CERTIFICATE OF ANALYSIS

Product Description GELZANTM
Product Number G3251

Lot Number AWK3251077 Storage Temperature Room Temperature

CAS Number 71010-52-1

Physiochemical Specifications:

| TEST | SPECIFICATION | RESULTS | |
|------------------------------|--|------------------------|--|
| Solubility | Partially Soluble to Soluble in Water Heated to Boiling | Passes | |
| pH (2.00 g/L) | 4.0 - 6.5 | 5.9 | |
| Physical Appearance | | | |
| Color* | 2143-70 to 2154-70 or | | |
| | PM-1 to PM-3, PM-19 | 2153-70 Light Cream | |
| Texture | Fine to Coarse Powder | Fine Powder | |
| Solution Appearance | | | |
| After Heating in Water | | | |
| Clarity | Clear to Slightly Hazy | Clear | |
| Color | Colorless to Slight Yellow Tint | Colorless | |
| Insolubles | None to Slight | Passes- None | |
| Gel Strength | Minimum 400 g/cm ² | 654 g/cm ² | |
| Transmittance | Minimum 80% | 96% | |
| Loss on Drying | For Information Only | 4.3 | |
| Gel Formation | Forms Gel When Suspended in | Passes | |
| | Medium and Autoclaved | | |
| Compression Break Force Test | Force Gauge Measurement (g/cm ²⁾ | 68.8 g/cm ² | |
| | For Information Only | | |

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

Biological Testing:

Test Concentration: 2.0 g/L

| TEST SPECIFICATION | PLANT CELL LINE | RESULTS |
|--|-----------------|---------|
| This product is commonly used as a means of support in plant tissue culture. This product is tested with two | Kalanchoe | Passes |
| or more plant cell lines to ensure proper gelling and that no phytotoxic impurities are present that would produce abnormal morphological plant development. | 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.

PhytoTech Labs Inc. provides the above information intended to be used only as a guide to the appropriate handling of this material by a properly trained person. PhytoTech Labs Inc. 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.

Date of Release: 3-July-2019

Recommended Shelf Life Date: July-2027

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