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**Laboratory Report No. 30847 A**



7-Jul-16

Mr. John Austin
Beagle I, Inc.
202 S. Lake Ave., STE 230
Pasadena, CA 91101

Cc: n/a

**PO #:** n/a

**Item:** One (1) strap-on overshoe sample

**Identification:** ID: Barefoot on the Run
Size: 11 (Men's)

**Purpose:** Measuring the Coefficient of Friction for Evaluation of Slip Performance; ASTM F 2913-11
Slip Resistance, ASTM F 1677-05

| Test<br>Unit of Measure | Specimen Results | | | | | Average |
|---|---|---|---|---|---|---|
| **Measuring the Coefficient of Friction for Evaluation of Slip Performance** | | | | | | |
| **ASTM F 2913-11** | | | | | | |
| Temperature: 72°F (50% RH) | | | | | | |
| Vertical Force: 500 (± 25) N | | | | | | |
| SATRA Quarry | | | | | | |
| **Coefficient of Friction - Backward Forepart Slip** | | | | | | |
| Dry | 0.60 | 0.60 | 0.58 | 0.60 | 0.62 | 0.60 |
| Wet | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Oily/Wet | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Oily | 0.16 | 0.15 | 0.15 | 0.16 | 0.16 | 0.16 |
| **Coefficient of Friction - Forward Heel Slip** | | | | | | |
| Dry | 1.11 | 1.11 | 1.08 | 1.11 | 1.11 | 1.10 |
| Wet | 0.44 | 0.44 | 0.44 | 0.43 | 0.43 | 0.44 |
| Oily/Wet | 0.25 | 0.25 | 0.26 | 0.25 | 0.25 | 0.25 |
| Oily | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

| Test<br>Unit of Measure | Specimen Results | | | | | Average |
|---|---|---|---|---|---|---|
| **Measuring the Coefficient of Friction for Evaluation of Slip Performance** | | | | | | |
| **ASTM F 2913-11** | | | | | | |
| Temperature: 72°F (50% RH) | | | | | | |
| Vertical Force: 500 (± 25) N | | | | | | |
| SATRA Quarry | | | | | | |
| | **Coefficient of Friction - Forward Flat Slip** | | | | | |
| Dry | 0.57 | 0.57 | 0.58 | 0.60 | 0.61 | 0.59 |
| Wet | 0.32 | 0.32 | 0.32 | 0.32 | 0.33 | 0.32 |
| Oily/Wet | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.26 |
| Oily | 0.21 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 |

Note: Precision provided a size 9 boot for attachment of strap-on Overshoe for test sequence.

**ASTM F2913 Reagent Application**

| | |
|---|---|
| SATRA Quarry = | SATRA Quarry Tile. |
| Dry= | Dry. |
| Wet= | Section 10.5.2 - Distilled or de-ionized water |
| Oily/Wet= | Section 10.5.4.2 - A sprayed on uniform film of water applied on top of approximately 8 drops of corn oil (0.2 ± 0.02 g) smeared on the surface as a thin film. On average 1 drop of oil = 0.027grams. |
| Oily= | Section 10.5.4.2 modified to oily only - Approximately 8 drops of corn oil (0.2 ± 0.02 g) smeared on the surface as a thin film. |

**Slip Resistance**
**ASTM F1677-05**
**Mark II**
Smooth Concrete
Heel

| Dry | Wet | Oily # 1 | Oily/Wet # 1 |
|---|---|---|---|
| 0.84 | 0.72 | 0.28 | 0.25 |

**Slip Resistance, Test Description - ASTM F1677**

| | |
|---|---|
| Smooth Concrete= | 16"x16"x2" patio slab |
| Dry= | Dry. |
| Wet= | 25 mls distilled water. |
| Oily #1= | 2 drops of vegetable oil. |
| Oily/Wet #1= | 25 mls of distilled water with 2 drops of vegetable oil. |

***Report Revision Notification***

Laboratory Report 30847 dated 21-Jun-16 has been revised to Laboratory Report 30847 A for the following reason(s).
Client requested additional testing - ASTM F1677.



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Signed: Don G. Roney
Don G. Roney, Laboratory Manager

Signed: Suzanne Piispanen
Suzanne Piispanen, COO