



# Certificate of Analysis

Ship-To:  
 HELM KOREA LTD  
 Yeouigongwon ro Youngdeungpo gu  
 909B CCMM Building 101  
 Seoul 150-968  
 SOUTH KOREA

Shell Product : MPG (Propylene Glycol) Industrial  
 Shell Spec. No. : U1511 / 1000

Cust PO/Indent : A20D014455  
 Sales Order/Item : 1001930532 / 10 Package Type : Bulk  
 Delivery Number : 8003336282 Vehicle/Vessel : ASL ORCHID  
 Despatch Date : 26.MAY.2020  
 Inspection Lot : 000002800985

Property	Units	Minimum	Maximum	Result	N	Method
Purity	%m/m	99.5		99.9		ASTM E202
Acidity as acetic acid	%m/m		0.005	0.001		ASTM E202
Water	%m/m		0.2	< 0.1		ASTM E202
Color, Pt-Co			10	5		ASTM E202
Chlorides as CL-	mg/kg		1	< 0		USP
Iron	mg/kg		1	0		ASTM E202
Specific Gravity @25C		1.035	1.037		1	USP
Appearance	Clear & Bright				1	ASTM E2680
Specific Gravity @20C		1.0375	1.0390		1	ASTM E202

(N)otes :1-Agreed Specification limits - no results reported

This product is not intended for use in pharmaceutical, food (including animal feed) or cosmetic type applications.

USP method: According to latest version of US pharmacopeia

SHELL EASTERN CHEMICALS (S) (Unique Entity Number 52812669E)

*Shell Chemicals certifies that these results are based upon sampling and testing procedures in place at the time of production.*