



PETRONAS

CERTIFICATE OF ANALYSIS

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CARBOWAX POLYETHYLENE GLYCOL 400 230 KG STEEL DRUM

Carrier/Vehicle ID	: MRKL16639440	Material ID	: 72000050
Customer P.O. No.	:	Customer No.	: 8010060329
Sales Order No.	: 100071832	Batch No.	: X14247
Delivery Qty	: 80.000	Delivery No.	: 500114402
Delivery Unit	: DR	Inspection Dt.	: 21 APR 2014

NOTE: THE TEST CHARACTERISTICS AND THEIR UNITS, TOLERANCES AND RESULTS LISTED BELOW WILL VARY DEPENDING ON THE BUSINESS, CUSTOMER & MATERIAL REQUIREMENTS.

Test Characteristics	Results	Unit	Tolerance Limits	Method
MOLECULAR WEIGHT	402	MWU	380 - 420	1B-ZMETH-1.2B
PH5% AQUEOUS 25C	5.4	NCL	4.5 - 7.5	1B-ZMETH-13.2B
COLOR	3	FTCO	0 - 18	1B-ZMETH-3.8c
WATER	0.1	WTP	0.0 - 0.5	1B-ZMETH-24C
ACIDITY AS ACETIC ACID	0.01	WTP	0.00 - 0.02	1B-ZMETH-1A
VISCOSITY 210F	7.3	CST	3.6 - 8.0	1B-ZMETH-23D
COMPLETE & COLOR OF SOL	PASS: = Slightly hazy	-	-	DOWM-101924-EG1

This product meets the Product Sales Specification. This result is based on the sample being tested.

Marketed by: **PETRONAS CHEMICALS MARKETING SDN. BHD.** (80474 V)
Level 15, Tower 1, PETRONAS Twin Towers, Kuala Lumpur City Centre, 50088 Kuala Lumpur, Malaysia.

Manufactured by: **PETRONAS CHEMICALS DERIVATIVES SDN. BHD.** (406586D)
(formerly known as OPTIMAL CHEMICALS (MALAYSIA) SDN. BHD.)
Administration Building, PETRONAS Petroleum Industry Complex, KM106 Jalan Kuala Terengganu - Kuantan, 24300 Kerih, Terengganu Darul Iman, Malaysia.