CERTIFICATE OF ANALYSIS

2-CHLORO-*trans*-ZEATIN (2ClZ)
$C_{10}H_{12}ClN_5O$, MW = 253.69

OLCHEMIM CODE: 001 516n
OLCHEMIM BATCH: 516-A
MANUFACTURING DATE: February 2024
EXPIRATION DATE: February 2034
CAS: 29736-30-9
BATCH SIZE: 350 mg

SYNTHESIS
By condensation of 2,6-dichloropurine and *trans*-4-amino-2-methylbut-2-enol hydrochloride. Chromatographically purified over silica and re-crystallised 2 times from water. Colourless, amorphous solid, sparingly soluble in alcohol.

ANALYSIS
MELTING POINT: 223-224ºC (Kofler block)
UV
Determined after drying to constant weight over phosphorus pentoxide in vacuo.

50% EtOH	λ_{max} 270 nm (18,200)
EtOH, 1 M HCl	λ_{max} 274 nm (15,500)
EtOH, 1 M NaOH	λ_{max} 276 nm (16,200)

TLC (silica-chloroform/MeOH. 9/1): Rf 0.40. Purity 98+% at 25 µg loading. No contaminants detected. tZ (Rf 0.25), 2,6-dichloropurine (Rf 0.61). No trace of starting material or cis-isomer in the product.
MASS SPETROMETRY: Matches the reference spectrum $[M]^+$= 254.4 amu.
HPLC: (25 x 0.4 cm ODS-2, 0 to 60% acetonitrile, 30 min, 1 ml/min, 270 nm) .Single, sharp peak, Rt 20.4 min, no detectable contaminants including *cis*-isomer. Purity 99+%.

STORAGE & STABILITY
Store over silica gel in tightly sealed container at below 0ºC. No detectable decomposition after 12 months storage under these conditions.

NOTE
The small packages (001 5161-2) contain approx. 10% more than the stated quantity. This is to ensure that you can dispense the required amount. However the product is unlikely to be anhydrous when it reaches you. For quantitative work, therefore, calculate concentration from UV absorption i.e. 1 OD A 270 nm in buffer = 13.9 µg/ml.

FOR LABORATORY USE BY EXPERIENCED PERSONNEL ONLY; NOT FOR DRUG, HOUSEHOLD OR OTHER USES

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