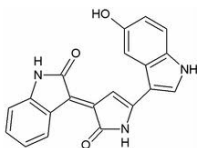


Technical Product Data Sheet											
Tech. Sheet #	008	Version	1.1	Created	August 18 th 2022	by	S. Muñoz	Last updated	June 30 th 2025	by	S. Muñoz
Product Name	Violacein		Product Code	pig_vio_008		Development State			Finished		
Core information											
Product Type	Pigment					Origin	Psychrotolerant Bacteria				
EC Number	NA			CAS-No.			548-54-9				
Product Description	Violacein is a deep violet pigment, is a secondary metabolite, not water-soluble and it is produced by some extremophilic bacteria. L-tryptophan is the precursor of violacein biosynthesis, belonging to the indole derivatives. The reaction is composed of two oxidations and one condensation of tryptophan molecule. This biocompound exhibits important antitumoral, antimicrobial and antiparasitic properties.										
Empirical formula	C ₂₀ H ₁₃ N ₃ O ₃			Structural Formula (confirmed by ¹ H-NMR)							
Molecular mass	343.34 g/mol			Form and color appearance			Powder, deep violet.				
Solubility	Dimethylsulfoxide, methanol, ethanol, acetone.										
% major 1-Violacein	≥ 95 % (By HPLC)			% major 2-Deoxyviolacein			≤ 5 % (By HPLC)				
Total purity %	≥ 98 %										
Long term Storage temperature	2-8°C avoid light exposure			Short term Storage temperature			2-8°C avoid light exposure				
Shipping temperature	2-8°C avoid light exposure										
Storage Stability	Under the specified storage conditions, violacein is stable at least 12 months.										

Scientific and Technical References

1. Lu, Y., et al. (2009) Production of violet pigment by a newly isolated psychrotrophic bacterium from a glacier in Xinjiang, China. *Biochemical Engineering Journal*: 43; 135-141.
2. Pantanella, F., et al. (2007) Violacein and biofilm production in *Janthinobacterium lividum*. *Journal of Applied Microbiology*: 102; 992-999.
3. Durán, M., et al. (2007) Violacein: properties and biological activities. *Biotechnology and applied biochemistry*: 48; 127-133.
4. Kanelli, M., et al. (2018). Microbial production of violacein and process optimization for dyeing polyamide fabrics with acquired antimicrobial properties. *Frontiers in microbiology*: 9, 1495.

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