



There Is Always a Better Way

**ARIA POLYMER**

Product Catalogue for the **Injection & Blow Molding** 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:

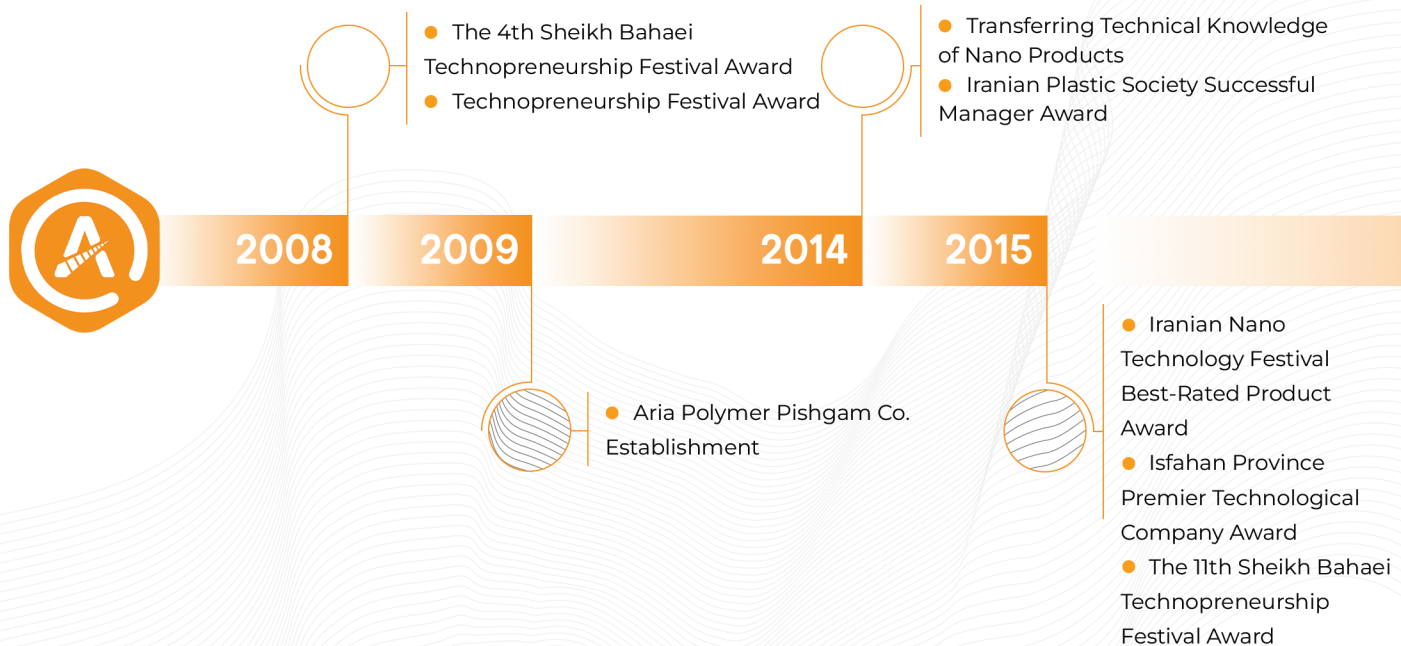
Automotive Compounds and Parts, Pipes, Packaging, Building and Civil Constructions, Medical Tools;  
and Consumer Goods.

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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Additive Masterbatch

## **ARIA ADD**

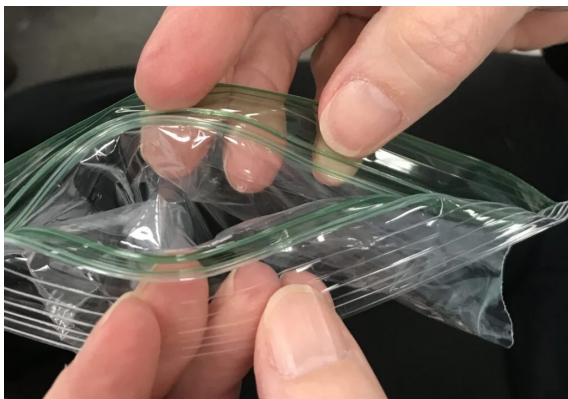
**ARIA ADD** is a category of concentrated mixture of additives dispersed in a carrier resin, designed to impart specific properties or functionalities to plastic products. These additives are incorporated during the manufacturing process to enhance the plastic's performance, durability, or appearance. 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C /2.16kg | 4.5±1.5 g/10min             | ASTM D1238 |
| Usage Level                    | 0.5-5%                      | -          |

