



## Certificate of Analysis

Brand name: Pure Crocin

### Constituents:

**Crocin-I** (Croceetin digentiobiosyl ester)

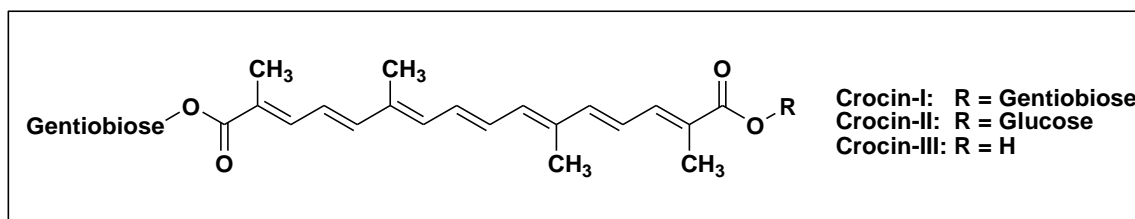
<b>CAS No.</b>	42553-65-1	<b>Formula</b>	C <sub>44</sub> H <sub>64</sub> O <sub>24</sub>
<b>Molecular Weight</b>	976.972 g/mol	<b>Type of Compound</b>	Diterpenoids

**Crocin-II** (Croceetin gentiobiosylglucosyl ester)

<b>CAS No.</b>	55750-84-0	<b>Formula</b>	C <sub>38</sub> H <sub>54</sub> O <sub>19</sub>
<b>Molecular Weight</b>	814.83 g/mol	<b>Type of Compound</b>	Diterpenoids

**Crocin-III** (Croceetin monogentiobiosyl ester)

<b>CAS No.</b>	94238-00-3	<b>Formula</b>	C <sub>32</sub> H <sub>44</sub> O <sub>14</sub>
<b>Molecular Weight</b>	652.69 g/mol	<b>Type of Compound</b>	Diterpenoids



Analysis item	Specifications / Results
Appearance	Violet powder
Loss on drying (90°C)	< 5 %
Dye content of dried powder <b>Crocin-I</b> ~ 69 % <b>Crocin-II</b> ~ 27 % <b>Crocin-III</b> ~ 4 %	> 98 % (HPLC, CNMR, HNMR)
Heavy metals	< 40 ppm (As, Hg, Pb, Cd)
Melting point	186-187 °C
Extinction	(1ppm /1cm) in 440nm UV: 0.904
Solubility	Soluble in water (10mg/5ml water (20°C)), DMSO and ethanol
Storage condition	Recommended storage temperature 2-8 °C Keep container tightly closed in a dry and well ventilated place. moisture sensitive, light sensitive