



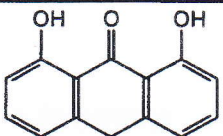
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LE 22/10/15

PAR L'ASSURANCE QUALITÉ

JSE J. SEBILLOT

DITHRANOL, EP - CERTIFICATE OF ANALYSIS

		SPE n° CQ - 304 vs 08	
C ₁₄ H ₁₀ O ₃	CAS RN [1143-38-0]	EINECS # 214-538-0	M.W. = 226.2 g.mol ⁻¹
1,8-dihydroxyanthracene - 9(10 H)- one 1,8-dihydroxy-9-anthrone			

BATCH N° DTHX - 086

TESTS	METHODS	SPECIFICATIONS	RESULTS
CHARACTERS	Visual examination	Yellow to brownish-yellow crystalline powder	Brown yellow crystalline powder
IDENTIFICATION			
A. Melting Point	EP, 2.2.60	178.0°C - 182.0°C	179.4°C
B. Infra Red Spectrum	EP, 2.2.24	Conform to IR spectrum of Dithranol CRS	Conform to IR spectrum of Dithranol CRS
TESTS			
Chlorides	EP, 2.4.4	≤ 100 ppm	Complies
Loss on Drying	EP, 2.2.32	≤ 0.5%	0.2%
Sulphated Ash	EP, 2.4.14	≤ 0.1%	0.0%
Heavy metals	EP, 2.4.8, Method C	≤ 20 ppm	Complies
Related Substances	EP, 2.2.29 Method A	Imp. A or B or C: ≤ 1.0% Unknown imp.: ≤ 1.0%	A = ND / B = 0.2% / C = 0.0% Unknown impurities = 0.1%
	EP, 2.2.29 Method B	Impurity D: ≤ 2.5%	0.2%
	Method A and B	Total impurities: ≤ 3.0%	0.4%
Residual Solvents	EP, 2.2.28	Methanol: ≤ 3000 ppm Xylenes: ≤ 2170 ppm Ethyl acetate: ≤ 5000 ppm	455 ppm ND 757 ppm
ASSAY	EP, 2.2.20	98.5% - 101.0% of C ₁₄ H ₁₀ O ₃ , calculated on the dried substance	99.2%

ND = Not Detected

MANUFACTURING DATE	October 2015		
RETEST DATE	September 2017		
ANALYSES	Date : 16 th October 2015		By : A. CAUDAN
COMPLIANT WITH SPECIFICATIONS			
Written by : J. SEBILLOT		Reviewed by : MORENO	
Date : 21/10/15	Visa : JSE	Date : 21/10/15	Visa : TH

Seratec S.A.S.

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