# 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C /2.16kg | 4.5±1.5 g/10min             | ASTM D1238 |
| Usage Level                    | 0.5-5%                      | -          |

# 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @230°C /2.16kg | 6±2 g/10min                 | ASTM D1238 |
| Usage Level                    | 0.5-2%                      | -          |

## 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C /2.16kg | 6±2 g/10min                 | ASTM D1238 |
| Usage Level                    | 0.5-2.5%                    | -          |

# 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C /2.16kg | 4.5±1 g/10min               | ASTM D1238 |
| Usage Level                    | 0.5-10%                     | -          |

## Anti-UV Masterbatch

# Aria Add 2176

### • Description

ria Add 2176 is a polyethylene-based masterbatch designed to provide longlasting 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C /2.16kg | 7±2.5 g/10min               | ASTM D1238 |
| Usage Level                    | 0.5-10%                     | -          |

# Anti-UV Masterbatch **Aria Add 2273**

## • Description

Aria Add 2273 is a polypropylene-based masterbatch designed to provide long-lasting protection for PP films, sheets & parts. It is a light stabilizer masterbatch containing a mixture of HALS (Hindered Amide Light Stabilizer) & UV absorbers

## • Product Application

UV protection for PP parts, packaging, especially woven bags & nonwoven fabrics

## • Advantages

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



## • Technical Specifications

| Properties                    | Value                       | Method     |
|-------------------------------|-----------------------------|------------|
| Appearance                    | Granules                    | -          |
| Carrier Resin                 | PP                          | -          |
| Active Ingredients            | >20%                        |            |
| Density                       | 0.91±0.01 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 5±2 g/10min                 | ASTM D1238 |
| Usage Level                   | 1-5%                        |            |

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 <sup>3</sup>               | 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 <sup>3</sup>               | 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 <sup>3</sup>               | 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 2113-5

## • Description

Aria Add 2113-5 is a white masterbatch of 60% finely dispersed white pigment, which provides optimum opacity for Rotational molded parts, blown and cast films, and injection or blow molded parts

## • Product Application

White masterbatch for Rotational molded parts

## • Advantages

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



## • Technical Specifications

| Properties                    | Value                                   | Method     |
|-------------------------------|-----------------------------------------|------------|
| Appearance                    | Bluish White Granules                   |            |
| White Pigment                 | 60±2%                                   | ASTM D4218 |
| Carrier Resin                 | PE                                      | -          |
| Density                       | 1.7±0.1 g/cm <sup>3</sup>               | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 45±5 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 <sup>3</sup>               | 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 |            |

Processing Aid Masterbatch

# Aria Add 2105

## • Description

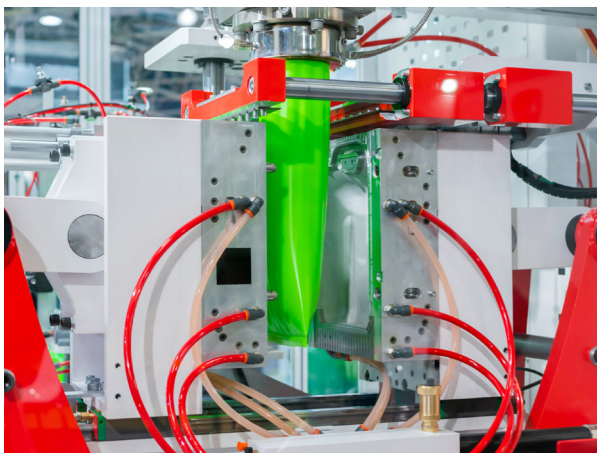
Aria Add 2105 is a processing aid (PPA) masterbatch, containing fluoropolymer (PVDF) based in a polyethylene carrier. It can improve PE processing and be recommended for polyolefin films, sheets, pipes, tubes, extrusion processes and stone paper

