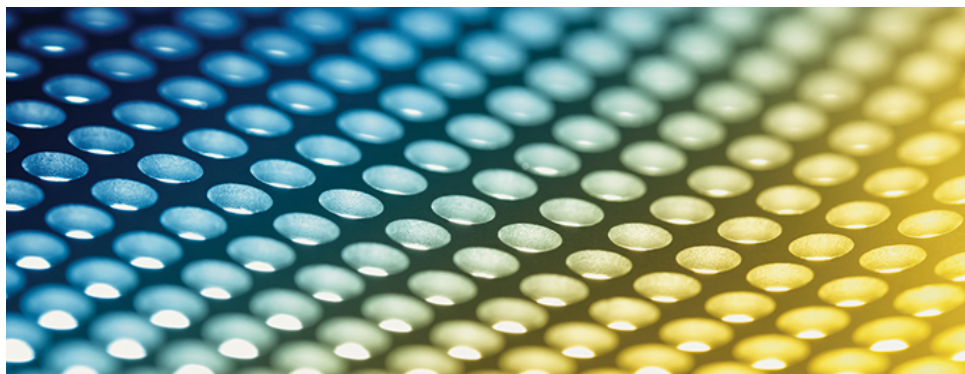


**SANODURE®
ORANGE G**



HOMOGENEOUS, WATER SOLUBLE DYESTUFF FOR THE ADSORPTIVE DYEING OF ANODIZED ALUMINUM

The main applications for Sanodure Orange G are:

- Indoor
- Jewellery

Only recommended for interior use.

1. DYE-SPECIFIC DATA

Commercial form:	Fine granules
Chemical character:	Azo-dyestuff, metal complex
Density:	900 g/l
Solubility in water:	40 g/l at 20 °C
Storage stability:	10 years
Ecotoxicological data:	See safety data sheet

CLARIANT INTERNATIONAL LTD

Rothausstrasse 61
4132 Muttenz
Switzerland

BUSINESS UNIT PIGMENTS
MARKETING AND SALES PLASTICS
AND SPECIAL APPLICATIONS

Phone +41 (0)61 469 79 45
Fax +41 (0)61 469 75 40

COPYRIGHT ©
CLARIANT INTERNATIONAL LTD 2013

ISSUE
July 2014

2. APPLICATION CONDITIONS

Concentration, dyeing temperature and time

	CONCENTRATION g/l	DYEING TEMPERATURE °C	DYEING TIME min
Bright shades	0.05-0.2	25-60	10-20
Medium shades	0.3-0.8	25-60	10-20
Dark shades	1.0-3.0	50-60	20-40

pH:	6.0±0.5
Water quality:	Preferably deionized
Sealing:	Preferably with Anodal® ASL (one or two stage)

CLARIANT INTERNATIONAL LTD

Rothausstrasse 61
4132 Muttenz
Switzerland

BUSINESS UNIT PIGMENTS
MARKETING AND SALES PLASTICS
AND SPECIAL APPLICATIONS

Phone +41 (0)61 469 79 45
Fax +41 (0)61 469 75 40

COPYRIGHT ©
CLARIANT INTERNATIONAL LTD 2013

ISSUE
July 2014

3. SETTING THE DYE BATH

When setting the dyebath, care must be taken that the dyestuff is well dissolved. Dissolve the dye preferably with hot water (80 °C) in a separate container (approx. 5 parts water to 1 part dye). Then this mother solution will be added to the dyebath while stirring.

4. LIGHT FASTNESS OF THE DYEINGS (ISO 2135)

Light fastness of dark dyeings (12 µm): Note 5-6 (ISO 2135)

5. SPECIAL REMARKS

- The dyestuff is very yielding
- Unsealed dyeing can be stripped with nitric acid
- The dyebaths are sensitive to aluminum; anodized objects should therefore be rinsed thoroughly before dyeing
- Prevention of mould formation:
We recommend the addition of a suitable antimicrobial product

6. DISPOSAL OF THE DYE BATHS

Spent dye baths can be readily precipitated with Anodal WT-1 Liquid. The method is described in detail in the technical information bulletin for Anodal WT-1 Liquid.

The table below shows the additions required for precipitating Sanodure Orange G.

PRECIPITATION METHOD	FeCl ₃ , 40 % ml/g dye	ETCHING LYE ml/g dye	ANODAL WT-1 LIQUID ml/g dye	RESIDUAL DYE IN THE FILTRATE mg/l	RESIDUAL CR IN THE FILTRATE mg/l
A	5.0	–	0.7	2	0.07
B	3.0	–	0.7	< 0.5	< 0.05
C	–	5.0	0.7	2	0.05

CLARIANT INTERNATIONAL LTD

Rothausstrasse 61
4132 Muttenz
Switzerland

BUSINESS UNIT PIGMENTS
MARKETING AND SALES PLASTICS
AND SPECIAL APPLICATIONS

Phone +41 (0)61 469 79 45
Fax +41 (0)61 469 75 40

COPYRIGHT ©
CLARIANT INTERNATIONAL LTD 2013

ISSUE
July 2014

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. * Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

* For sales to customers located within the United States and Canada the following applies in addition: NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE.

