Technical Data Sheet

Cromophtal® Scarlet K 3540
(Old: Cromophtal® Scarlet RN)

BASF
We create chemistry

Chemical type	Azo condensation
CI Generic Name	Pigment Red 166
CI Constitution No	20730
Description	Semi-opaque yellow shade red with very good heat resistance in polyolefins, even at low concentrations. Suitable for PVC, polyolefins, PUR and PP fibers. Recommende for demanding indoor applications due to its good light fastness and hot light fastness.
Preparations	Depending on the suitability of the pigment, mono-pigment preparations for PVC, polyolefin, elastomers and further polymers may be available. Please contact your local BASF sales representative.

Properties

Coloristic properties

Full shade
over white
0.10 % in PVC

L*	50.9
a*	58.6
b*	40.0
C*	71.0
h	34.3

Full shade
over white
0.50 % in PVC

L*	45.2
a*	50.9
b*	33.3
C*	60.8
h	33.2

White reduction

1/3 ISD in PVC

L*	57.4
a*	50.5
b*	20.3
C*	54.4
h	21.9

1/3 ISD at 1.0 % TiO_2 in HDPE: 0.20 %
1/3 ISD at 1.0 % TiO_2 in PVC: 0.18 %

Physical properties

Product form	Powder
Density	1.58 g/cm³
Bulk density	0.19 kg/l
Bulk volume	5.3 l/kg
Specific Surface	28.7 m²/g

Polymer suitability

PVC	■		
LL / LDPE	■	HDPE	■
PP	■	PP fibers	■
PA6	☒	PA6 fibers	☒
PET	☒	PES fibers	☒
PC	☒	PMMA	☐
PS	☐	HIPS	☐
ABS	☐	SAN	☒
Rubber	■	PUR	■

■: Recommended ☐: Limited suitability ☒: Not recommended

If you need information on other polymers, please contact your local BASF representative.

Technical performance

For details regarding the test methods, please refer to the BASF Colorants for Plastics test methods overview or contact your local BASF representative.

PVC-P

	Full shade	White reduction
Pigment concentration	0.10 %	0.20 %
TiO_2 concentration		2.00 %
Migration (GS)	5	nt
Light fastness (BWS)	8	7
Hot light fastness (GS)	5	4-5
Weather resistance (GS) 3000 h	4-5	-
5000 h	3-4	-

nt: not tested
-: below limit of GS 3

HDPE

	Full shade	White reduction
Pigment concentration	0.10 %	0.10 %
TiO_2 concentration		1.00 %
Heat resistance (°C) Limit DE 3	300	300
Migration (GS)	5	nt
Light fastness (BWS)	8	7
Weather resistance (GS) 3000 h	3	-
5000 h	-	-

nt: not tested
-: below limit of GS 3

Warping	High
Filter pressure value in PP (bar/g)	not tested

PMMA

	Full shade
Pigment concentration	0.10 %
Heat resistance (°C) Limit DE 3	280
Migration (GS)	5
Light fastness (BWS)	7-8

PS

	Full shade	White reduction
Pigment concentration	0.10 %	0.10 %
TiO_2 concentration		1.00 %
Heat resistance (°C) Limit DE 3	280	280
Migration (GS)	5	nt
Light fastness (BWS)	7-8	7-8

nt: not tested

HIPS

	White reduction
Pigment concentration	0.20 %
TiO_2 concentration	1.00 %
Heat resistance (°C) Limit DE 3	300
Migration (GS)	5
Light fastness (BWS)	7

ABS

	Full shade	White reduction
Pigment concentration	0.20 %	0.20 %
TiO_2 concentration		1.00 %
Heat resistance (°C) Limit DE 3	240	260
Migration (GS)	5	nt
Light fastness (BWS)	7	7-8

nt: not tested

Regulatory and Compliance status

For details regarding the regulatory and compliance status, please refer to the respective product regulatory information sheets and food contact certificates.
They are available upon request at ed-psr@basf.com.

Note

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