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Irgalite® Yellow B3RN

Chemical type

Diarylide*

CI Constitution No

21108*

CI Generic name

Pigment Yellow 83*



full shade over white
(0.1 % in HDPE)



full shade over black
(0.1 % in HDPE)



1/3 ISD in HDPE

L*	77.3	61.5	87.0
C*	87.0	57.8	70.5
h	74.4	79.3	78.5
a	23.4	10.7	14.0
b	83.8	56.8	69.1

Plastics-specific remarks

Red shade yellow with high saturation. Recommended for indoor applications, where an economical solution is required.
For processing temperatures below 200 °C

* At temperatures above 200 °C diarylide pigments may decompose. Users are advised to follow the recommendation of ETAD information No. 2

Application suitability

Recommended:
PVC
PVC/Rigid-PVC
PVC/Plasticized-PVC
Polyolefins/LDPE/LLDPE
Other Polymers – Elastomers
Other Polymers – Elastomers/Rubber
Other Polymers – Elastomers/PUR Coating

Potentially suitable:
Polyolefins
Polyolefins/PP
Polyolefins/HDPE

Depth of shade

1/3 ISD % at 1 % TiO ₂ in PVC	0.05
1/3 ISD % at 1 % TiO ₂ in PO	0.07
1/3 ISD % at 1 % TiO ₂ in PS	–

Resistance properties in flexible PVC

	Reduction	Full shade
% Concentration	0.2 colored pigment	0.1 colored pigment
% Concentration	2.0 TiO ₂	– TiO ₂
Heat resistance	5	5
Light fastness	7–8	8
Migration	5	5
Weather fastness (2000 h)	3	4–5

Resistance properties in polyolefin

	Reduction	Full shade
Warping in HDPE (Plate test)		low
Warping in HDPE (Disc test)		high
% Concentration	0.1 colored pigment	0.1 colored pigment
% Concentration	1.0 TiO ₂	– TiO ₂
Heat resistance	200	200
Light fastness	7	7
Weather fastness (3000 h)	–	–

Resistance properties in PS

	Reduction	Full shade
% Colorant concentration	0.2	0.2
% TiO ₂	1.0	–
Heat resistance	–	–
Migration	–	–
Light fastness	–	–

Resistance properties in ABS

	Reduction	Full shade
% Colorant concentration	0.2	0.2
% TiO ₂	1.0	–
Heat resistance	–	–
Migration	–	–
Light fastness	–	–

Physical data

(based on actual Master Standard)

Bulk density	0.20 kg/l
Bulk volume	5.0 l/kg
DOP-absorption	64 g/100 g
Oil absorption	57 g/100 g
Specific gravity	1.51 g/cm ³
Specific surface	48.9 m ² /g

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