



TENSILE STRENGTH & ELONGATION SAMPLE PREPARATION

For testing by TSI

Samples were prepared between July 10th and 12th

For consistency in sampling:

- all samples prepared used the same polyurethane binder
- all samples were mixed using 20% binder by weight of the rubber
- EPDM is a Light Blue by Gisolastic 1-3mm
- TPV is a Light Brown by Rosehill 1-3mm
- coated Black SBR by Superior Rubber
- colored Carribean Blue SBR by Superior Rubber
- colored Rubber Buffings by Superior Rubber

All materials were weighed using a Kamenstein model #5105596 electronic scale capable of measuring to within .1 of an oz. All samples were mixed using a total of 2.5 lbs of various crumb rubber materials with .5 lb. of binder and thoroughly mixed in blending bowl. All samples were made individually and compacted in place by hand trowel into a 12" X12" template with excess material disposed of.

The purpose for testing these products to evaluate how the Superior Rubber coated SBR products bond with the polyurethane and effect the overall strength and durability of the finished playground and running track surfacing materials.

Sample No. Description

- 1 Carribean Blue SBR - Superior Rubber with 20% binder
- 2 Coated Black SBR - Superior Rubber with 20% binder
- 3 Light Blue EPDM – Gizolastic with 20% binder
- 4 Light Brown TPV – Rosehill with 20% binder
- 5 4 colored Rubber Buffings - Superior Rubber with 20% binder

| Tensile Strength Summary | 01-08-2013 | Superior Rubber SBR | | | |
|---|-------------------------------|----------------------------|---------------------|--|--|
| TSI product description | Tensile Strength - psi | | % Elongation | | |
| Black SBR | 23.41 | | 22.2 | | |
| Black Superior SBR | 133.7 | | 45.1 | | |
| 4 color Superior Rubber Buffings | 59.75 | | 29.3 | | |
| 100% Ligth Blue EPDM | 115.6 | | 40.3 | | |
| Blue Superior SBR | 110.7 | | 35 | | |
| 100% Light Brown TPV | 176.7 | | 55.5 | | |
| Notes: | | | | | |
| It's quite apparent that a raw uncoated SBR weakens any surfacing system. | | | | | |
| The Black Superior coated SBR appears to be stronger than the Light Blue EPDM | | | | | |