



The functional color company®

ARAPLAST-30 in short:

- * Fluorescent melting pigments
- * Excellent balance between color strength and brightness / fluorescence
- * Improved heat stability
- * Low plate out
- * Low dusting
- * Low odor
- * Decomposition T > 300 °C.
- * Heat stability: 240 °C / 5 minutes
- * Average particle size: 7-20 µm

ARAPLAST-30 SERIES

**For Coloring Olefins
HDPE, LDPE, MDPE, PP, cPP**

TPU

MASTER BATCHES

Injection Molding . Blow molding

Film blowing

Some other plastics

Regulatory & Ecotox

- All non-polymeric components are registered in EINECS and TSCA (incl. polymers in TSCA).
- All non-polymeric components are registered respectively preregistered in REACH
- EN71 part 3 conformity (purity requirement). Still tests have to be carried out on final application.
- Heavy metals free (with exception of the natural values in the ppm range).

Technology & Applications

ARALON® ARAPLAST-30 are developed as an optimal choice for coloring olefins. While other Stir-In Fluorescent pigments keep their particle size and shape in the application, ARALON® Melting Fluorescent Pigments do melt in the final application without being dissolved; they form distinct Nano phases. This technology insures highest color strength with a high degree of heat stability.

In addition to infinitely low migration, efflorescence and plate out characteristics, ARALON® Melting Fluorescent Pigments have the crucial compatibility with Olefins (HDPE, MDPE, LDPE, PP, cPP) and TPU.

For making Master batches a processing temperature of 150 °C is recommended. For injection or blow molding, it is recommended to follow the instructions mentioned in the technical data sheet of the processed polymer.

Depending on the thickness of the final application, it is recommended to have 1-2 % of ARAPLAST in the final application for a final thickness of 1,5 mm or in thicker applications, while the pigment load need to go up continuously by reduced final application thickness to reach 10% for example in 0,1 mm thin applications.

Although it is possible to increase the load of ARAPLAST till 40% in the Master batch, it is recommended to have only 25 - 30% pigment load for optimal processing.

Avoid the introduction of additives, which contain metal ions (some stea- rates) as such components might lead to fluorescence quenching. For this, the content of metals and heavy metals is right important by changing the raw material source of any of the components used in final products colored with fluorescent melting pigments.

Light Fastness & Heat Stability

Light Fastness

ARAPLAST series can partially resist the multiple factors, generally known to influence light fastness and, depending on the shade, values up to 5 on the BWS can be achieved.

Heat Stability

ARAPLAST series can withstand temperatures of above 240 °C for up to 5 minutes without affecting the perceived shades. Resistance to even higher temperatures is possible but for shorter exposure time.

Storage & Shelf life

ARAPLAST series products are stable, provided they are stored in dry places at ambient temperatures (below 40 °C) the predicted shelf life is 60 months. However depending on the quality of storage conditions, products might be used beyond this shelf life period.

Migration & Efflorescence

ARAPLAST-30 series products are developed for high technical requirements regarding migration and efflorescence while high color strength, heat stability and reflection are maintained.

All performance parameters depend highly on the individual process parameters. Individual recommendations are gladly

Physical & Chemical properties

- Resin / Carrier: Modified polyester-amid resin
- Melting range: 90 - 150 °C
- Melting temperature: 95 - 130 °C
- Volatile organic compounds: 0%
- Phthalates plasticisers: 0%
- Particle size: 7-20 µm
- Spec. Gravity: 1.2
- Bulking value: 0.5 g/ml

Any given technical information is given on a purely informative basis. ARALON cannot give any warranty for a particular use.

Package = Minimal order

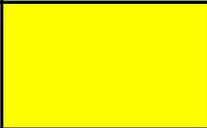
1 Carton BOX= 20 kg

Processing polymer	R = Recommended. NR = Not recommended. T = Need to be tested
Polyethylene (HDPE, MDPE, LDPE,)	R
Polypropylene (also cPP)	R
TPU	R
ABS, PS, PS, PMMA, PA, Rigid PVC, PU	T
Polyester, Woven PP, Woven Polyester	T

Available colors

ARAPLAST-30 Series		
ARAPLAST-300	LEMON	
ARAPLAST-313	STRONG ORANGE	
ARAPLAST-305*	RED	
ARAPLAST-306	PINK	
<p>The above shades are only indicative; computer screens and conventional printers cannot reproduce true fluorescent shades.</p> <p>* not ready yet</p>		

Mixing recommendations

25% MB / ARAPLAST-300 LEMON 4 parts 20 MB % PIGMENT GREEN 7 0,1-0,3 parts	Fluorescent GREEN	
25% MB / ARAPLAST-300 LEMON 4 parts 25% MB / ARAPLAST-103 ORANGE 0,04 - 0,1 parts	Fluorescent YELLOW	
<p>For more hiding power and pastel shades use ZnS pigment dispersions instead of TiO₂ pigment dispersions to preserve optimal brightness, especially under UV light. Anyway this works only at low temperatures (<190 °C) as many ZnS pigments causes decomposition of fluorescent melting pigments at higher temperatures.</p>		
2 - 5 % of the pigment part of conventional Master batches of similar shades to ARAPLAST-10 / -20 colors	Higher color strength without noticeable loss of brightness	Stronger shades



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About ARALON:

Today, ARALON – The NEW supplier of daylight fluorescent and functional pigments. Development, manufacturing and marketing of pigments for the paints & coatings (ARACO products), plastics (ARAPLAST), aerosols (ARASOL), and printing inks (ARAPRINT) industries only commenced in 2013 at its greenfield construction in 56412 Heiligenroth, Germany, half-way between Cologne and Frankfurt. ARALON's strengths are apparent in three key areas:

- State-of-the-art encapsulation technology coupled with modern and efficient manufacturing assets and lean operations capable of delivering best-in-class fluorescent pigments at competitive cost.
- Unique fluorescent ARAPLAST-10&20-melting pigments permitting coloration of thin olefin based films in single and multilayer packaging.
- Next generation ARAGEN-chemistry enabling unprecedented light stability of formaldehyde-free fluorescent pigments without compromising other performance attributes.

ARALON wants to surprise with best-in-class products, innovations that matter and prices hard to ignore – TRY US!

ARALON, What is behind the name and the logo?

ARALON was created as a name for our company based on the ARA, which is kind of colorful parrot. The wonderful and bright colors of the parrot's feathers are the result of light refraction through nano-sized holes in the natural polymer structure of the parrot feathers. Depending on the hole size and the number of feather layers results in an unlimited number of bright and colorful shades of light, seen by our eyes as being the color of the feathers themselves.

This has, for our company, a relevance of many kinds. Initially the brightness and purity of the parrot's colors is similar, but often less when compared to the brightness and purity of our fluorescent colors. Further, the colors of the feathers were created in completely natural way, which is for our R&D development, an orientation for the future horizons of the company.

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