



>>Entry Name: Polyglycerols

Synonym(s): 1,2,3-Propanetriol homopolymer, 9CI. Polyglycerins

CAS Registry Number: 25618-55-7

Source/Synthesis: Synth. by base-induced polycondensation of Glycerol [BGV25-K](#)

Use/Importance: Polyglycerols and their fatty acid ester are used in food emulsifiers cosmetic moisturisers, plasticisers and surfactants

>>Variant: Triglycerol

CAS Registry Number: 56090-54-1

Molecular Formula: $C_9H_{20}O_7$

Molecular Weight: 240.253

Accurate Mass: 240.120905

Percentage Composition: C 44.99%; H 8.39%; O 46.62%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH

>>Variant: Tetraglycerol

CAS Registry Number: 56491-53-3

Molecular Formula: $C_{12}H_{26}O_9$

Molecular Weight: 314.332

Accurate Mass: 314.157685

Percentage Composition: C 45.85%; H 8.34%; O 45.81%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH

>>Variant: Pentaglycerol

CAS Registry Number: 51555-31-8

Molecular Formula: $C_{15}H_{32}O_{11}$

Molecular Weight: 388.411

Accurate Mass: 388.194465

Percentage Composition: C 46.39%; H 8.30%; O 45.31%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH

>>Variant: Hexaglycerol

CAS Registry Number: 36675-34-0

Molecular Formula: $C_{18}H_{38}O_{13}$

Molecular Weight: 462.49

Accurate Mass: 462.231245

Percentage Composition: C 46.75%; H 8.28%; O 44.97%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH

>>Variant: Heptaglycerol

CAS Registry Number: 74899-87-9

Molecular Formula: $C_{21}H_{44}O_{15}$

Molecular Weight: 536.57

Accurate Mass: 536.268025

Percentage Composition: C 47.01%; H 8.27%; O 44.73%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH

>>Variant: Octaglycerol

CAS Registry Number: 70103-30-9

Molecular Formula: $C_{24}H_{50}O_{17}$

Molecular Weight: 610.649

Accurate Mass: 610.304805

Percentage Composition: C 47.21%; H 8.25%; O 44.54%

Physical Description: Viscous liq.

Solubility: Sol. H_2O , EtOH