

**CERTIFICATE OF ANALYSIS**  
**Ex Factory : 102 And 103**

Invoice No. : 121/PHT/2013 Dated. February 04, 2013  
Commodity : 160 Drums = 39.088 MTons GW = 38.4 MTons NW. 2 FCL = 38.4 MTons Indonesian Gum Rosin WW Grade

Vessel :  
Marks : GUM ROSIN WW  
240 KG NW  
Destination : Ambarlı Port, Istanbul  
B/L. No. : MSCUDZ422272 Dated. February 11, 2013

The result of chemicals analysis as follows :

No	Specification	Result	
		102	103
1	Softening Point Ring And Ball	80,0 ° C	79,0 ° C
2	Colour By Lovibond Comparator	WW	WW
3	Impurity / Solubelity In Toluen	0,0249 %	0,0268 %
4	Acid Value	189,51	188,41
5	Saponification Value	196,60	196,62
6	Iodine Value	11,24	10,91
7	Ash Content	0,0180 %	0,0176 %
8	Volatile Oil Content %	1,60 %	1,70 %

To my knowledge the result of the above inspection could be used by any body concern.