



Alpha Chemicals
Clariant Dye
Availability(Australia)

Code	Illustrated dyes	Light fastness ¹⁾	pH for the illustrated dyeing
Sanodal® Range			
102070	Sanodal Gold 4N	pale > 8	4.5
		medium > 8	4.5
		deep > 8	4.5
125491	Sanodal Orange 3LW	> 8	5.5 x
102262	Sanodal Red B3LW	> 8	5.5 x
102266	Sanodal Turquoise PLW Liquid	> 8	5.5 xx
102785	Sanodal Green 3LW	> 8	5.5 x
102258	Sanodal Black GL Paste	> 8	5.5
102093	Sanodal Deep Black H3LW	> 8	5.5 x
104190	Sanodal Black 2LW (as black)	> 8	4.5
102027	Sanodal Deep Black HBL Liquid	> 8	5.5 x
102257	Sanodal Deep Black MLW	> 8	4.5
102242	Sanodal Deep Black MLW Gran.	> 8	4.5
Sanodure® Range			
102261	Sanodure Fast Gold L	7-8	5.5 x
104124	Sanodure Orange RL	6	5.5
102071	Sanodure Orange G	6	5.5
102263	Sanodure Fiery Red ML	6-7	5.5
102253	Sanodure Bordeaux RL	6-7	5.5
102267	Sanodure Violet CLW	6-7	5.5 x
102264	Sanodure Green LWN	7-8	5.5 x
102260	Sanodure Fast Bronze L	7-8	5.5 x
102255	Sanodure Bronze 2LW	7	5.5 x
102254	Sanodure Bronze G	6-7	5.5 x
102268	Sanodure Yellow Brown 2G	5-6	5.5 x
102216	Sanodure Brown GSL	6-7	5.5 x
102033	Sanodure Olive Brown 2R	6	5.5 x
152424	Sanodure Grey HLN Liquid	8	5.5 xx
102019	Sanodure Grey NL Liquid	7	5.5 xx
104122	Sanodure Black CRO (as black)	7-8	7
Sanodye® Range			
102045	Sanodye Yellow 3GL	> 8	5.5
161579	Sanodye Yellow D	5	5.5 x
104123	Sanodye Golden Orange RLW	5-6	5.5
138996	Sanodye Orange 2B	5-6	5.5 x
153752	Sanodye Orange C	4-5	7x
104105	Sanodye Red GLW	7	5.5 x
102265	Sanodye Red RLW	7	5.5 x
138997	Sanodye Violet 3D	4-5	5.5 x
166533	Sanodye Violet MRB New	3-4	5.5 x
198048	Sanodye Blue 2LW	> 9	5.5 x
102259	Sanodye Blue G	> 8	5.5 x
193214	Sanodye Green AEN	6-7	5.5 x
138995	Sanodye Green AX	6	5.5 x
102010	Sanodye Brown R	5-6	5.5
102782	Sanodye Black OA	> 8	5.5 x

1) = The light fastness ratings relate to the deep dyeings produced under the described conditions. They were tested in accordance with ISO standard 2135 (exposure to the ATLAS Weather-Ometer 600 WRC). In paler shades the light fastness is generally lower.

Different light fastness ratings may also result from differences in the coating thicknesses or in the dyeing or sealing conditions. To avoid bleeding and increase the light fastness nickel sealing with Anodal ASL should be carried out.

x = Buffered dyeing medium recommended

xx = Buffered dyeing medium required

> = Greater than

Production conditions for the illustrations

Material	Pure aluminium	
Pre-treatment	Degreasing	Anodal® DA-5
	Etching	Anodal EC-2 Liquid
Anodizing	Current density	1.5 A/dm ²
	Current potential	15 – 17 V
	Electrolyte	190 – 200 g/l free sulphuric acid 5 – 10 g/l Al
	Temperature	18 – 20 °C
	Time	45 min
	Film thickness	ca. 20 µm
Dyeing	Temperature	55 – 60 °C
	– Sanodal Gold 4N	45 °C
	– Sanodure Green LWN	25 °C
	– Sanodure Grey NL Liquid	25 °C
	Time	15 – 20 min
	– Sanodal Gold 4N	30 s, 5 min, 15 min
	Concentration	as given with the illustrations
pH	see "Illustrated dyes"	
	Water	deionized
Sealing	Temperature	boiling
	Time	45 min
	Medium	water with 5 g/l Anodal ASL or 2 ml/l Anodal SH-1



