

## Crocin I Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Crocin I

**Catalog No.:** CFN99927

**Cas No.:** 94238-00-3

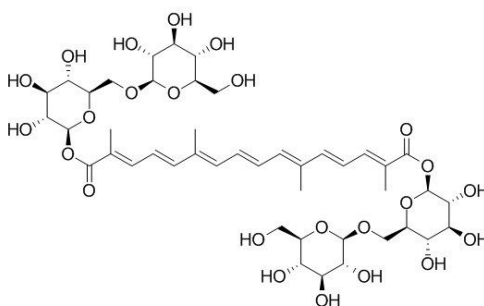
**Purity:** >=97%

**M.F:** C<sub>44</sub>H<sub>64</sub>O<sub>24</sub>

**M.W:** 976.96

**Physical Description:** Powder

**Synonyms:** Gardenia Yellow.



### [ Intended Use ]

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

### [ Source ]

The stigma of *Crocus sativus* L.

### [ Biological Activity or Inhibitors ]

Crocin has anti-inflammatory and anti-apoptotic effects against gastric ischemia-reperfusion injury in rats, the effect of crocin is mainly mediated by reducing the protein expression of iNOS and caspase-3.<sup>[1]</sup>

Crocin ameliorated CCl<sub>4</sub>-induced liver injury via inhibition of inflammatory cytokines, caspase3 and oxidative stress along with modulation of liver metabolizing enzymes favoring elimination of CCl<sub>4</sub> toxic metabolite.<sup>[2]</sup>

Crocin has antihyperlipidemic effect, may be due to the inhibition of pancreatic lipase and crocin, and its metabolite, crocetin, can improve hyperlipidemia. <sup>[3]</sup>

Crocin has antidepressant effects by increasing CREB, BDNF and VGF levels in hippocampus.<sup>[4]</sup>

## **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

## **[ HPLC Method ]<sup>[5]</sup>**

Mobile phase: Acetonitrile-0. 5% Phosphoric acid H<sub>2</sub>O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 440 nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Mard S A, Nikraftar Z, Farbood Y, *et al. Braz.J.Pharm.Sci*, 2015, 51(3):637-42.

[2] Bahashwan S, Hassan M H, Aly H, *et al. Journal of Taibah University Medical Sciences*, 2014, 289(2):140-9.

[3] Lee I A, Lee J H, Baek N I, *et al. Biol. Pharmaceut. Bull.*, 2005, 28(11):2106-10.

[4] Hassani F V, Naseri V, Razavi B M, *et al.* *Daru Journal of Faculty of Pharmacy Tehran University of Medical Sciences*, 2014, 22(1):166-166.

[5] Feng X C, Zhang R, Li H Y, *et al.* *Chinese Journal of Experimental Traditional Medical Formulae*, 2013, 19(24):85-9.

## **[ Contact ]**

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