

# Punicalin Datasheet

5<sup>th</sup> Edition (Revised in January, 2017)

## [ Product Information ]

**Name:** Punicalin

**Catalog No.:** CFN98113

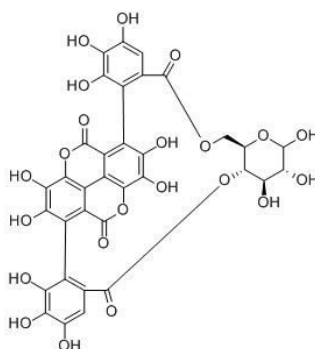
**Cas No.:** 65995-64-4

**Purity:** >=98%

**M.F:** C<sub>34</sub>H<sub>22</sub>O<sub>22</sub>

**M.W:** 782.52

**Physical Description:** Powder



**Synonyms:** D-Glucose cyclic 4,6-[(2S,2'S)-2,2'-(5,10-dihydro-2,3,7,8-tetrahydroxy-5,10-dioxo[1]benzopyrano[5,4,3-cde][1]benzopyran-1,6-diyl)bis[3,4,5-trihydroxybenzoate]]; 4,6-Gallagylglucose.

## [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

## [ Source ]

The peel of *Punica granatum L.*

## **[ Biological Activity or Inhibitors ]**

Punicalagin and punicalin exert anti-inflammatory activity, but treatment with larger doses of punicalin may induce some cell damages.<sup>[1]</sup>

Punicalagin and punicalin have strong antioxidative activity, they also have anti-hepatotoxic activity but that the larger dose of punicalin induced liver damage.<sup>[2]</sup>

Punicalin shows inhibitory activity on HIV-1 reverse transcriptase in a dose-dependent manner, with an IC<sub>50</sub> of 0.11 microg/ml (0.14 microM).<sup>[3]</sup>

## **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

## **[ HPLC Method ]<sup>[4]</sup>**

Mobile phase: Methanol- 0.1% Trifluoroacetic acid in water, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30°C;

The wave length of determination: 254 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Lin CC, Hsu Y F, Lin TC. *Am. J. Chin. Med.*, 1999;27(3-4):371-6.

[2] Lin C C, Hsu Y F, Lin T C, *et al. J. Pharm. Pharmacol.*, 1998 Jul;50(7):789-94.

[3] Martino V, Morales J, Martínez-Irujo J J, *et al. Phytother. Res.*, 2004, 18(8):667-9.

[4] Liu Z, Chen X, Peng H, *et al. Journal of Chinese Institute of Food Science & Technology*, 2013,13(1):183-7.

## **[ Contact ]**

**Address:**

S5-3 Building, No. 111, Dongfeng Rd.,  
Wuhan Economic and Technological Development Zone,  
Wuhan, Hubei 430056,  
China

**Email:** [info@chemfaces.com](mailto:info@chemfaces.com)**Tel:** +86-27-84237783**Fax:** +86-27-84254680**Web:** [www.chemfaces.com](http://www.chemfaces.com)**Tech Support:** [service@chemfaces.com](mailto:service@chemfaces.com)