

## MACROLEX® Red 5B Gran

<b>Colour Index</b>	Part I Part II	Solvent Red 52 68210
<b>Chemical description</b>	Anthraquinone dyestuff	
<b>Form supplied</b>	low dusting microgranulate	
<b>Shade</b>	red with a blue cast	
<b>1/3 Standard depth</b>	0.195% dyestuff	(determined in GP-PS with 2% TiO <sub>2</sub> )
<b>Density (23°C)</b>	approx. 1.37 g/cm <sup>3</sup>	
<b>Bulk density</b>	approx. 0.39 g/cm <sup>3</sup> (according to DIN ISO 787-11)	
<b>Melting point</b>	approx. 280°C	
<b>Main fields of application</b>	Transparent and opaque dyeing of PS, SAN, PMMA, PC, PET, ABS / PC blends, PA 6 and PA 6.6.	
<b>Storage stability</b>	60 months from delivery ex plant LANXESS Deutschland GmbH	

**Solubility** in g/l at temperature 23°C (approximate figures)

Water	Acetone	Benzyl alcohol	Butyl acetate	Ethanol	Methyl methacrylate	Methylene chloride	Styrene (monomer)	Xylene
insoluble	0.3	5.0	0.3	0.1	0.5	35	3.0	2.0

**Heat stability** in °C at 1/3 standard depth with 1% TiO<sub>2</sub> (ABS 4% TiO<sub>2</sub> and PS 2% TiO<sub>2</sub>) evaluated according to DIN EN 12877; (approximate figures)

PS	SB*	ABS	SAN	PMMA	PC	PA 6	PA 6.6	PET	PBT
280	300	280	280	300	350	300	290	290	280

\* For Styrene-butadiene block copolymer the use of this dye is not recommended.

**Lightfastness** 1/3 standard depth with 1% TiO<sub>2</sub> (PS 2% TiO<sub>2</sub>) according to DIN EN ISO 4892-2; transparent coloration with 0.05% dye; evaluated with 8-step blue wool scale

PC			PS			PMMA		
Dye content in %	reduction	trans-parent	Dye content in %	reduction	trans-parent	Dye content in %	reduction	trans-parent
0.100	4-5	7	0.195	3-4	7	0.100	4-5	7

**Materials used for testing of Heat stability and Lightfastness:**

PS: BASF Polystyrene 143E	PA 6: LANXESS Durethan B30S
SB: BASF Polystyrene 472C	PA 6.6: LANXESS Durethan A30H 1.0
ABS: LANXESS Novodur P2X	PET: Voridian 9921 W
SAN: BASF Luran 368R	PBT: LANXESS Pocan B1505
PMMA: Röhm Plexiglas 7H	TiO <sub>2</sub> : Kerr McGee Tronox R-FK-3
PC: Bayer MaterialScience Makrolon 2800	

The test result were evaluated with the above mentioned conditions and materials. For other polymers, polymergrades, TiO<sub>2</sub> grades and dyes concentrations, the results can be different from the values above.



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### Fastness to bleeding

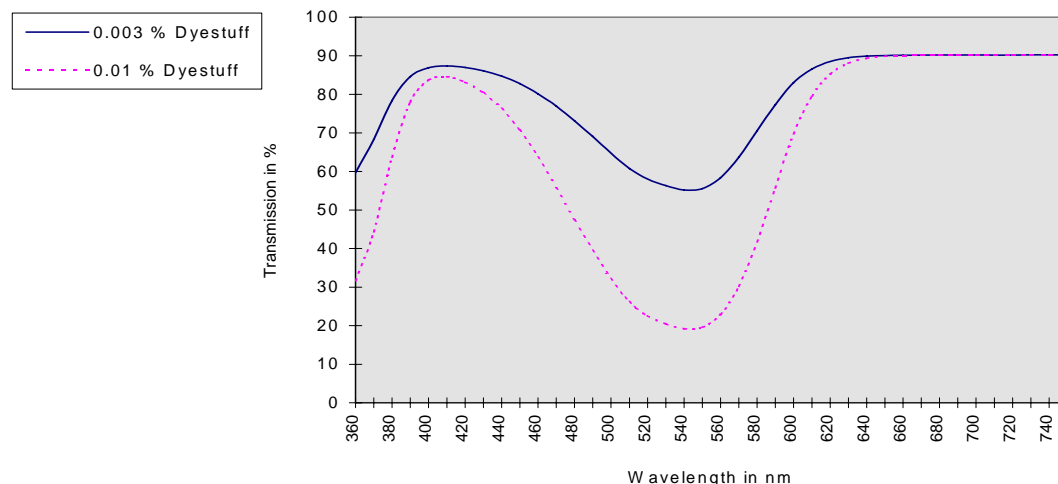
(Suitability for dyeing household utensils)

No staining of distilled water, 2% by weight acetic acid, 10% by volume ethanol, coconut oil or peanut oil in our test on 0.1% dyeing of PS, ABS, SAN, PMMA, PC, PET and PVC-U. The tests were carried out in accordance with the recommendations of the German BfR [for plastic applications (saturated strips of filter paper, 5h at 50°C)].

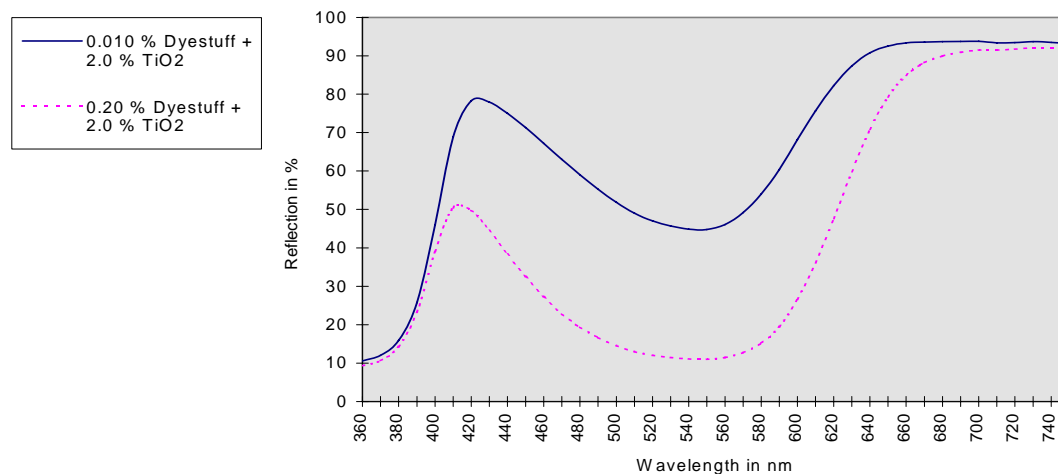
### Purity

This dyestuff meets current purity requirements for dyeing household utensils and toys in Europe.

### Transmission curve MACROLEX Red 5B Gran in GP-PS (2mm thickness)



### Reflection curve MACROLEX Red 5B Gran in GP-PS



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## COLORANTS

TECHNICAL INFORMATION