

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by LRQA. Certificate Number.  
10551915

Catalogue Number	A18820
Lot Number	10232181
Description	Saponin
CAS Number	8047-15-2
Quality Test/Release Date	03/Feb/2021
Suggested retest date	03/Feb/2026
Country of Origin	Germany
Declaration of Origin	Plant
BSE/TSE	Vegetable

Result Name	Units	Specifications	Test Value
Comment	cm	Foam rate: 6-17cm	10.5
Comment	mN/m	Surface tension: 35-55mN/m	49.8
Comment		Turbidity: ≤ 70 Formazin turbidity units	4.57
Appearance (Color)		White to pale yellow or pale cream	Pale cream
Form		Powder	Powder
pH		4.0-7.0 (5% in aqueous. Solution)	5.01
Specific Gravity	g/ml	1.01-1.02	1.019



Paul Coleman  
Site Quality Manager

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.