## Certificate of Analysis

(Representative Sample Certificate)

| Product Name: | Polysorbate 80 |
| :--- | :--- |
| INCI Name: | Polysorbate 80 |
| CAS Number: | $9005-65-6$ |
| Lot Number: | Not available (data may vary slightly with different lots or batches) |
| Expiration Date: | 24 months from production date |


| Property | Specifications | Laboratory Values | Results |
| :--- | :--- | :--- | :--- |
| Acid Value (mg KOH/lg sample) | 2 max | 1.33 | pass |
| Hydroxyl Value (mg KOH/lg sample) | $65-80$ | 74.69 | pass |
| Saponification Value (mg KOH/1g <br> sample) | $45-55$ | 49.59 | pass |
| Water | $3.0 \%$ max | 2.32 | pass |
| IR (NEAT) | TMS | pass | pass |
| *Color (Gardner) | 5 max | 4 | pass |

This product does not contain Bovine, Ovine, or Caprine materials of any type.
All product characteristic test methods conforms to USP/NF unless noted with an asterisk (*).

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.

This report is not to be signed.

