

# Kalchem International

## Chemicals & Compounding Supplies

### Certificate of Analysis Diethylene Glycol

Customer Name: UNIVAR INC  
Customer Location: HOUSTON, TX

Material: Diethylene Glycol  
Bulk GMID: 168830

Customer P.O.: Y7-853590  
Customer Ref:  
Delivery Note: 46-64103121  
Order No: 4646098732  
Vehicle: CUSTOMER ARRANGED  
Ship from: S/T 8-81  
Shipping Date: 12/2/2014  
Batch: 3K1001RF81

UNIVAR USA - Houston, Texas	
Univar Code:	251571
Lot No.:	47124833245
P.O. #:	
Cust. Code:	
Other:	

DATE:	12-2-14
CARRIER:	Transport Service
TRAILER #	2180

This material meets the requirements of the specification.

Specification	Units	Results	Limits		Method
			Minimum	Maximum	
Purity, % wt, minimum		99.93	99.0		
Monoethylene Glycol, % wt maximum		0.049		0.2	
Triethylene Glycol, %wt, maximum		0.0005		0.7	
Acidity, ppm, maximum, as AC		16.50		50	
Water, % wt, maximum		0.021		0.2	
Color, Platinum-Cobalt units, max		4		10	
Iron, ppm, maximum		0.045		1.0	
Appearance		CFSM	Pass		

Quality Coordinator Gary Breneman 989-636-9075

**Kalchem International, Inc**  
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