

TEST REPORT

12-0557IT

Issued on November 16th 2012

COMPANY

Tinaz Rubber Chemistry Ind. Ltd. Co

PRODUCT NAME

LAY-FLEX EPDM RUBBER GRANULES

CATEGORY

EPDM GRANULES

Tests according to:

NF P90-100:2008 standard Surfaces for sports areas – Synthetic material surface-coated athletics tracks and run-up areas.

Reproduction of this Test Report is only authorised in its entirety.

The results are only valid for the sample subjected to testing.

This report, valid for 3 years, contains 6 pages.



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A large, light gray watermark of the word "SPORT" is centered on the page. The letters are bold and sans-serif. To the right of the word, there are several curved, overlapping lines that sweep from the bottom left towards the top right, mirroring the style of the LABOSPORT logo.

TEST PROGRAMME

Granules have been tested in accordance with NF P90-100 standard : Sport surfaces - Surfaces for sports areas – Synthetic material surface-coated athletics tracks and run-up areas. As required in this standard, chemical identification (TGA), particle size (EN933-1) and bulk density (NF EN 1097-3) have been realized.

REFERENCE DOCUMENTS

NF P90-100:2008 Sport surfaces - Surfaces for sports areas – Synthetic material surface-coated athletics tracks and run-up areas

EN 933-1 :1999 Tests for geometrical properties of aggregates. Determination of particle size distribution. Sieving method

NF EN 1097-3:1998 Tests for mechanical and physical properties of aggregates. Determination of loose bulk density and voids

STORAGE TIMES

Storage "Sine die" of specimens and documents

TEST PERFORMANCE CONDITION IN LABORATORY

Ambient temperature	Relative humidity
23 ± 2°C	50 % ± 5%

APPLICANT

COMPANY
ADDRESS

TINAZ RUBBER CHEMISTRY IND. LTD. CO
Oto Sanayi Sitesi Aytekin Sok No: 44
Levent Istanbul

