PRODUCT INFORMATION



Cyanidin (chloride)

Item No. 14803

CAS Registry No.:	528-58-5	ОН
Formal Name:	2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy-	
	1-benzopyrylium, monochloride	OH
Synonyms:	Cyanidol chloride, IdB 1027	
MF:	$C_{15}H_{11}O_6 \bullet CI$	HO,O ⁺
FW:	322.7	$\gamma \gamma \gamma \gamma \gamma$
Purity:	≥98%	
UV/Vis.:	λ _{max} : 278, 548 nm	OH • CI
Supplied as:	A crystalline solid	
Storage:	-20°C	OH
Stability:	≥4 years	

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

Laboratory Procedures

Cyanidin (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the cyanidin (chloride) in the solvent of choice. Cyanidin (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of cyanidin (chloride) in ethanol and DMSO is approximately 16 mg/ml and in DMF it is approximately 25 mg/ml.

Cyanidin (chloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cyanidin (chloride) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cyanidin (chloride) has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cyanidin is a natural anthocyanidin found in a variety of fruits and vegetables. This polyphenolic compound is a flavonoid with significant antioxidant activity.¹ Cyanidin and its glycosides have vasoprotective effects and can interfere with inflammation, carcinogenesis, obesity, and diabetes.²⁻⁴

References

- 1. Galvano, F., La Fauci, L., Vitaglione, P., et al. Bioavailability, antioxidant and biological properties of the natural free-radical scavengers cyanidin and related glycosides. Ann. Ist. Super. Sanita. 43(4), 382-393 (2007).
- Andriambeloson, E., Magnier, C., Haan-Archipoff, G., et al. Natural dietary polyphenolic compounds cause 2. endothelium-dependent vasorelaxation in rat thoracic aorta. J. Nutr. 128, 2324-2333 (1998).
- Rice-Evans, C.A., Miller, N.J., and Paganga, G. Structure-antioxidant activity relationships of flavonoids 3 and phenolic acids. Free Radic. Biol. Med. 20(7), 933-956 (1996).
- Galvano, F., La Fauci, L., Lazzarino, G., et al. Cyanidins: Metabolism and biological properties. 4. J. Nutr. Biochem. 15(1), 2-11 (2004).

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

SAFFTY 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, 11/02/2022

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