



TECHNICAL REPORT

Test on infill material: PRO-Gran

Report Number LSUK.17-0011B

Client Murfitts Industries Ltd
Station Road
Lakenheath
Suffolk
IP27 9AD
United Kingdom

Date 12/03/2017

Summary Testing undertaken on samples of PRO-Gran infill material supplied by Murfitts Industries Ltd. The testing was undertaken in accordance with EN 15330-1, NF P90-112, DIN 18035-7 and FIFA Quality Programme for Football Turf / World Rugby Regulation 22.

Note: results in the report are taken from Labosport reports LSUK.17-0011 & R161091-C1

This report contains 4 pages

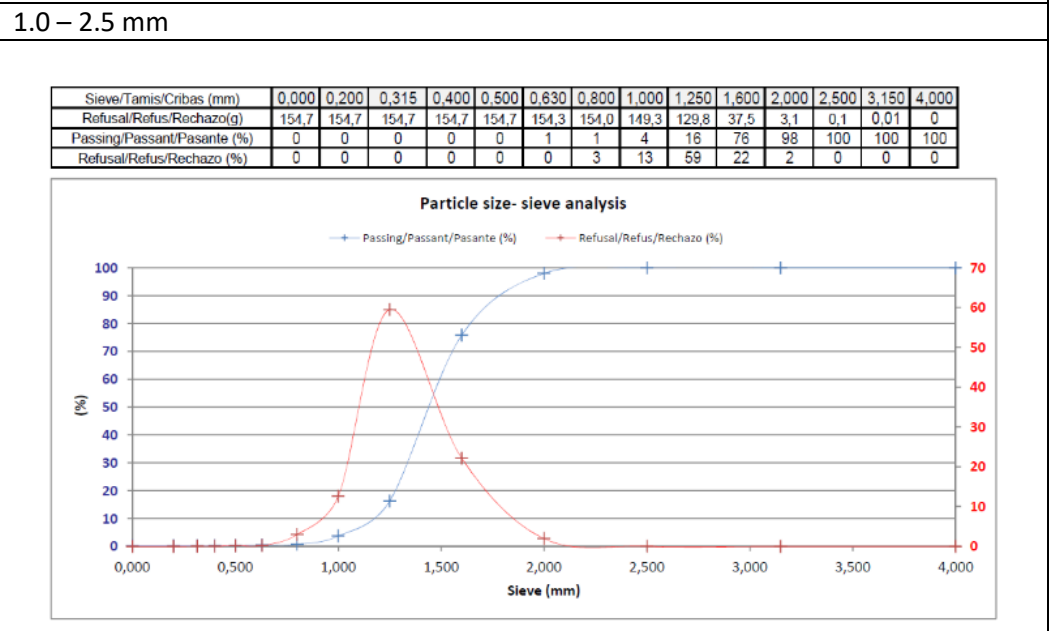
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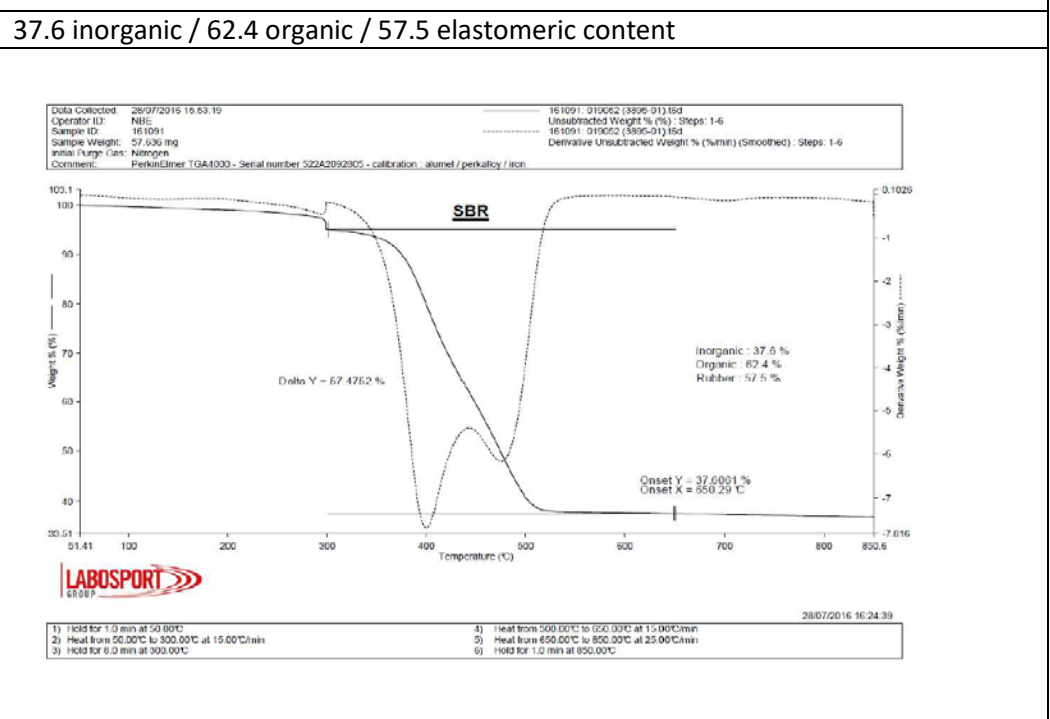
IDENTIFICATION