COUNTRY

Turkey

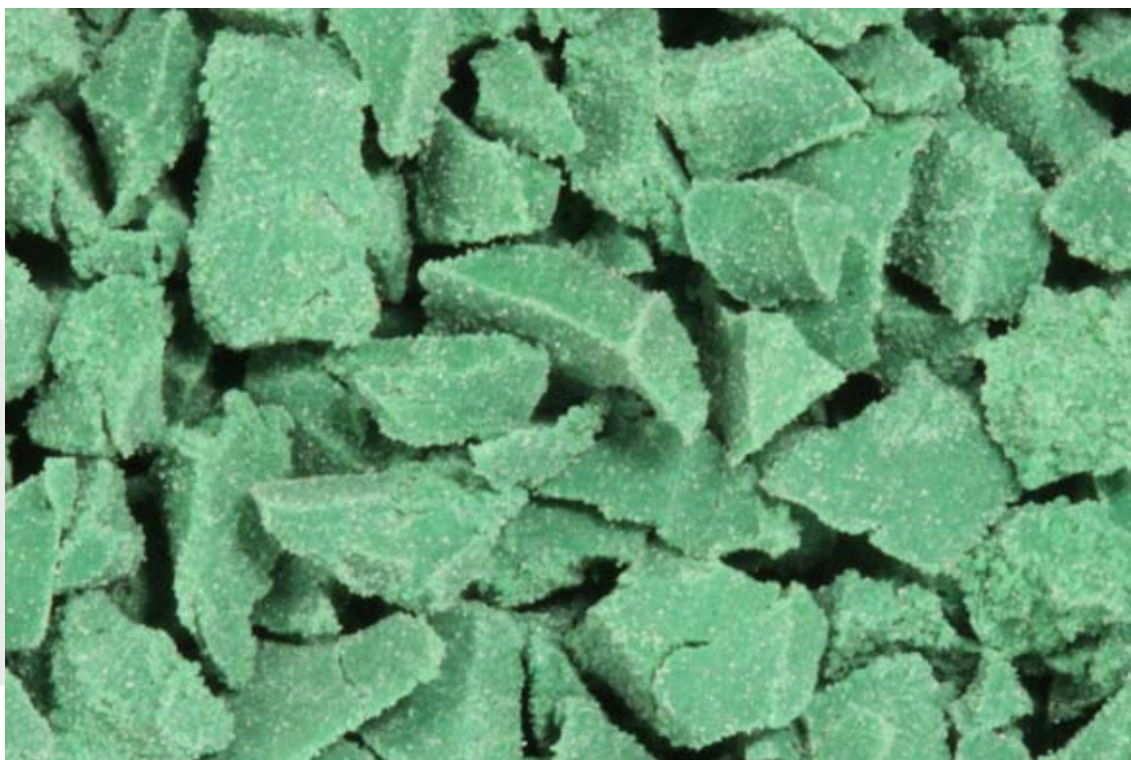
ACQUISITION DATA

DATE ORDER RECEIVED	November 06 th 2012
DATE FIRST SAMPLE RECEIVED	November 09 th 2012
DATE LAST SAMPLE RECEIVED	November 09 th 2012
TEST START DATE	November 09 th 2012
TEST END DATE	November 16 th 2012

SAMPLE IDENTIFICATION

Manufacturer	Commercial name	Color	Type
Tinaz Rubber Chemistry Ind. Ltd. Co	LAY-FLEX	Green	EPDM
Application declared	Top layer of Athletic surface when mixed with PU binder		

