

Quality Assurance & Compliance Testing Utilizing Textile & Related Technologies

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ATTN: Jerry Lee Porter

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ISO/ICC 17025 Certified Third Party Test Report

DATE ISSUED: DATE REVISED: August 12, 2019

August 14, 2019

CLIENT:

MCR Safety 685 Highway 72 Piperton, TN 38017

SAMPLE IDENTIFIED BY CLIENT AS:

Fabric Submitted Article #: BJ238

Roll #: 666, PN #: 427517, Ref: RD

Color Hi Vis Yellow

TEST PROCEDURE:

RESISTANCE OF PROTECTIVE CLOTHING MATERIALS TO PENETRATION BY LIQUIDS (ASTM F903):

Temperature:

70°F

Specimen Area Exposed:

4.15 in²

Thickness:

0.234 in

Procedure:

Method A (0 psig for 5 min, 2 psig for 10 min)

| | Chemical Name | Concentration | CAS Number | Result | Comment |
|----|------------------------------|---------------|------------|--------|-------------------|
| 1 | Acetonitrile | 100% | 75-05-8 | Pass | |
| 2 | 1,2 Dichloroethane | 100% | 107-06-2 | Fail | Liquid penetrated |
| 3 | Ethanolamine | 100% | 141-43-5 | Pass | |
| 4 | Ethyl Acrylate | 100% | 140-88-5 | Pass | |
| 5 | Formaldehyde | 37% | 50-00-0 | Pass | |
| 6 | Hexanes | 100% | 96-37-1 | Pass | |
| 7 | Hydrochloric Acid | 37% | 7647-01-0 | Pass | |
| 8 | Hydrofluoric Acid | 48% | 7664-39-3 | Pass | |
| 9 | Kerosene | 100% | 8008-20-6 | Pass | |
| 10 | Methyl Ethyl Ketone | 100% | 78-93-3 | Fail | Liquid penetrated |
| 11 | Methylene chloride | 100% | 75-09-2 | Fail | Liquid penetrated |
| 12 | Naphtha (Mineral Spirits) | 100% | 8030-30-6 | Pass | |
| 13 | Nitric Acid | 70% | 7697-37-2 | Pass | |
| 14 | Sodium Hydroxide | 70% | 1310-73-2 | Pass | |
| 15 | Sodium Hypochlorite | 6% | 7681-52 | Pass | |
| 16 | Styrene | 100% | 100-42-5 | Pass | |
| 17 | Sulfuric Acid | 70% | 7664-93-9 | Pass | |
| 18 | Toluene | 100% | 108-88-3 | Pass | |
| 19 | 1,1,1 Trichloroethane | 100% | 71-55-6 | Pass | |

Signed For The Company By

Laboratory Manager

JG/07...JG/08

Sested & Evaluated

Stacy Sadowy Quality Assurance Manager

All of the tests in this report were carried out in accordance with the procedures and provisions detailed in the Vartest Quality Assurance Manual. Vartest maintains a quality system in compliance with ISO/IEC 17025:2005. The findings and results in this test report apply only to the specific sample(s) submitted to by the client for testing.