| | |
|---------------------------|---|
| Client / Supplier | Murfitts Industries Ltd |
| Address | Station Road Lakenheath Suffolk IP27 9AD United Kingdom |
| Commercial Name | PRO-Gran |
| Colour | Green |
| Type / Classification | Encapsulated SBR |
| Particle Shape (EN 14955) | A2 and B2 |
| Bulk Density (EN 1097-3) | 0.51 kg/m ³ |

Particle Size (EN 933-1)



TGA (%)



UVA (340 NM) AGEING (9600 KJ) – EN 14836

| | |
|---------------------------|------------------------------|
| Colour | Green |
| Grey Scale (EN 20105-A02) | 4 |
| Visual Aspect | No agglomeration or cracking |

View New



View After Ageing



UVB (313 NM) AGEING (4896 KJ) – EN 14836

| | |
|---------------------------|------------------------------|
| Colour | Green |
| Grey Scale (EN 20105-A02) | 4 |
| Visual Aspect | No agglomeration or cracking |

View New



View After Ageing



TOXICOLOGY AND ENVIRONMENT

| | | | | NF P90-112 | |
|------------|--|-------------------------|---|---------------------------------|---|
| | Parameter Elément Elemento | Unit Unité Unidad | Test method Méthode d'essai El método de ensayo | Result Résultat Resultado | Requirements Exigences Exigencias |
| NF P90-112 | Lead Pb Plomb / Plomo | mg/l | | < 0,005 | ≤ 0.040 |
| | Cadmium Cd Cadmio | mg/l | | < 0,005 | ≤ 0.005 |
| | Chromium total Cr Chrome total / Cromo total | mg/l | NF EN ISO 11885 | < 0,005 | ≤ 0.050 |
| | Tin Sn Etain / Estaño | mg/l | | < 0,005 | ≤ 0.050 |
| | Zinc Zn(1) with CO₂ Zinc avec CO ₂ / Cinc con CO ₂ | mg/l | | 6,01 | ≤ 20 |
| | Zinc Zn(2) without CO₂ Zinc sans CO ₂ / Cinc sin CO ₂ | mg/l | | 0,132 | ≤ 0.5 |
| | Dissolved organic carbone DOC Carbone Organique Dissous | mg/l | NF EN 1484 | 21,9 | ≤ 40 |
| | Chromium hexavalent Cr Chrome hexavalent / Cromo hexavalente | mg/l | NF T90-043 DIN 38405-24 | < 0,008 | ≤ 0.008 |
| | Mercury Hg Mercure / Mercurio | mg/l | NF EN 13506 DIN 12846 | < 0,0001 | ≤ 0.0010 |
| | NE : (1), (2) : NF P 90-112 / Zinc : one of the two conditions must be necessary / Pour le Zinc, une des deux conditions doit être requise cumplir. | | | | |

| | | | | DIN 18035-7 | |
|-------------|---|-------------------------|---|---------------------------------|-------|
| | Parameter Elément Elemento | Unit Unité Unidad | Test method Méthode d'essai El método de ensayo | Result Résultat Resultado | |
| DIN 18035-7 | Extractable Organic Halides EOX Organo-halogénés extractibles EOX Extraíbles Orgánicas Halogenuros EOX | mg/kg | DIN 38414-17 | 29 | ≤ 100 |

REPORTED BY:

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COLIN YOUNG
(MANAGING DIRECTOR)