
Maleic Anhydride Graft Level	High*	Titration Method

* Low <0.25wt%, Medium 0.25-0.5wt%, High 0.5-1.0wt%



Maleic Anhydride Grafted Polypropylene

Aria Couple 1432T188

Description

- Maleic anhydride functionalized polypropylene produced by reactive extrusion
- Coupling agent & compatibilizer between polyolefin & polar polymers, fillers, etc.

Product Application

COUPLING AGENT FOR PP &

- Reinforcing materials e.g., GF in PP/GF compounds 1.5-2.5%
- Fillers e.g., CaCo3 polyolefin-based compounds 1.5-3%

COMPATIBILIZER PP &

- Polar polymers e.g., polyamide 1.5-3%

Advantages

DISPERSION

Achieve optimum dispersion & distribution of polar polymer, fillers, starch, glass fiber, etc. in non-polar polymer matrix

MECHANICAL PROPERTIES

Improve mechanical properties e.g., tensile strength, impact resistance & flexural modulus in polyolefin & biodegradable containers

OTHER

- Eliminate output variation
- Increase permeability of polyolefin
- Achieve dimensional stability
- Increase surface smoothness of final products

Technical Specifications

Properties	Value	Method
Density	0.91 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	130±20 g/10min	ASTM D1238
Maleic Anhydride Graft Level	High*	Titration Method

* Low <0.25wt%, Medium 0.25-0.5wt%, High 0.5-1.0wt%



Maleic Anhydride Grafted Linear Low Density Polyethylene

Aria Couple 1196

Description

- Maleic anhydride functionalized polyethylene produced by reactive extrusion
- Coupling agent & compatibilizer between polyolefin & polar polymers, fillers, etc.

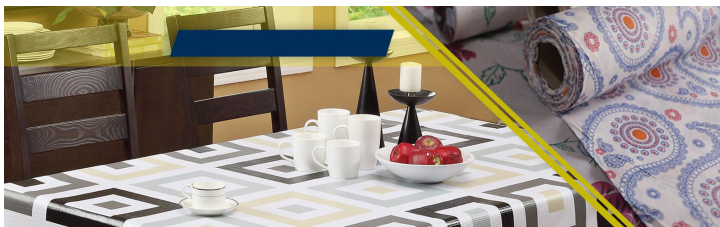
Product Application

COUPLING AGENT FOR PE OR PVC

- Fillers, e.g., starch in biodegradable polyolefin compounds 1.5-5%
- Reinforcing agents such as glass fiber, wood flour, and HFFR additives 1.5-6%
- Adhesion promoter for PE films or lamination coating 5-15%

COMPATIBILIZER PE

- Polar polymers e.g., Polycarbonate 1.5-5%



Technical Specifications

Properties	Value	Method
Density	0.93 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	0.5-1.5 g/10min	ASTM D1238
Maleic Anhydride Graft Level	High*	Titration Method

* Low <0.25wt%, Medium 0.25-0.5wt%, High 0.5-1.0wt%

Advantages

DISPERSION

Achieve optimum dispersion & distribution of polar polymer, fillers, starch, glass fiber, etc., in the non-polar polymer matrix

MECHANICAL PROPERTIES

Improve mechanical properties e.g., tensile strength, impact resistance & flexural modulus in non-polar polymers & biodegradable containers

OTHER

- Eliminate output variation
- Increase permeability of product
- Achieve dimensional stability
- Increase smoothness of final products

Maleic Anhydride Modified Low Density Polyethylene

Aria Couple 1125

Description

- Maleic anhydride functionalized low density polyethylene produced by reactive extrusion
- Coupling agent & compatibilizer between polyolefin & polar polymers, fillers, etc.

Product Application

COUPLING AGENT FOR PE &

- Fillers e.g., starch in biodegradable polyolefin compounds 1.5-5%
- Reinforcing agent such as glass fiber & wood floor 1.5-4%
- Flame retardant fillers e.g., ATH & MDH in HFFR cable compounds 3-6%

COMPATIBILIZER PE &

- Polar polymers e.g., Polycarbonate 1.5-5%



Technical Specifications

Properties	Value	Method
Density	<0.93 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	1.2±0.5 g/10min	ASTM D1238
Maleic Anhydride Graft Level	High*	Titration Method

* Low <0.25wt%, Medium 0.25-0.5wt%, High 0.5-1.0wt%

Advantages

DISPERSION

Achieve optimum dispersion & distribution of polar polymer, fillers, starch, glass fiber, etc. in non-polar polymer matrix

MECHANICAL PROPERTIES

Improve mechanical properties e.g., tensile strength, impact resistance & flexural modulus in polyolefin & biodegradable containers

OTHER

- Eliminate output variation
- Increase permeability of product
- Achieve dimensional stability
- Increase surface smoothness of final products

Ethylene Copolymer Functionalized by Maleic Anhydride

Aria Couple 1937

Description

- Maleic anhydride functionalized ethylene copolymer produced by reactive extrusion
- It has been primarily designed to use in adhesive formulation and in polar and non-polar polymer compound such as EVA/PE and PA/PE

Product Application

COUPLING AGENT FOR EVA &

Fillers and reinforcing agents
e.g., GF and other mineral
fillers in EVA compounds 3-15%

COMPATIBILIZER FOR POLYOLEFINES &

Polar polymers e.g., PA 1.3-5%

Advantages

DISPERSION

Function as a coupling agent between reinforcing materials such as glass fibers or mineral fillers and EVA to achieve superior mechanical properties

MECHANICAL PROPERTIES

Improve mechanical properties e.g., tensile strength, impact resistance & flexural modulus in EVA compounds

