CERTIFICATE OF ANALYSIS

Product Description	POLYOXYETHYLENESORBITAN MONOOLEATE; TWEEN® 80
Product Number	P738
Lot Number	11L0738003
Storage Temperature	Room Temperature
Molecular Weight	1309.63
Formula	$C_{64}H_{124}O_{26}$
CAS Number	9005-65-6

Physiochemical Specifications:

TEST	SPECIFICATION	RESULTS
Solubility	Miscible with Water @ 1 mL/L	Passes
pH (Neat)	Under Development	9.76
Physical Appearance		
Color*	2024-50, 2024-60 to 2027-60	2024-50 Light Yellow
Texture	Clear, Viscous Liquid	Clear, Viscous Liquid
Insolubles	None	Passes
Moisture (KF)	For Information Only	2.08%
Hydroxyl Number	For Information Only	68.28

* Product color based upon comparisons between sample and standardized color wheel (Benjamin Moore® Color PreviewTM).

Biological Testing:

Test Concentration: 1.0 mL/L

TEST SPECIFICATION	PLANT CELL LINE	RESULTS
This product is tested with two or more plant cell lines to ensure there are no	Achimenes	Passes
phytotoxic impurities that would cause morphological aberrations to plants.	Tobacco callus	Passes

The material described in this certificate is synthetic. No animal- or plant-derived components were used in the manufacture of this product.

*Phyto*Technology Laboratories® provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. *Phyto*Technology Laboratories® shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

Recommended Shelf Life Date: November 2019

gary Szehinger

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