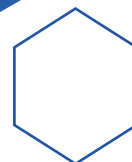


Avanzare additives



Antistatic / ESD additives

Antistatic line

Special additives to create permanent and colorable rubber solutions.

PRODUCT	NBR	SBR	EPDM	NR	IIR	CSM	pHr	Format	Characteristics
avanSTATIC Rubber							1-5	Powder	$10^6 - 10^9 \Omega$
avanSTATIC Rubber MB							10-25	MB	$10^6 - 10^9 \Omega$
avanSTATIC SBR/EPDM							7-12	Powder	$10^7 - 10^9 \Omega$
avanSTATIC S45							6-14	Powder	$10^6 - 10^9 \Omega$
avanSTATIC FDA 445							5-15	Powder	$10^7 - 10^9 \Omega$ (Food contact)
avanSTATIC PLAST							5-12	Liquid	$10^7 - 10^9 \Omega$
avanSTATIC NBR 535							2-8	Liquid	$10^6 - 10^9 \Omega$
avanSTATIC 1515							4-6	Liquid	$10^7 - 10^9 \Omega$

Conductive floors versus static dissipative floor

Too conductive



Conductive



Dissipative



Insulative



Avanzare additives



Magnetic Tracer (food application)

avanSAFE DETECTOR

Designed to impart detectability by metallic, magnetic or X-ray systems to rubber and other polymers. Specially designed to detect small pieces and rubber contamination in food production processes.

Colorable, FDA and EU regulation 10/2011.

APPLICATIONS:

Buckets, Scraper, Shovels.

Ties, Pens, Card Holders.

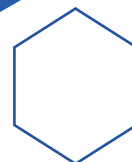
Conveyor belts.

Rubber gaskets.

Pipes.

Food contact elements.

Avanzare additives



Biocides

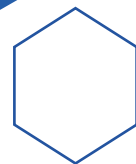
Our biocides prevent the accumulation and growth of bacteria, fungi and algae on the surface of rubber materials for a more hygienic environment.

According to the European directive n° 1048/2005 (13/June/2005) and directive (CE) n° 528/2012 regulating the applications of biocides in the industry.

PRODUCT	USES	FORMAT	%
avanZNO BAC	General biocide grade	Powder (white)	0.1 - 0.2
avanS-109	Food contact biocide grade	Powder (white)	0.5 - 0.8

**Prevent the accumulation
and growth of bacteria,
fungi & algae.**

Avanzare additives



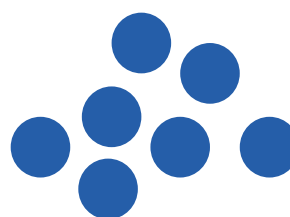
Anti-blooming

avanSTOP Blooming 64

A barrier-effect additive to prevent the leaching of plasticizers and other additives from the rubber surface.



Non-toxic additive



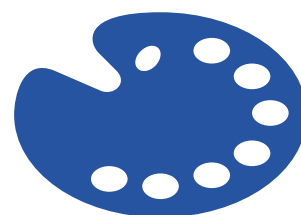
Powder



Reach compliance

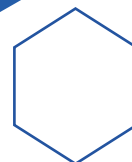


**Minimal impact over
physical properties**



Valid for any colour

Avanzare additives



Graphene / Electrical and thermal conductive solution

Conductive graphene-based materials provide both thermal and electrical conductivity within any polymer matrix.

Electrical conductivity

Conductive graphene and graphene MB for high conductivity rubber application.

