



Exactly your chemistry.

# Sanodal<sup>®</sup>, Sanodure<sup>®</sup> and Sanodye<sup>®</sup> Dyes

**For the dyeing  
of anodized aluminium**

In this folder information on the principal properties of our Sanodal, Sanodure and Sanodye dyes is set out in synoptic form for quick reference. The chemical nature of each brand, its special uses and dyeing behaviour are noted in the accompanying brochure.

The Sanodal Dyes are designed for the dyeing of exterior building elements and are applied by the SANODAL Process. Detailed information on the SANODAL System is available on request.



Code	Illustrated dyes	Light fastness <sup>1)</sup>	pH for the illustrated dyeing
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### 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

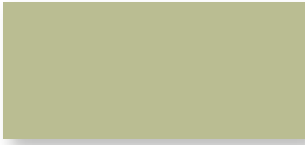
> = Greater than

## Production conditions for the illustrations

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



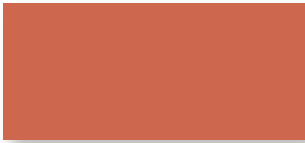
Sanodal Gold 4N 30.0 g/l, 15 min



Sanodal Orange 3LW 0.3 g/l



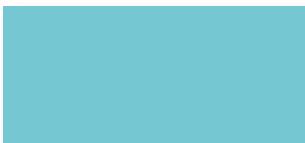
Sanodal Orange 3LW 5.0 g/l



Sanodal Red B3LW 0.2 g/l



Sanodal Red B3LW 5.0 g/l



Sanodal Turquoise PLW Liquid 0.1 g/l



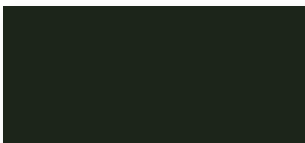
Sanodal Turquoise PLW Liquid 5.0 g/l



Sanodal Green 3LW 0.2 g/l



Sanodal Green 3LW 1.0 g/l



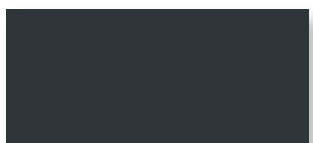
Sanodal Black GL Paste 2.0 g/l



Sanodal Deep Black H3LW 0.2 g/l



Sanodal Black 2LW 1.0 g/l

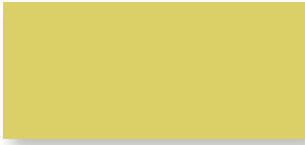


Sanodal Deep Black HBL Liquid 0.2 g/l



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 Bronze G 0.2 g/l



Sanodure Bronze G 1.0 g/l



Sanodure Yellow Brown 2G 0.3 g/l



Sanodure Yellow Brown 2G 1.0 g/l



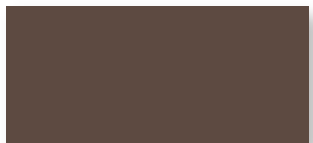
Sanodure Brown GSL 0.2 g/l



Sanodure Brown GSL 1.0 g/l



Sanodure Olive Brown 2R 0.1 g/l



Sanodure Olive Brown 2R 1.0 g/l



Sanodure Grey HLN Liquid 0.2 g/l



Sanodure Grey HLN Liquid 2.0 g/l



Sanodure Grey NL Liquid 0.4 g/l



Sanodure Black CRO 0.5 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

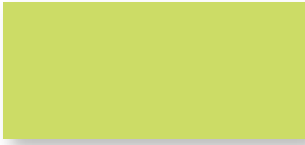


Sanodure Violet CLW 1.2 g/l  
Sanodye Blue G 0.2 g/l

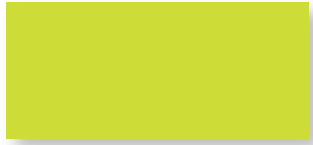


Sanodal Red B3LW 0.5 g/l  
Sanodure Bronze 2LW 3.0 g/l

## Sanodye® Range



Sanodye Yellow 3GL 0.2 g/l



Sanodye Yellow 3GL 3.0 g/l



Sanodye Yellow D 0.5 g/l



Sanodye Yellow D 5.0 g/l



Sanodye Golden Orange RLW 0.5 g/l



Sanodye Golden Orange RLW 3.0 g/l



Sanodye Orange 2B 0.5 g/l



Sanodye Orange 2B 5.0 g/l



Sanodye Orange C 0.2 g/l



Sanodye Orange C 0.5 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 Violet 3D 0.5 g/l



Sanodye Violet 3D 5.0 g/l



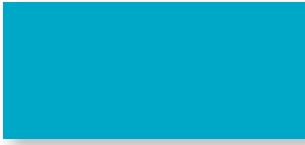
Sanodye Violet MRB New 2.0 g/l



Sanodye Violet MRB New 5.0 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



Sanodye Green AEN 0.5 g/l



Sanodye Green AEN 4.0 g/l



Sanodye Green AX 2.0 g/l



Sanodye Green AX 5.0 g/l



Sanodye Brown R 0.5 g/l



Sanodye Brown R 3.0 g/l



Sanodye Black OA 0.5 g/l

## Technical Characteristics

Range	Outdoor - Application	Indoor-Application	Heavy Metal-free
Sanodal	■	■	
Sanodure		■	
Sanodye	▲	■	■

■ = Suitable

▲ = Limited suitable

**Please note**

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale.

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