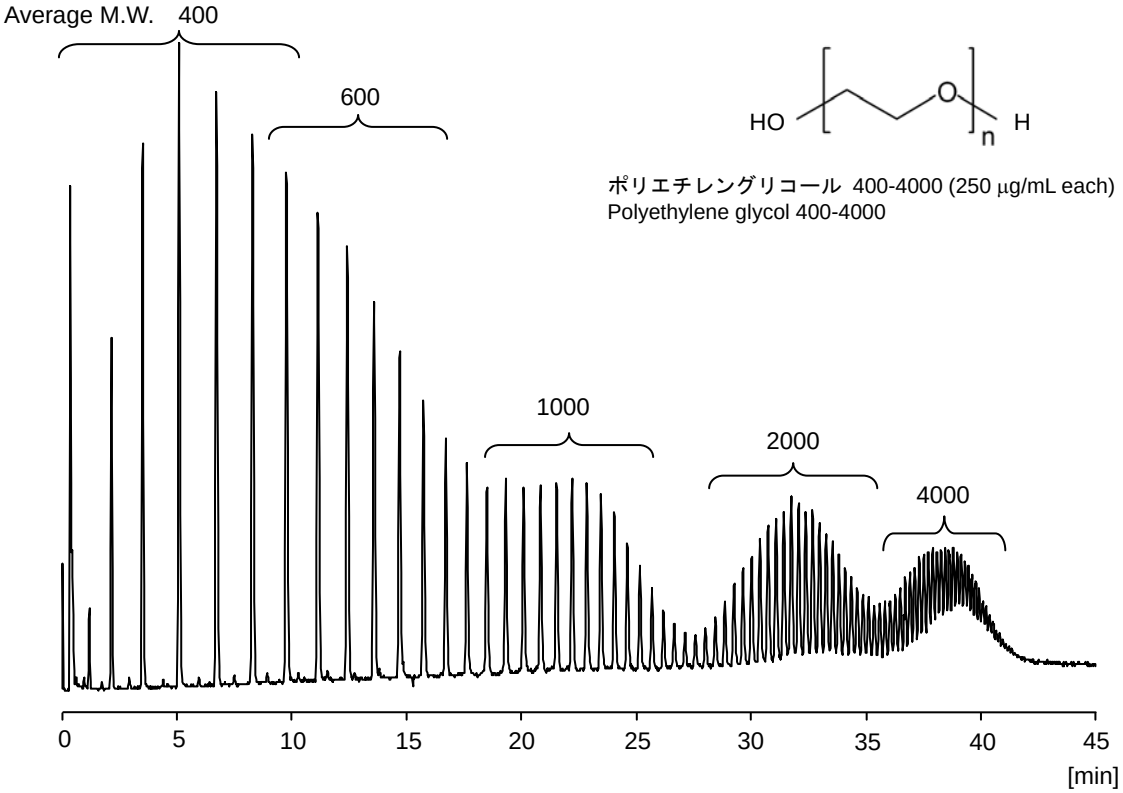
ポリエチレングリコール　　Polyethylene glycol

ポリエチレングリコール（PEG）は，化粧品を初め多くの分野で工業利用されています．ここでは検出器に NQAD を用い，比較的分子量の大きい物質の分離に用いられる表面多孔性のカラム，CAPCELL CORE MP S2.7（2.1 mm i.d. x 50 mm）による平均分子量 400 から 4000 までの等重量混合物の分析例を示します．

An equal-weight mixture of polyethylene glycol (PEG) 400 to 4000 was separated with CAPCELL CORE MP S2.7 (2.1 mm i.d. x 50 mm), or a superficially porous phase designed for large molecules, and detected with nano quantity analyte detector (NQAD).



【HPLC Conditions】

Column	: CAPCELL CORE MP S2.7 ; 2.1 mm i.d. x 50 mm
Mobile phase	: A) H_2O, B) CH_3CN B 5 % (0 min) → 40 % (45 min) → 5 % (45.1 min) Gradient
Flow rate	: 400 μL/min
Temperature	: 50 ˚C
Detector	: NQAD (Evaporation 35 ˚C, Nubulizer 30 ˚C, Filter 2.5 sec)
Inj. vol.	: 2 μL
Sample dissolved in	: Each standard was dissolved in 20 % CH_3CN at 10 mg/mL. All the solutions were mixed together, and diluted with 20 % CH_3CN, so that concentration of each type was 250 μg/mL. ※ 1μg/mL = 1 ppm