Sanodal® Range



Sanodal Gold 4N 30.0 g/l, 30 s



Sanodal Gold 4N 30.0 g/l, 15 min



Sanodal Red B3LW 0.2 g/l



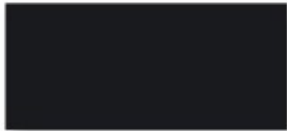
Sanodal Red B3LW 5.0 g/l



Sanodal Turquoise PLW Liquid 0.1 g/l



Sanodal Turquoise PLW Liquid 5.0 g/l



Sanodal Deep Black MLW 10.0 g/l

Sanodure® Range



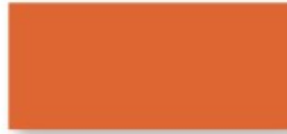
Sanodure Fast Gold L 0.2 g/l



Sanodure Fast Gold L 3.0 g/l



Sanodure Orange RL 0.3 g/l



Sanodure Orange RL 3.0 g/l



Sanodure Orange G 0.2 g/l



Sanodure Orange G 3.0 g/l



Sanodure Fiery Red ML 0.2 g/l



Sanodure Fiery Red ML 5.0 g/l



Sanodure Bordeaux RL 0.5 g/l



Sanodure Bordeaux RL 5.0 g/l



Sanodure Violet CLW 0.1 g/l



Sanodure Violet CLW 0.3 g/l



Sanodure Green LWN 0.2 g/l



Sanodure Green LWN 1.0 g/l



Sanodure Fast Bronze L 0.2 g/l



Sanodure Fast Bronze L 0.5 g/l



Sanodure Bronze 2LW 0.1 g/l



Sanodure Bronze 2LW 1.0 g/l

Sanodure® Range and Offered Combinations



Sanodure Olive Brown 2R 0.1 g/l



Sanodure Olive Brown 2R 1.0 g/l



Sanodure Grey NL Liquid 0.4 g/l



Sanodure Fast Gold L 0.15 g/l
Sanodure Fast Bronze L 0.15 g/l



Sanodye Blue 2LW 0.4 g/l
Sanodure Fast Gold L 0.2 g/l



Sanodure Fast Bronze L 0.20 g/l
Sanodal Red B3LW 0.25 g/l, T=40°C



Sanodal Turquoise PLW Liquid 5.0 g/l
Sanodye Yellow 3GL 3.0 g/l



Sanodure Violet CLW 1.2 g/l
Sanodye Blue G 0.2 g/l



Sanodal Red B3LW 0.5 g/l
Sanodure Bronze 2LW 3.0 g/l

Sanodye® Range



Sanodye Yellow 3GL 0.2 g/l



Sanodye Yellow 3GL 3.0 g/l



Sanodye Golden Orange RLW 0.5 g/l



Sanodye Golden Orange RLW 3.0 g/l



Sanodye Red GLW 0.1 g/l



Sanodye Red GLW 4.0 g/l



Sanodye Red RLW 0.2 g/l



Sanodye Red RLW 2.0 g/l

Sanodye® Range



Sanodye Blue 2LW 0.1 g/l



Sanodye Blue 2LW 3.0 g/l



Sanodye Blue G 0.5 g/l



Sanodye Blue G 2.0 g/l

Technical Characteristics

Range	Outdoor - Application	Indoor-Application	Heavy Metal-free
Sano dal	■	■	
Sano dure		■	
Sanodye	▲	■	■

■ = Suitable

▲ = Limited suitable