



**PRODUCT CODE: 142436**

**Polyethylene Glycol 400 (BP, Ph. Eur.) pure, pharma grade**

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HO(C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>H

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CAS [25322-68-3]

EINECS 203-473-3

TARIC 3907 20 11 90

**SYNONYMS:** Carbowax 400, Macrogol 400, PEG 400

**PHYSICAL DATA:** liquid, Clear, Colourless, Miscible with water • Hygroscopic • D 20/4 1,12 • M.P.: 4 - 8 °C • pH(100g/l)4 - 7 • Ign. T.:370 °C • Viscosity 20 °C 120 mPa.s •

**BIBLIOGRAPHY:** Merck Index **12**, 7.729 13, 7.651 Sax **PJT000** • Ullmann **(5.)**10 , 108 • Beilstein **1** , **III** , **2109 17** , **II** , **11** • Fieser **12399** • **BP.2021** • **USP -NF 37** • Ph. Eur. **9.0** (2017) **10.0** (2020) 7.7 • F.C.C **11 12** •

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**HAZARDOUS:** RTECS: TQ 3675000 • LD50 oral rat 30.200 mg/kg •

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**WEIGHT/VOLUME INFORMATION:** 1l-1,127 kg 1kg-0,887 l

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#### **SPECIFICATIONS:**

Identity :

Identity according to Pharmacopoeias: passes test  
pH of 5% solution 4,5-7,5

Viscosity dynamic at 20°C 105-130 mPa.s  
Viscosity kinematic at 20°C 94-116 cSt

Average molecular weight 380-420

#### **Maximum limit of impurities**

Appearance of solution passes test  
Acidity or alkalinity passes test  
Insoluble matter in in H<sub>2</sub>O passes test  
Reducing substances passes test  
Residue on ignition (as SO<sub>4</sub>) 0,1 %

Hydroxyl value	264-300
Residual solvents (Ph.Eur.)	passes test
Ethylene Oxide (G.C.)	0,0001%
1,4-Dioxan (G.C.)	0,001%
Formaldehyde (CH <sub>2</sub> O)	0,0015%
Ethylene Glycol and Diethylene Glycol (G.C.)	0,25%
Water (H <sub>2</sub> O)	2 %

Elemental impurities (ICH Q3D):

Class 1

Cd	0,5 ppm
Pb	0,5 ppm
As	1,5 ppm
Hg	1,5 ppm

Class 2A

Co	5 ppm
V	10 ppm
Ni	20 ppm

Class 2B

Tl	5 ppm
Au	10 ppm
Pd	10 ppm
Ir	10 ppm
Os	10 ppm
Rh	10 ppm
Ru	10 ppm
Se	15 ppm
Ag	15 ppm
Pt	10 ppm

Class 3

Li	55 ppm
Sb	120 ppm
Ba	140 ppm
Mo	25 ppm
Cu	250 ppm
Sn	600 ppm
Cr	25 ppm