

**CERTIFICATE OF QUALITY AND QUANTITY  
(CERTIFICATE OF ANALYSIS)**

Product: **SORBITOL SOLUTION 70 % U.S.P.NON CRYSTALLINE**

BuyerName: **AVRASYA KIMYASAL HAM MADDELERI DIS TICARET A.S. [TURKEY]**

| SR. NO. | TESTS   | LIMITS   | OBSERVATION   |
|---------|---|--|---|
| 1.      | Characters  | A clear, colorless, syrupy liquid, miscible with water   | A clear colorless, syrupy liquid, miscible with water |
| 2.      | Identification                                      | A A deep pink colour or wine red colour appear<br>B The retention time of the major peak form the sample solution correspond to that of the std solution as obtained in the assay<br>C limit of di ethylene glycol and ethylene glycol NMT 0.1 % | Complies<br><br>Complies<br><br>Complies              |
| 3.      | PH (14% Soln)                                       | 5 to 7.5   | 5.76  |
| 4.      | Residue on ignition                                 | NMT 0.1 % w/w  | 0.0199 %  |
| 5.      | Reducing sugars<br>(as glucose on anhydrous basis ) | NMT 0.3 %w/w   | 0.175 % w/w   |
| 6.      | Lead  | Maximum 0.5 ppm  | Less than 0.5 ppm                                     |
| 7.      | Nickel  | Maximum 1 ppm  | Less than 1 ppm                                       |
| 8.      | Water   | Between 28.5 % to 31.5 %   | 29.43 % w/w   |
| 9.      | Assay<br>A D-glucitol<br>(on as such basis)         | NLT 45 %w/w  | 61.66 % w/w   |
| 10.     | Mannitol  | Maximum 2.0%   | 1.66 % w/w  |
| 11.     | Total plate count                                   | <1000 cfu/ml   | < 10 cfu/ml   |
| 12.     | Ethylene glycol                                     | Max 0.1%   | 0.049%  |
| 13.     | DiEthylene glycol                                   | Max 0.1%   | Not detected.   |
| 14.     | Yeast & mold  | < 100 cfu/ml   | < 10 cfu/ml   |
| 15.     | E Coli  | Should be Absent   | Absent  |
| 16.     | Salmonella  | Should be Absent   | Absent  |