

Please note that the certificates of analysis are also conveniently available on your BASF online portal.

Fax No 0078770174

OOO BASF

14/3 Kadashevskaya nab

119017 MOSCOW

Russian Fed.

2020-01-28
 ENT/OQA
 Hr. Dr. Florian Wildschek
 florian.wildschek@basf.com
 Certificate No 4172
 Page 5 of 12

Certificate of Analysis according to DIN 55350-18-4.1.2

1,2-PROPYLENE GLYCOL USP

220KG Plastic drums
 Purchase Order/Customer Product#
 CPL-Ruskhimset 2020
 000000000052705412

Material	52705412
Order	3382898418 000010
Delivery	3192713974 000010
Lot	78688097V0
Lot/Qty	5280.000 KG
Total	17600.000 KG
Transport	TRHU3973845

Test Parameter	Requirements	UoM	Results
Appearance	clear and colorless liquid		conforms
Identification (IR)	must conform		conforms
Purity (CGC)	Min.: 99.8	g/100g	>99.9
Relative density d(20/20)	Min.: 1.035 Max.: 1.040		1.038
Relative Density d(25/25)	Min.: 1.035 Max.: 1.037		1.036
Refractive Index n(20/D)	Min.: 1.431 Max.: 1.433		1.433
Water (Karl Fischer-Titration)	Max.: 0.2	g/100g	<0.1
Sulfated Ash / Residue on ignition	Max.: 70	mg/kg	<10
Chloride	Max.: 70	mg/kg	<1
Sulfate	Max.: 60	mg/kg	<1
Arsenic *	must conform (max.2mg/kg)		conforms

The aforementioned data shall constitute the agreed contractual quality of the product at the time of passing of risk. The data are controlled at regular intervals as part of our quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No liability of ours can be derived therefrom.

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Test Parameter	Requirements	UoM	Results
Lead *	must conform (max.1mg/kg)		conforms
Heavy metals *	must conform (max.5mg/kg)		conforms
Dimers and Polymers (CGC)	Max.: 0.1	g/100g	<0.1
1,3-Propanediol (CGC)	Max.: 100	mg/kg	<50
Organic chlorine compounds as Cl	Max.: 1	mg/kg	<1
Acidity	must conform (max. 0.019 mg KOH/ml)		conforms
Oxidizing substances	must conform		conforms
Reducing substances	must conform		conforms
Residual solvents **	must comply with the requirements of PhEur 5.4, USP <467> and ICH Q3C		conforms
Colour (Hazen)	Max.: 10		<5
Identification: Ethylene glycol *	must conform		conforms

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Test Parameter	Requirements	UoM	Results
Identification: Diethylene glycol *	must conform		conforms

* Test is verified on random samples only.

**Not tested, since no organic solvents are likely to be present.

The product meets the specifications of following monographs:

"Propylene Glycol" of USP42/NF37,
"Propylenglycole" of European Pharmacopoeia 9th edition

Manufacturer: BASF SE
Carl-Bosch-Str.38
67056 Ludwigshafen
Germany

QC-Reference-No.	19C07804
Production date	(YYYY-MM-DD) 2019-06-23
Release date	(YYYY-MM-DD) 2019-06-27
Best before	(YYYY-MM-DD) 2020-06-22

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BASF SE

Quality Assurance - Release

sig. Hr. Frühbeis

QA-Representative

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