

# Silybum Marianum Fruit (*Fructus Silybi*) – 水飞蓟

## Sample source

Commercially available Fruit of Silybum Marianum

## Chemical reference substances

Silybin (National Institute for the Control of Pharmaceutical and Biological Products, Batch number: 110856-200203)

## Preparation of test solution

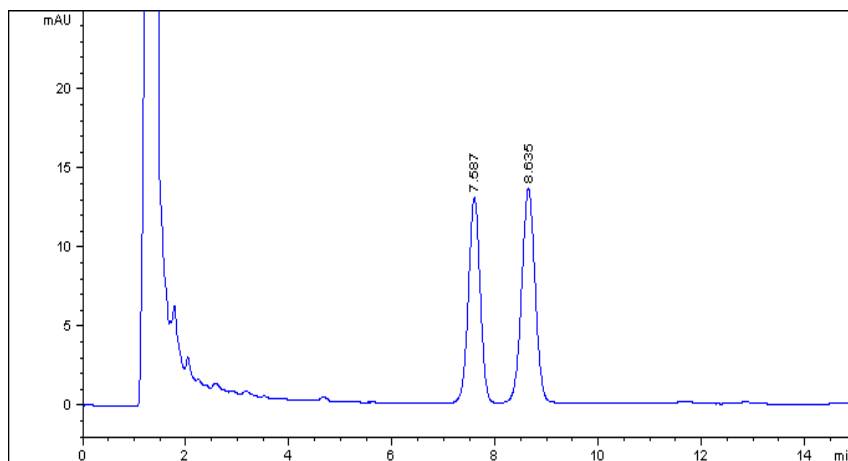
Accurately weigh 0.5 g of the powder in a stoppered conical flask, accurately add 50 mL of 75 % methanol, weigh and heat under reflux on a water bath for 30 minutes, allow to cool, weigh again and replenish the lost weight with 75 % methanol, mix well and allow to stand. Filter, and use the filtrate as the test solution.

## Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 µm (883975-902)
- Column temperature: 25 °C
- Mobile phase: methanol-water-glacial acetic acid (48:52:1)
- Detector wavelength: 287 nm
- Flow rate: 1.0 mL/min

## Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated column compartment
- Agilent 1200 Series diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU's)	n	USP T <sub>r</sub>
Silybin	4.058	7.587	12.97	203.8	5537	0.98
Isosilybin	4.757	8.635	13.53	242.3	5529	1.00