## • 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 <sup>3</sup> | 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 <sup>3</sup> | 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

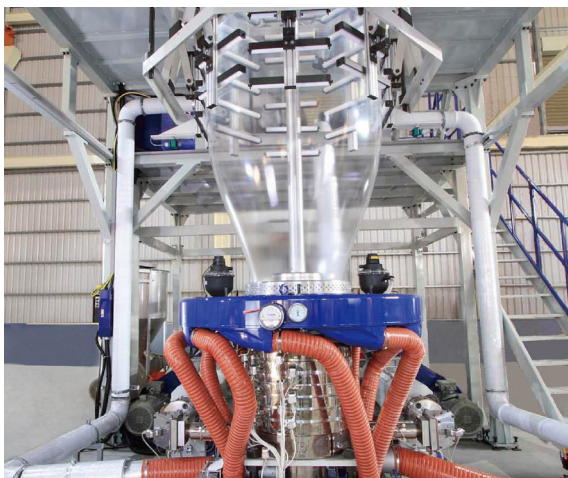
- Optical brightener masterbatch (fluorescent whitening agent) absorbs some part of the UV ray and re-emits it in the blue region of the visible spectrum
- Aria Add 2162 is added in polymers to reduce yellowing, improve whiteness, and enhance the brightness of a product

### • 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 5±1 g/10min                 | ASTM D1238 |
| Usage Level                   | 0.2-1%                      | -          |

# MFI Modifier Masterbatch

## Aria Add 2445

### • Description

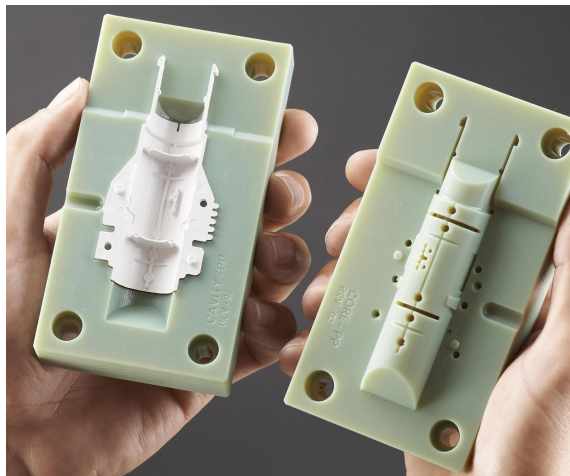
- Polypropylene based masterbatch reactive extrusion
- MFI modifier and viscosity reducer masterbatch

### • Product Application

PP Melt Flow increase as masterbatch

### • Advantages

- Enhance melt blown process
- Increase MFI of PP compounds
- Increase production rate
- Better and softer surface properties of melt blown products
- Reduce warpage
- Improve mixing of pigment/color and filler in PP matrix



### • Technical Specifications

| Properties                    | Value                      | Method     |
|-------------------------------|----------------------------|------------|
| Appearance                    | White Granules             | -          |
| Carrier Resin                 | PP                         | -          |
| Density                       | 0.9±0.01 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | >70 g/10min                | ASTM D1238 |
| Usage                         | 0.5-10%                    | -          |

## MFI Modifier Masterbatch

# Aria Add 2440T136

### • Description

- Polypropylene based masterbatch reactive extrusion
- MFI modifier and viscosity reducer masterbatch

### • Product Application

PP Melt Flow increase as masterbatch

### • Advantages

- Enhance melt blown process
- Increase MFI of PP compounds
- Increase production rate
- Better and softer surface properties of melt blown products
- Reduce warpage
- Improve mixing of pigment/color and filler in PP matrix



### • Technical Specifications

| Properties                    | Value                      | Method     |
|-------------------------------|----------------------------|------------|
| Appearance                    | Phosphoric Granules        |            |
| Carrier Resin                 | PP                         | -          |
| Density                       | 0.9±0.01 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | ≥100 g/10min               | ASTM D1238 |
| Usage Level                   | 1-10%                      | -          |

