



บริษัท ไทยโพลีเอทิลีน จำกัด
THAI POLYETHYLENE CO., LTD.

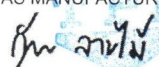
CERTIFICATE OF ANALYSIS

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PRODUCTION/MANUFACTURE DATE : August 04, 2014 DATE : August 13, 2014
INVOICE NO. : 1631003416 BATCH/LOT NO. : R9148009
GRADE : SG660 QUANTITY : 6.000 MT
SAMPLE CHARACTERISTIC : ETD DATE : August 13, 2014

APPLICANT/BUYER/CUSTOMER NAME : PLASTI PACK
JALAN INDUSTRIAL PARK,
JALADHULAGORI, P.S.- SANKRAIL,
ANDUL MOURI, HOWRAH - 711302
IEC CODE: 0295003294

TEST ITEM	UNIT	TEST RESULT	TEST METHOD
Retained on 75 micron	%	97.1	ASTM D 1921
Impurities and Foreign Matter	pt/100 squ	1	ISO 1265
Volatile Matter	%	0.1	ISO 1269
K-Value	-	66.0	DIN 53726
Retained on 250 micron	%	0.1	ASTM D 1921
Apparent Density	g/ml	0.54	ISO 60

THAI POLYETHYLENE CO.,LTD.
AS MANUFACTURER

(Kuntika Lymai)
Authorized Signature CO.,LTD

Disclaimer:

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

*** To be continued on next page ***

CEE-F-C1011-002

This document is issued and approved by computer system and does not sign manually by authorized person.

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LG PVC **LS100H**

Suspension Resin



Product Information

www.chemwide.com

Updated : Mar. 2013

General Description

LS100H, homopolymer made by suspension polymerization, can be applied to rigid products.

Main Applications

Pipe, profiles, sash

Resin Properties

Parameter	Test Method	Unit	Test Condition	Typical Value
K-Value	DIN 53726	-	-	67
Degree of Polymerization	ASTM D1243	-	30 °C	1,060 ± 50
Particle Size	ASTM D1921	%	45 Mesh pass	99.8
Apparent Bulk Density	ASTM D1895	g/cm ³	-	0.59 ± 0.04
Specific Gravity	ASTM D792	-	23 °C	1.4
Volatiles	ASTM D3030	%	110 °C, 1hr	Max. 0.3

Packaging

Paper bag(25kg), Jumbo bag

Certificate Numbers

ISO 9001:2000 00048-1997-AQ-SEO-RvA (rev.1)
ISO 14001:2004 0008-1996-AE-SEO-RvA
OHSAS 18001:1999 0015-2000-HSO-SEO-DNV (rev.1)



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Keep the directions and advices contained in MSDS (Material Safety Data Sheet) made and distributed by LG Chem when handling the product and work out proper safety countermeasures. The substance described in MSDS is intended for general condition and each user must work out additional safety countermeasures when mixing with other products or using in special condition.



HANWHA CORPORATION
C.P.O. BOX 7423, SEOUL, SOUTH KOREA

CERTIFICATE OF ANALYSIS

To **PLASTI PACK** Date : 2015-05-16
JALAN INDUSTRIAL PARK
JALADHULAGORI PS SANKRAIL
ANDUL MAURI HOWRAH 711302, INDIA

Shipment from **KWANGYANG PORT IN SOUTH KOREA**
 Shipment to **KOLKATA PORT, INDIA**
 Shipment on **KMTC DUBAI /1501W**
 Shipped on board date **2015-05-16**

Description of Goods

54 M.T. PVC RESIN P-1000
 DULY PACKED IN 25 KG NET IN EXPORT STANDARD BAG
 AS PER PROFORMA INVOICE NO.15 PI-IN0421-B DATED 21APR2015 OF HANWHA CORPORATION.
 DOCUMENTARY CREDIT NUMBER:DPCDAL361123
 ISSUED BY HSBC GLOBAL TRADE AND RECEIVABLES FINANCE,
 31,B.B.D.BAG,KOLKATA - 700 001, INDIA.

Remarks

WE HEREBY CERTIFY THAT THE FOLLOWING MENTIONED RESULTS
 HAVE BEEN OBTAINED FROM ANALYTICAL TEST CONDUCTED ON THE RANDOM SAMPLE MATERIAL.
 THEREFORE IT IS PROVED THAT PRODUCTS ARE OF VIRGIN AND FIRST QUALITY
 STANDARD PRODUCTS. QUALITY OF GOODS AND RESULT OF ANALYSIS OF GOODS AS FOLLOWS :

TEST ITEMS	UNIT	SPECIFICATIONS/METHOD	TEST RESULT
=====	====	=====	=====
LOT NO.			Y50511B2
AVERAGE POLYMERIZATION DEGREE	N/A	950 ~ 1050	991
BULK DENSITY	G/CC	0.48 ~ 0.56	0.560
VOLATILE MATTER	%	MAX. 0.30	0.140
P.S DISTRIBUTION (42 MESH PASS)	%	MIN. 100	100

HANWHA CORPORATION
S. Y. KIM
 S. Y. Kim **GEN. MANAGER**



華夏聚合股份有限公司高雄分公司
CGPC POLYMER CORPORATION KAOHSIUNG BRANCH

Certificate of Analysis

Customer : PLASTI PACK		Date : 2015/05/26		
Product Name : PVC RESIN SUSPENSION GRADE H-66		Order : 15000515		
Quantity : 51 M.T.		Shipping : 15800364		
Lot No. : 15052				
Test Items	Test Method	Test Standard	Test Result	
1. Volatile Matter Content (%)	ISO 1269	< 0.3	0.13	
2. Apparent Density (g/cm ³)	ISO 60	0.48~0.58	0.546	
3. Foreign Material (grains/100g)	Visual Inspection	< 40	6	
4. Particle Size Distribution (pass %) <u>Micron</u> <u>Mesh No.</u> 355 45	Malvern Mastersizer 2000E	> 99.0	99.85	
5. VCM Residual (ppm)	ISO 6401	< 1.0	0.1	
6. K-Value	ISO 1628-2	65~67	66	

核准(Approved) : 王文龍(Wang Wen Long)

製表(Prepared) : 何國禎(Kuo Chen Ho)

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Factory: 8, Shihua 2nd Rd., Lin-Yuan, Kaohsiung, Taiwan 832,
ROC.
Tel: 886-7-7040988 Fax: 886-7-6417672

CGPC POLYMER CORPORATION
KAOHSIUNG BRANCH

.....*Melw*.....

DOCUMENTARY CREDIT NUMBER DC DAL361151 ISSUING DATE: MAY.19,2015
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