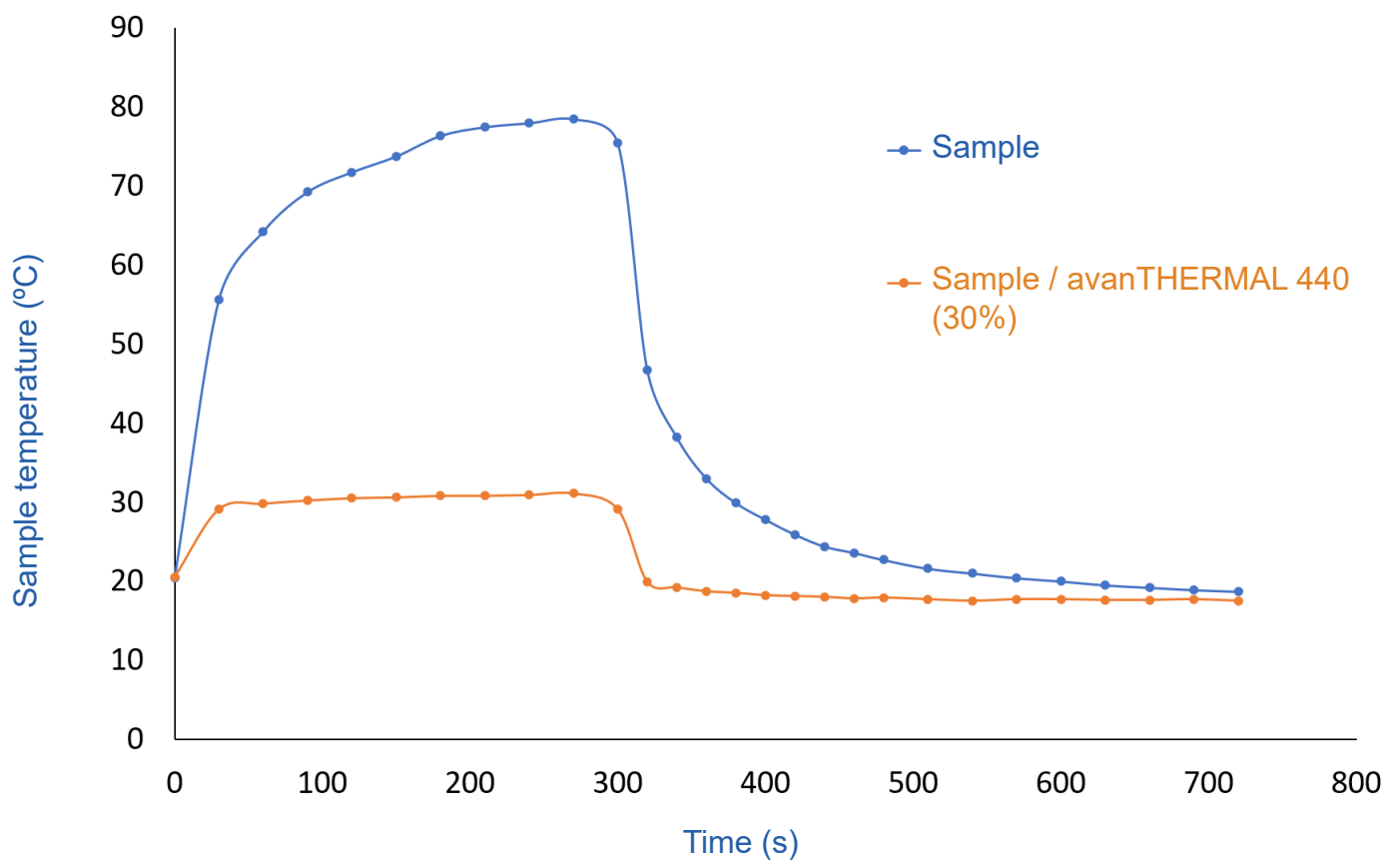
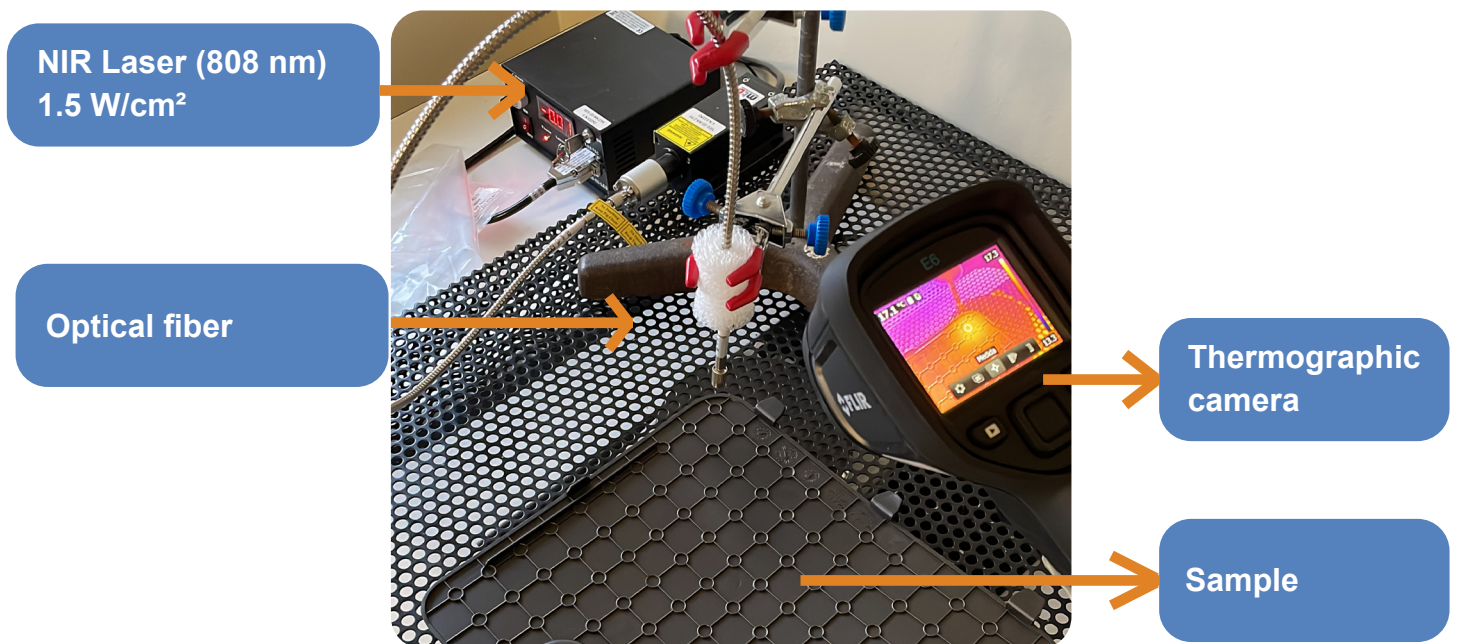
PRODUCT	USES	FORMAT	%
avanGRP 601	General use. Low dosage powder for electrical conductivity.	Powder (black)	8-12
avanGRP 700 MB	General use. Low dosage of MB for conductivity but not critical the mechanical properties.	Pellet (black)	25-40