# Anti-Static Masterbatch

## Aria Add 2115

### • Description

Aria Add 2115 is anti-static masterbatch with anti-static additives for neutralizing the surface charges of polyethylene polymers. Anti-static additives can reduce or eliminate static electrical charges to prevent problems such as dust accumulation (which can ruin clarity and surface finish) and electronic static discharge damaging electronic equipment

### • Product Application

Anti-static for PE films, PE sheets, and Injection molded parts

### • Advantages

- Reduces Surface Resistivity of Plastics
- Prevents dust attraction to plastic parts
- Reduces Static charge built-up on plastics
- Prevents shock discharge during production and handling



### • Technical Specifications

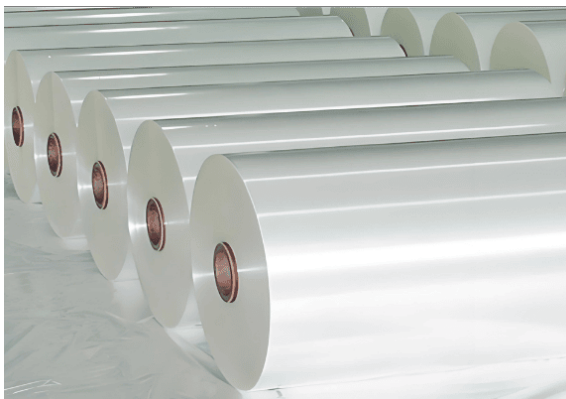
| Properties                    | Value                       | Method     |
|-------------------------------|-----------------------------|------------|
| Appearance                    | Milky Granules              | -          |
| Active Ingredients            | >10%                        | -          |
| Carrier Resin                 | PE                          | -          |
| Density                       | 0.92±0.01 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 4±2 g/10min                 | ASTM D1238 |
| Usage                         | 0.5-3%                      | -          |

## 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 <sup>3</sup> | 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 1±0.5 g/10min             | ASTM D1238 |
| Usage                         | 0.5-1.5%                  | -          |





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 1432T112

### 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 <sup>3</sup> | 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%



## 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 <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 2.7±0.5 g/10min             | ASTM D1238 |
| Usage Level                   | 1-5 %                       | -          |

# Impact Modifier Based Polypropylene

## Aria Comp 4410

### • Description

Aria Comp 4410 polymer resin is a polypropylene base compound. It has been primarily designed to act as an impact modifier of polypropylene containers and parts

### • Product Application

Containers and parts

### • Advantages

- Improving impact properties of polyolefin containers without changing in transparency
- Scratch resistance of PP plastic containers



### • Technical Specifications

| Properties                    | Value                       | Method     |
|-------------------------------|-----------------------------|------------|
| Density                       | 0.91±0.02 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @190°C/2.16kg | 2.5±1 g/10min               | ASTM D1238 |
| Usage Level                   | 3-7 %                       | -          |

# Polyolefin Compound (Injection Molding)

## Aria Comp 4329

### • Description

Aria Comp 4329 polymer resin is a polyolefin base compound. It has been primarily designed to injection molding for parts

### • Product Application

Injection molding for parts

### • Advantages

- Good impact properties
- Proper processability



### • Processing Condition Suggestion

Zone1(°C)

180...200

Zone2(°C)

180...200

Zone3(°C)

180...200

Zone4(°C)

200...210

...(°C)

200...210

Die(°C)

210...230

### • Technical Specifications

| Properties                        | Value                       | Method     |
|-----------------------------------|-----------------------------|------------|
| Density                           | 0.92±0.01 g/cm <sup>3</sup> | ASTM D792  |
| Melt Flow Index @230°C/2.16kg     | 9±3 g/10min                 | ASTM D1238 |
| Melting Temperature               | 150±5 °C                    | ISO 113571 |
| Vicat Softening Point             | 134±4 °C                    | ASTM D1525 |
| Tensile Strain at Break(50mm/min) | >120 %                      | ASTM D638  |
| Tensile Stress at Yield(50mm/min) | 23±5 MPa                    | ASTM D638  |
| Flexural Modulus                  | 1500 MPa                    | ASTM D790  |
| Izod Impact Strength (notched)    | 78 J/m                      | ASTM D256  |
| at 23 °C                          |                             |            |



- Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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