

Certificate of Analysis

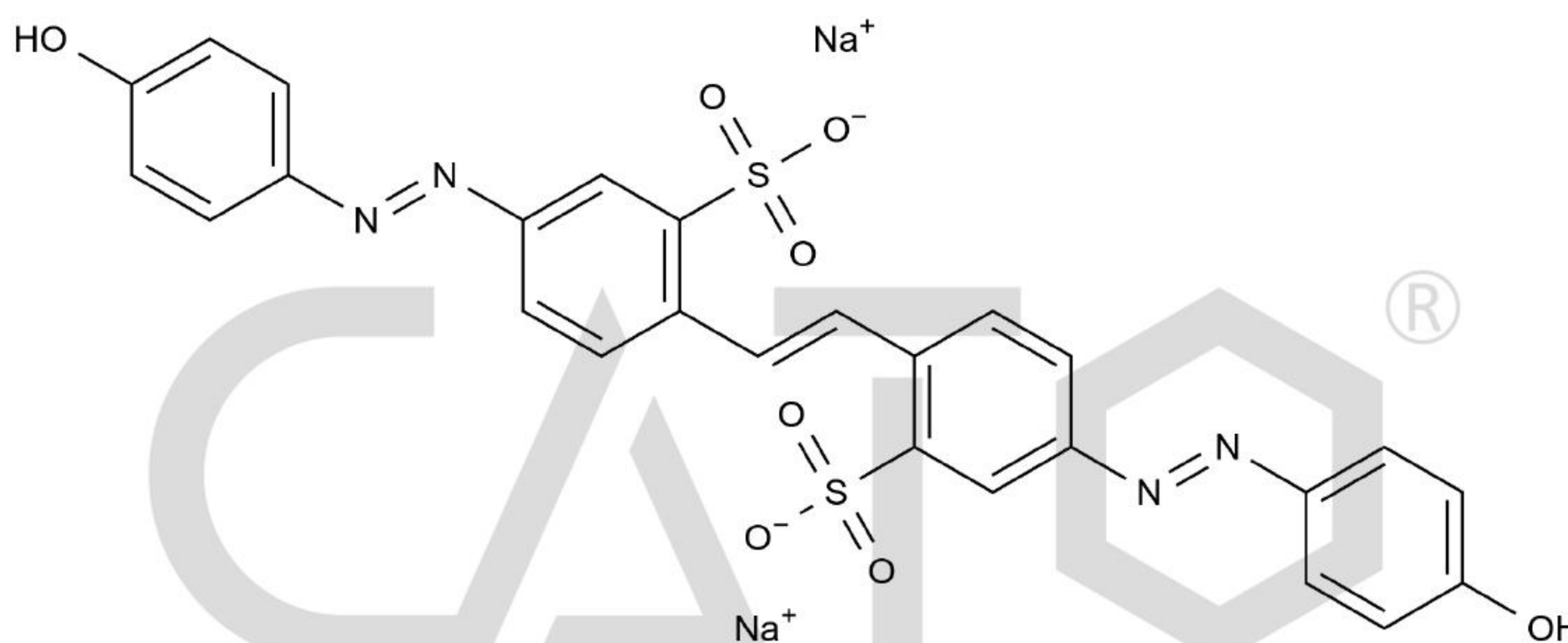
Reference Material & Standard

Product Name:	Direct Yellow 4	Catalogue Number:	CWLT600839
Synonyms:	N/A	Lot Number:	0531-RE-0009
CAS Number:	3051-11-4	Expiry Date:	Jun 04, 2027
Molecular Formula:	C ₂₆ H ₁₈ N ₄ O ₈ S ₂ 2*Na	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	578.57 2*22.99		

Warning:



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Brown-Yellow Powder
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	98.510%
Loss On Drying	TGA	3.4695%
Assay		95.1%
Uncertainty		±2.0%

Comment:

1. The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity HPLC (\%)} / 100\%$$

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Hin Lam

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Jun 05, 2023

Date: Jun 05, 2023

Date: Jun 05, 2023



Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