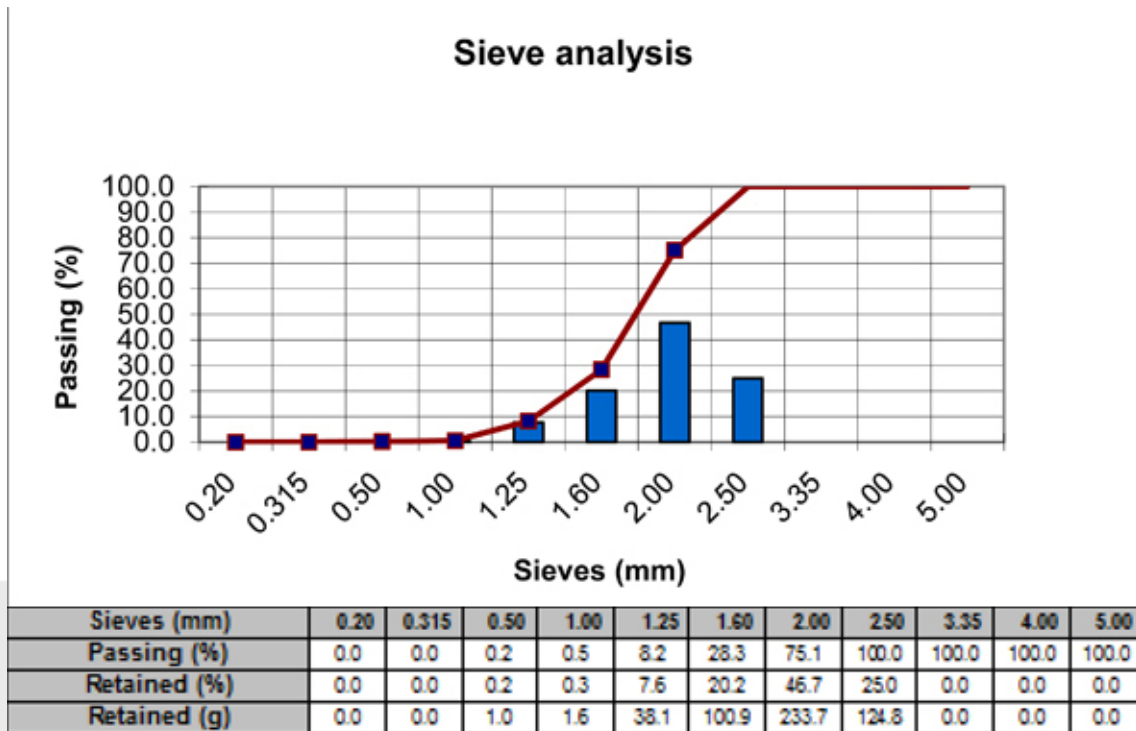
SAMPLE'S PHOTO



TESTS RESULTS

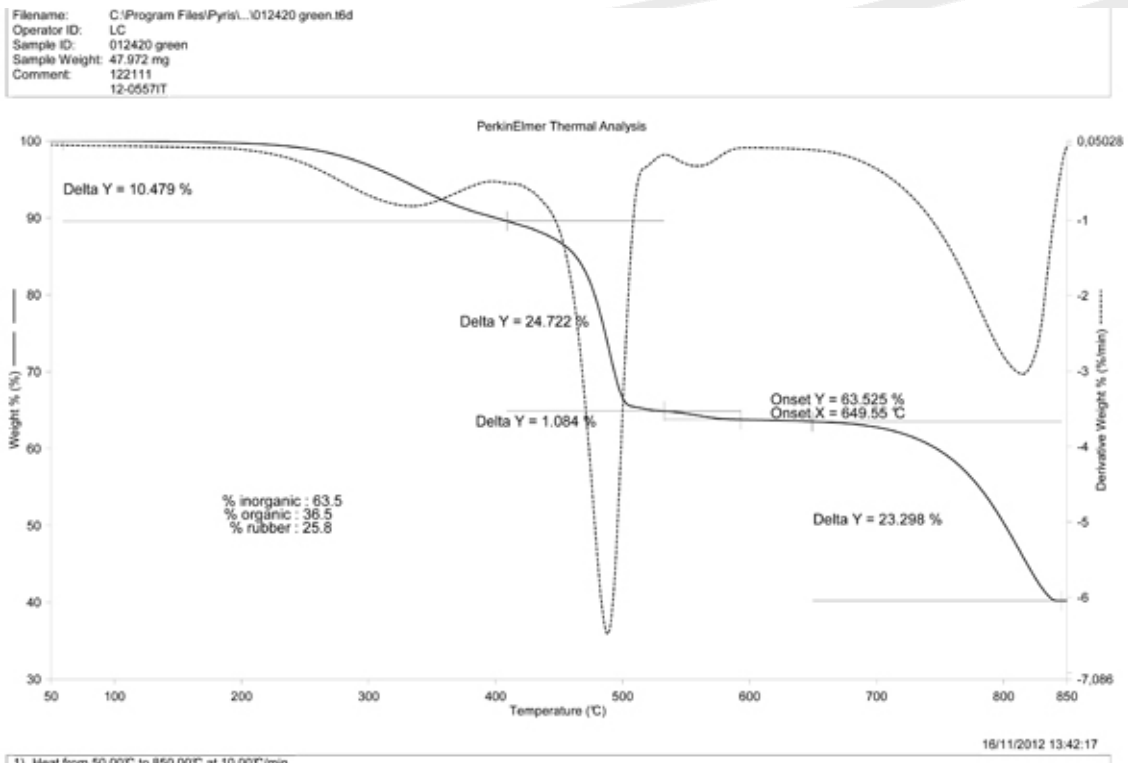
Test	Result	Requirement
Particle size	1.25 - 2.5mm.	$d \geq 1.0\text{mm}$. $D \leq 4.0\text{mm}$.
Bulk density	0.63g/cm ³	/
TGA	% mineral 63.5% % organic 36.5% % elastomer 25.8%	% elastomer $\geq 21\%$

PARTICLE SIZE CURVE



TGA GRAPH

This test consists in registering the sample mass variations (solid or liquid) according to the temperature. The obtained curve is named thermogram. It records simultaneously the weight curve and its primary derivative, that allows to know the temperature for which one the body degradation speed is the most important.



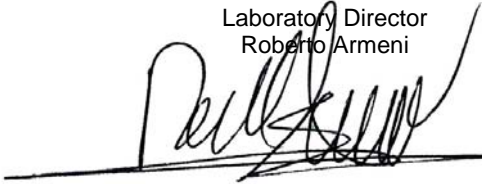
ADDITIONAL INFORMATION

None

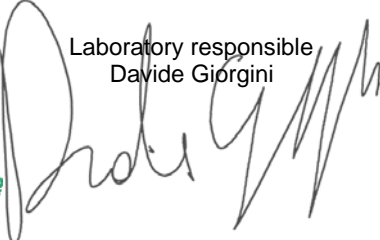
CONCLUSIONS

The particle size of the granule is 1.25 - 2.5mm. and complies with the NF P90-100 requirement.
Elastomer rate in the tested granule is 25.8% and complies with NF P90-100 requirement.

Laboratory Director
Roberto Armeni



Laboratory responsible
Davide Giorgini



SPORT