

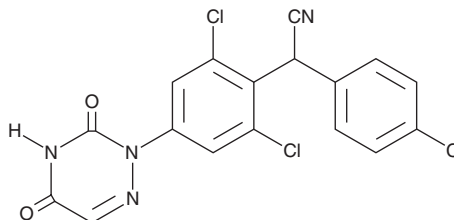
PRODUCT INFORMATION



Diclazuril

Item No. 27047

CAS Registry No.: 101831-37-2
Formal Name: 2,6-dichloro- α -(4-chlorophenyl)-4-(4,5-dihydro-3,5-dioxo-1,2,4-triazin-2(3H)-yl)-benzeneacetonitrile
Synonym: R-64433
MF: C₁₇H₉Cl₃N₄O₂
FW: 407.6
Purity: \geq 95%
UV/Vis.: λ_{\max} : 222, 245, 279 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Diclazuril is supplied as a solid. A stock solution may be made by dissolving the diclazuril in the solvent of choice. Diclazuril is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of diclazuril in these solvents is approximately 5 mg/ml.

Diclazuril is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, diclazuril should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Diclazuril has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Diclazuril is an anticoccidial agent.^{1,2} It decreases the number of oocysts per gram of feces in a broiler chicken model of *E. tenella* coccidiosis infection.¹ Diclazuril (1 and 2 mg/kg) decreases fecal oocyst shedding in goat kid models of *E. arloingi*, *E. ninakohlyakimovae*, and *E. christensenii* infection.² It also inhibits *B. besnoiti* tachyzoite proliferation in MARC-145 cells (IC₉₉ = 29.9 μ M).³ Formulations containing diclazuril have been used in the prevention and treatment of coccidiosis in livestock.

References

1. Wang, D., Zhou, L., Li, W., *et al.* Anticoccidial effect of *Piper sarmentosum* extracts in experimental coccidiosis in broiler chickens. *Trop. Anim. Health Prod.* **48(5)**, 1071-1078 (2016).
2. Ruiz, A., Guedes, A.C., Muñoz, M.C., *et al.* Control strategies using diclazuril against coccidiosis in goat kids. *Parasitol Res.* **110(6)**, 2131-2136 (2012).
3. Jiménez-Meléndez, A., Rico-San Román, L., Hemphill, A., *et al.* Repurposing of commercially available anti-coccidials identifies diclazuril and decoquinatate as potential therapeutic candidates against *Besnoitia besnoiti* infection. *Vet. Parasitol.* **261**, 77-85 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM