

P.2.5 MICROBIOLOGICAL ATTRIBUTES

The microbiological attributes of the excipients were characterized during the development program. All excipients meet USP <1111> *Microbial Examination of Nonsterile Products: Acceptance Criteria for Pharmaceutical Preparations and Substances for Pharmaceutical Use* and Ph. Eur. 5.1.4 *Microbiological quality of non-sterile pharmaceutical preparations and substances for pharmaceutical use*, when tested in accordance with USP <61> and <62>, and Ph. Eur. 2.6.12 and 2.6.13, where applicable.

Current Good Manufacturing Practices are used which minimize the possibility for microbial contamination for the finished product. This was confirmed via testing of three lots manufactured at the commercial scale for the purpose of PPQ and stability studies according to USP <61> and <62>. All lots met the USP <1111> criteria for nonaqueous preparations for oral use (Total Aerobic Microbial Count NMT 10^3 CFU/gram, Total Combined Yeast and Mold Count NMT 10^2 CFU/gram and absence of *Escherichia coli* in 1 gram), as stated in Sections 3.2.P.5.4 and 3.2.P.8.3.

Per USP <921> *Water Determination*, the drug product specification is set to NMT 1.0% at release and NMT 2.0% for shelf life as described in Section 3.2.P.5.1. The water activity for the drug product was confirmed to comply with the specifications as stated in Sections 3.2.P.5.4 and 3.2.P.8.3.

A product microbial risk evaluation conducted for the drug product manufacturing site supports annual microbiological quality testing at release and on stability following the specification listed in Section 3.2.P.5.1. Input material, manufacturing, process controls as well as environmental controls are all in place to ensure consistent microbiological quality. The excipients used in the manufacture of the product are tested for microbiological quality as required by their respective compendial requirements. This product demonstrates satisfactory microbiological quality based on the results of all batches evaluated. Microbiological quality testing will continue to be monitored annually on the drug product for release and throughout the stability study.