



CERTIFICATE OF MATERIAL ORIGIN

Date: 10-6-19

Revision: 01

Product: Heprasil® (Hyaluronic acid/Heparin Mixture)

Supplier	Advanced BioMatrix, Inc.
Supplier Catalog No.	GS217, GS215
Supplier Location	California, USA
Name/Grade	Heprasil® (Hyaluronic Acid/Heparin Mixture)
Animal Origin (including human)	
-Animal Species	Hyaluronic Acid - Not applicable Heparin - porcine
-Tissue Origin	Hyaluronic Acid - Not applicable Heparin - intestinal mucosa
-County of Origin	Hyaluronic Acid - Not applicable Heparin – United States
Non-animal Source of Origin	
-Country of Origin	United States/Czech Republic
Animal Origin Material Adventitious	Hyaluronic Acid - Non-animal materials used during the manufacturing process
Agent Risk Reduction Steps	Heparin – Multi-step purification chemical treatment
Method of Manufacturing	Hyaluronic Acid - Sodium hyaluronate produced by fermentation (Streptococcus zooepidemicus bacterial strain, non-haemolytic) - Non-GMO Heparin – extraction and purification
Briefly describe Method of Manufacturing	Hyaluronan is a polysaccharide composed of repeating disaccharide units. The hyaluronic acid is produced using fermentation technology followed by downstream purification processes. This hyaluronan product is formulated in a physiologically compatible buffer salt solution and neutral pH. Heparin – Multi-step extraction and purification process

The above information has been completed by an authorized representative of management and is complete and correct to my knowledge.

President

October 6, 2019

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