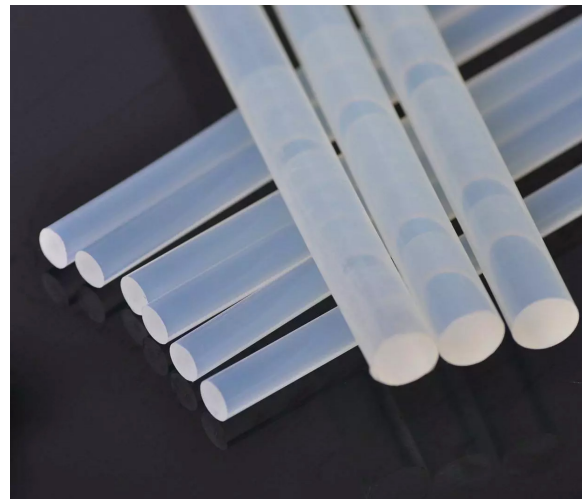
OTHER

- Eliminate output variation
- Increase permeability of polyolefin
- Achieve dimensional stability
- Increase surface smoothness of final products

Technical Specifications

Properties	Value	Method
Density	<0.94 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	0.5-1.5 g/10min	ASTM D1238
Maleic Anhydride Graft Level	Very High*	Titration Method

*Low <0.25wt%, Medium 0.25-0.5wt%, High 0.5-1.0wt%, Very High > 1.0wt%





Aria Couple
Maleic Anhydride
Crafted Polyethylene





Tie Layer Adhesive

ARIA ADHESIVE

ARIA ADHESIVE is an inseparable part of many polymer-based multilayer structures. It is a Tie Layer Adhesive in granule and powder form to make a firm bond between polyolefin and non-polymer layers.

ARIA ADHESIVE is specifically designed to be used in vital industries, e.g. **Steel Pipe Coating, PEX and PERT Pipes, Reinforced Corrugated Pipes, Oxygen Barrier Packaging Films, Cosmetic and Hygienic Tubes, Plastic Fuel Tanks, Aluminum Composite Panels, etc.**

Tie Layer Adhesive

Aria Adhesive 4100T301

Description

Aria Adhesive 4100T301 is a LLDPE based adhesive resin designed as an intermediate layer between polyolefin layers with polar polymers in multilayer structure in flexible or rigid films in packaging and tube industry



Processing Condition Suggestion

Zone1(°C)

190

Zone2(°C)

190

Zone3(°C)

210

Zone4(°C)

210

...(°C)

210

Die(°C)

210

Product Application

Adhesion Layer

- Multilayer structure in flexible or rigid films in packaging and tube industry
- Blown film, cast film, Sheet

Advantages

- High adhesion between PE layers and PA, EVOH and PET
- Transparent

Technical Specifications

Properties	Value	Method
Density	0.91 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	1.7±0.3 g/10min	ASTM D1238
Melting Temperature	130±5 °C	ISO 113571
Vicat Softening Point	85±3 °C	ISO 306
Tensile Strain at Break(50mm/min)	>600 %	ISO 527
Tensile Stress at Yield(50mm/min)	10 ±3 MPa	ISO 527
Tensile Stress at Break(50mm/min)	17±3 MPa	ISO 527
Hardness Shore	40±2 D Scale	ISO 868

Tie Layer Adhesive

Aria Adhesive 4100T250

Description

Aria Adhesive 4100T250 is an LLDPE based adhesive resin designed as an intermediate layer between polyolefin layers with polar polymers in multilayer structure in flexible or rigid films in packaging and tube industry

Product Application

Adhesion Layer

Multilayer structure in flexible or rigid films in packaging and tube industry

Advantages

- High adhesion between PE layers and PA, EVOH and PET
- Transparent

Technical Specifications



Properties

Value

Method

Density	0.91 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	2.1±0.6 g/10min	ASTM D1238
Melting Temperature	130±3 °C	ISO 113571
Vicat Softening Point	83±3 °C	ISO 306
Tensile Strain at Break(50mm/min)	>600 %	ISO 527
Tensile Stress at Yield(50mm/min)	10±3 MPa	ISO 527
Tensile Stress at Break(50mm/min)	16±3 MPa	ISO 527
Hardness Shore	49±4 D Scale	ISO 868

Processing Condition Suggestion

Zone1(°C)

180...200

Zone2(°C)

180...200

Zone3(°C)

180...200

Zone4(°C)

180...200

...(°C)

200...210

Die(°C)

200...230

Tie Layer Adhesive (Special Applications Like Double Bubble, Triple Bubble Blown Film)

Aria Adhesive 4100T328

• Description

Aria Adhesive 4100T328 is a Polyolefin based adhesive resin designed as an intermediate layer between PE and PA or EVOH in blown and cast film and especially double-bubble applications



• Product Application

Adhesion Layer

- Double, triple bubble Blown film
- Blown film, cast film, Sheet

• Advantages

- High adhesion between PE layers and PA, EVOH and PET
- Transparent

• Technical Specifications

Properties	Value	Method
Density	0.90 g/cm ³	ASTM D792
Melt Flow Index @190°C/2.16kg	2.3±0.4 g/10min	ASTM D1238
Melting Temperature	106 °C	ISO 113571
Vicat Softening Point	68 °C	ISO 306
Tensile Strain at Break(50mm/min)	>600 %	ISO 527
Tensile Stress at Yield(50mm/min)	51 MPa	ISO 527
Hardness Shore	35 D Scale	ISO 868

• Processing Condition Suggestion

Zone1(°C)

160

Zone2(°C)

180

Zone3(°C)

180

Zone4(°C)

180

...(°C)

180

Die(°C)

200



**Download
Catalogue**



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