

## 6,7-Dimethylpterin

Product number 11.503

CAS number 611-55-2

In a 2 l round bottom flask, 25 g of 2,4,5-triamino-6-hydroxypyrimidine dihydrochloride are dissolved in 600 ml of water.

13 ml of diacetyl are added and the solution is mixed.

A yellow precipitate forms.

After 10 minutes, 27 g of NaOAc dissolved in 100 ml of water are slowly added.

After 30 minutes the 2 l round bottom flask is put in a heating hood and a reflux condenser is installed. The solution is refluxed for 1 hour and then the heating hood is removed. The solution is allowed to cool overnight.

The precipitated 6,7-dimethylpterin is filtered and the filter cake is rinsed with 150 ml of water and dried in a vacuum desiccator over NaOH to give 16.0 g of raw 6,7-dimethylpterin.

### Recrystallisation:

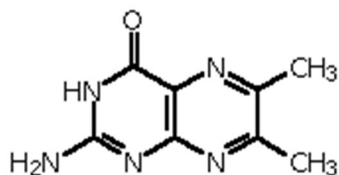
10 g of the raw 6,7-dimethylpterin are dissolved in 7 l of water by the addition of about 13 ml of 7 N NaOH. The pH of the solution must be over 12.2, otherwise traces of the active coal pass the filter and the product becomes greenish. 10 g of active coal are added and the mixture is stirred for 30 minutes. The mixture is filtered through a very fine filter. Do not rinse the filter!

To the filtrate is added slowly while stirring vigorously diluted acetic acid until a pH of 6.0 is reached. In order not to get a too fine precipitate the solution is refluxed for 10 minutes and the solution is allowed to cool overnight.

The precipitated 6,7-dimethylpterin is filtered and the filter cake is rinsed with 700 ml of water and dried in a vacuum desiccator over NaOH to give 7.1 g of 6,7-dimethylpterin.

Purity: 99.0% (HPLC)

Description: light yellow powder



6,7-Dimethylpterin

C<sub>8</sub>H<sub>9</sub>N<sub>5</sub>O  
191.19

C 50.26% H 4.74% N 36.63% O 8.37%

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# Schircks Laboratories

## HPLC

Sample: 1 mg/5 ml 0.05 N NaOH  
Column: Spherisorb S5 ODS1  
Eluant: 10 mM PB pH 9.5 plus 20% MeOH  
Flow: 1 ml/min  
Detection 254 nm