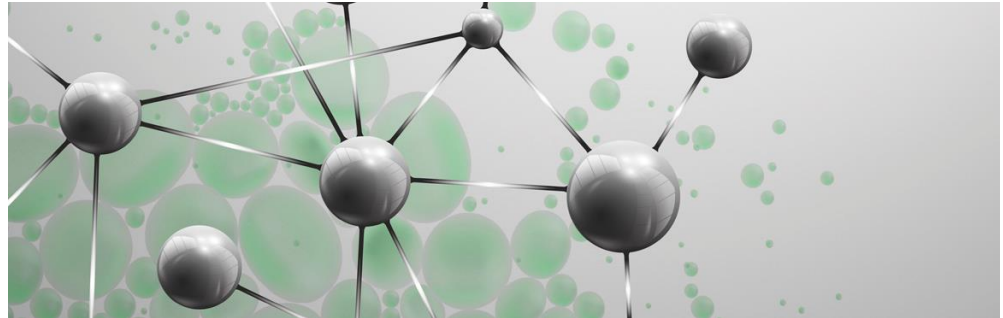


Product Sheet

POLYGLYKOL

Polyglykol
4000 FL
4000 S
4000 P / PF /
PS / PSK
4000 M 50



Composition

Polyethylene glycol
 $H(OCH_2CH_2)_nOH$
 $n = 90$

CAS-No.: 25322-68-3
INCI-description: PEG-90

Product properties*

The physical and chemical properties of polyethylene glycols are mainly determined by the two hydroxyl end groups, the ether groups as well as the molecular weight. Polyglykol 4000 is a yellowish wax-like solid at room temperature. Polyglykol 4000 is soluble in water and polar organic solvents like acetone or methanol. Polyglykol 4000 is insoluble in pure hydrocarbons. Polyglykol 4000 shows typical chemical reactions of alcohols/diols and a very low evaporation rate. The solidification point of Polyglykol 4000 is about 56 °C, the solidification point of Polyglykol 4000 M 50 about -10 °C.

CLARIANT INTERNATIONAL LTD
BU INDUSTRIAL & CONSUMER
SPECIALTIES

Rothausstrasse 61
4132 Muttenz
Switzerland

CONTACTS

Technical: + 49 8679 7 17020
Commercial: + 41 61 469 7847

COPYRIGHT ©
CLARIANT INTERNATIONAL LTD 2015

ISSUE
July 2015

Product data*

Delivery form for 4000 FL / M 50 for 4000 P / PF / PS / PSK for 4000 S			liquid powder flakes
water content for 4000 FL for 4000 S/P/PF/PS/PSK for 4000 M 50	DIN 51777	% w/w	max. 0,1 max. 0,5 48 - 52
colour index [APHA] (25 % w/w in water)	EN 1557		max. 30
pH (5 % w/w in water)	DIN EN 1262		5 - 7
hydroxyl number	DIN 53240	mg KOH/g	25 - 30
molecular weight		g/mol	3700 - 4400
solidification point (EP III)		°C	53 - 58
viscosity at 20°C (50 % w/w in water)	DIN 51562	mPa·s	114 - 142
flash point	DIN 51376	°C	260
ignition temperature	DIN 51794	°C	> 320
ethylene oxide		ppm	max. 1
dioxane		ppm	max. 1

Industrial Applications

Due to their physical and chemical properties polyethylene glycols are used for a wide variety of applications as:

- Reactant
Reactive diol/polyether component in polyester or polyurethane resins
- Solvent / Humectant / Plasticizer
Paper, wood, cellulose films, inks, paints, coatings, adhesives, sealants, concrete
- Release agent / Lubricant
mould release agent for rubber and elastomer processing, lubricant formulations, metal working fluids
- Binder for ceramics
- Component of auxiliaries for fiber, textile and leather processing
- Heat transfer medium

Shipping and Storage

Polyglykol 4000 can be supplied as 50 % aqueous solution (Polyglykol 4000 M 50) in tank trucks or steel drums on request.

Polyglykol 4000 FL can be supplied in heated tank trucks and should be stored as melt at 60 – 80 °C under nitrogen and not longer than 6 months.

Polyglykol 4000 S, P, PF, PS, and PSK can be supplied in 20 kg sacks or in big packs and can be kept for at least two years, when stored in a cold, dry place in a closed container.

REFERENCE

^{*)} These characteristics are guidance only and not to be taken as product specifications. The tolerances are given in the product specification sheet. For further product properties, specifications, safety and ecological data, please refer to the MSDS.

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. * Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

*** For sales to customers located within the United States and Canada the following applies in addition: NO EXPRESS OR IMPLIED WARRANTY IS MADE OF THE MERCHANTABILITY, SUITABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE OF ANY PRODUCT OR SERVICE.**

7/2015

© Trademark registered in many countries and owned by Clariant
© 2015 Clariant International Ltd, Rothausstrasse 61, 4132 Muttenz, Switzerland

