



cust: Waste Services, Inc
 PO#: JED CELL 10 adds
 dest: St Cloud, FL

doc	24544
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English Dimensions			
roll #	wid	len	area
3 additional rolls 60 HD micro (522)(Special Length)			
check weld rod qty (if ordered)			resin lot #
100k / lot TRICALI WE cut 1ft conf			

G14D162021	23	522	12,006	60HD micro	3tot (long)	1	3890	1ft conf	H7240412
G14D162022	23	522	12,006	60HD micro	3tot (long)	2	3890		H7240412
G14D162023	23	522	12,006	60HD micro	3tot (long)	3	4064		H7240412
							11844		

ROLL # G14D162021		LOT # H7240412		LINER TYPE MICROSPIKE HD 60			
		METRIC	ENGLISH			METRIC	ENGLISH
Thickness	MIN	1.41 mm	55 mil	Thickness	1.52 mm	60 mil	
Measurement							
ASTM D5994	MAX	1.76 mm	69 mil	Length	159.108 m	522 feet	
(Modified)	AVE	1.53 mm	60 mil	Width	7.01 m	23 feet	
OIT(Standard) ASTM D 3895							204 minutes
Asperity		Average	Top				26 mil
ASTM D7466			Bottom				34 mil
Specific Gravity		Average Density			g/cc		.945
ASTM D792							
MFI ASTM D1238 COND. E		Melt Flow Index 190C/2160 g - g/10 min					.21
Grade	K307						
Carbon Black Content ASTM D4218		Range			%		2.40
Carbon Black Dispersion ASTM D5596		Category			10 in Category 1		
Tensile Strength ASTM D6693 (2 inches / minute)		Average Strength @ Yield	MD	26 N/mm	149 ppi	2484 psi	
			TD	25 N/mm	141 ppi	2348 psi	
		Average Strength @ Break	MD	33 N/mm	189 ppi	3154 psi	
			TD	34 N/mm	194 ppi	3226 psi	
Tensile Elongation ASTM D6693 (2 inches / minute) Lo = 1.3" Yield Lo = 2.0" Break		Average Elongation @ Yield	MD			%	16.0
			TD			%	21.0
		Average Elongation @Break	MD			%	604.0
			TD			%	484.0
Dimensional Stability ASTM D1204 (Modified)		Average Dimensional Change				%	-0.97
Tear Resistance ASTM D1004 (Modified)		Average Tear Resistance	MD		249.1 N		56.0 lbs
			TD		258.0 N		58.0 lbs
Puncture Resistance FTMS 101 Method 2065 Modified		Average Peak Load			364.7 N		82.0 lbs
Puncture Resistance ASTM D4833 (Modified)		Average Peak Load			551.6 N		124.0 lbs
ESCR ASTM D1693		Minumum Hrs w/o Failures			1500 Hrs		CERTIFIED
Notched Constant Tensile Load ASTM D5397		Pass/Fail @ 30%			300 Hrs		ONGOING

Customer Waste Services, Inc
PO JED CELL 10 adds
Destination St Cloud, FL

Date **4/15/2014**

Signature


Quality Control Department

ROLL # G14D162022
LOT # H7240412
LINER TYPE MICROSPIKE HD 60

		METRIC	ENGLISH		METRIC	ENGLISH
Thickness	MIN	1.43 mm	56 mil	Thickness	1.52 mm	60 mil
Measurement				Length	159.108 m	522 feet
ASTM D5994	MAX	1.67 mm	66 mil	Width	7.01 m	23 feet
(Modified)	AVE	1.54 mm	61 mil			
OIT(Standard) ASTM D 3895						204 minutes
Asperity		Average	Top			25 mil
ASTM D7466			Bottom			34 mil
Specific Gravity		Average Density			g/cc	.945
ASTM D792						
MFI ASTM D1238 COND. E		Melt Flow Index 190C/2160 g - g/10 min				.21
Grade	K307					
Carbon Black Content ASTM D4218	Range				%	2.40
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Puncture Resistance ASTM D4833 (Modified)	Average Peak Load			551.6 N		124.0 lbs
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ROLL # G14D162023
LOT # H7240412
LINER TYPE MICROSPIKE HD 60

		METRIC	ENGLISH		METRIC	ENGLISH
Thickness	MIN	1.37 mm	54 mil	Thickness	1.52 mm	60 mil
Measurement				Length	159.108 m	522 feet
ASTM D5994	MAX	1.73 mm	68 mil	Width	7.01 m	23 feet
(Modified)	AVE	1.53 mm	60 mil			
OIT(Standard) ASTM D 3895						204 minutes
Asperity		Average	Top			26 mil
ASTM D7466			Bottom			34 mil
Specific Gravity		Average Density		g/cc		.945
ASTM D792						
MFI ASTM D1238 COND. E		Melt Flow Index 190C/2160 g - g/10 min				.21
Grade	K307					
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Certificate of Analysis

Shipped To: AGRU AMERICA INC:GEORGETOWN
500 GARRISON RD
GEORGETOWN SC 29440-9688
USA

Recipient: PALMER
Fax:

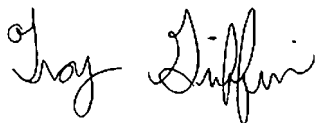
Delivery #: 88828288
PO #: 8077
Weight: 193600 LB
Ship Date: 04/02/2014
Package: BULK
Mode: Hopper Car
Car #: CBFX470028
Seal No: 319856

Product:
MARLEX POLYETHYLENE K307 BULK

Lot Number: H7240412

Property	Test Method	Value	Unit
Melt Index	ASTM D1238	0.21	g/10mi
HLMI Flow Rate	ASTM D1238	20	g/10mi
Density	D1505 or D4883	0.938	g/cm3
Pellet Count	P02.08.03	27	pel/g
Production Date		03/28/2014	

The data set forth herein have been carefully compiled by Chevron Phillips Chemical Company LP (CPChem).
However, there is no warranty of any kind, either expressed or implied, applicable to its use, and the user assumes all risk and liability in connection therewith.



Troy Griffin
Quality Systems Coordinator

For CoA questions contact Customer Service Representative at +1-832-813-4806