

Emery Oleochemicals GmbH
 Henkelstraße 67, D-40589 Düsseldorf

Certificate of Analysis
 (acc. EN 10204)

CUSTOMER:
DELIVERY NOTE: 80051178 / 900001 **CUSTOMER NO:** 501118
DELIVERY DATE: 22.10.2009 **CUSTOMER ORDER:** 36017/000010
ORDER NUMBER: **DATE OF ORDER:** 13.10.2009
MEANS OF SHIPPING: Road transport **DATE OF ISSUE:** 14.10.2009
LICENSE PLATE:

Material Description: GLYCERIN 99,5 % PF 0250
Material-No.: 1028000202
Cust.Material:
Batch No.: GE92780002

Characteristic/ Method	Unit	Value	Lower tolerance	Upper tolerance
CLEARNESS		LIGHT		LIGHT
PH. EUR. 496 (by 3.1)				
COLOR VISUAL CHARACTERISTICS		COLORLESS		COLORLESS
PH. EUR. 496 (by 3.1)				
REFRACTIVE INDEX;20°C		1,4741	1,4738	1,4750
PH. EUR. 2.2.6 (by 3.1)				
GLYCERINE	%	99,8	99,0	101,0
PH. EUR. 496 (by 3.1)				
DILUTION APPEARANCE		MEETS TEST		MEETS TEST
PH. EUR. 2..2.1 (by 3.1)				
ACIDITY - ALKALINITY	ml	< 0,1		0,2
PH. EUR. 496 (by 3.1)				
ALDEHYDES	ppm	< 10		10
PH. EUR. 496 (by 3.1)				
SAPONIFICATION EQUIVALENT (%NA2O)	%	0,004		0,024
DIN 55967-93 (by 3.1)				
ESTER	ml	9,7	8,0	
PH. EUR. 496 (by 3.1)				
WATER	%	0,06		0,20
PH. EUR. 2.5.12 (by 3.1)				

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Gesellschaft mit beschränkter Haftung
 Geschäftsführer: Andreas Meinz
 Handelsregister: AG Düsseldorf HRB 52759
 Sitz: Düsseldorf
 01
 Sales-tax-ID-number: DE 811244157

Commerzbank AG, Düsseldorf HSBC Trinkaus & Burkhard AG
 Konto 11 60 290 00 (BLZ 300 400 00) Konto 001 1489 001 (BLZ 300 309 80)
 IBAN: DE 65 300 400 000 11 60 290 00 IBAN: DE54 3003 0880 0011 4890
 SWIFT/BIC: COBADE33XXX SWIFT/BIC: TUBSDE33

Material-No.: 1028000202 **CUSTOMER NO:** 501118
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Characteristic/ Method	Unit	Value	Lower tolerance	Upper tolerance
HALOGENATED COMPOUNDS PH. EUR. 496 (by 2.1)	ppm	< 35		35
SUGAR PH. EUR. 496 (by 3.1)		NEGATIVE	NEGATIVE	
CHLORIDE PH. EUR. 2.4.4 (by 2.1)	ppm	< 10		10
HEAVY METALS PH. EUR. 2.4.8 (by 2.1)	ppm	< 5		5
PURITY H2O-LESS SUBSTANCE PH. EUR. 496 (by 3.1)	%	99,9	99,0	101,0
RELATIVE DENSITY;20/20°C PH. EUR. 2.2.5 (by 3.1)		1,2633	1,2628	
SULFATED ASH PH. EUR. 2..4.14 (by 2.1)	%	< 0,010		0,010
COLOR HAZEN/APHA ISO 2211 (by 3.1)		3		5
IDENTITY PH. EUR. 496 (by 3.1)		A,B OK	A,B OK	
IMPURITY A PH. EUR. 2.2.28 (by 3.1)	%	< 0,1		0,1
ANY OTHER IMP. R(T) < GLYCEROL PH. EUR. 2.2.28 (by 3.1)	%	< 0,1		0,1
PEAKS RT > GLYCEROL (SUM) PH. EUR. 2.2.28 (by 3.1)	%	< 0,5		0,5

PRODUCTION DATE: 05.10.2009

RECERTIFICATION DATE: 05.10.2011

Released by:

The above data represent the results of our quality assessment. They do not free the purchaser from his own quality check nor do they confirm that the product has certain properties or is suitable for a specific application.

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