Thermal conductivity

avanTHERMAL solutions are a series of very effective Graphene based additives, specifically designed to provide thermal conductivity in rubber and other matrices.

PRODUCT	USES	FORMAT	%
avanTHERMAL 440	General use. Low dosage powder for thermal conductivity	Powder (black)	8-xx
avanTHERMAL 440 MB	General use in MB format. Low dosage of MB for conductivity but not critical the mechanical properties	Pellet (black)	25-40

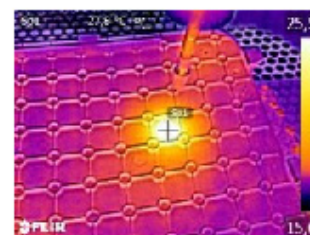
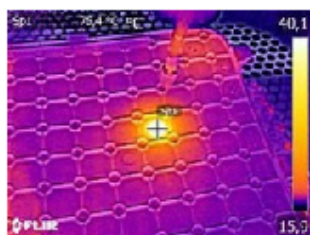
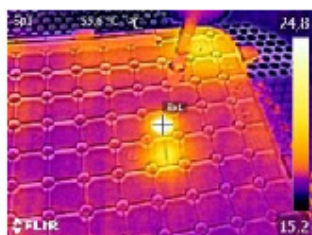
Improving thermal dissipation using avanTHERMAL 440



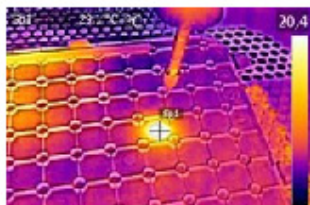


Example

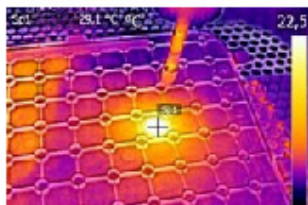
Without avanTHERMAL 440:



With avanTHERMAL 440:



T= 30 s



T= 300 s

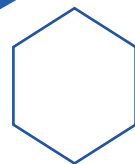


T= 400 s

Electric underfloor heating

Rubber mat.: A small voltage apply in the rubber mat. Produces a thermal system for thermal flooring.

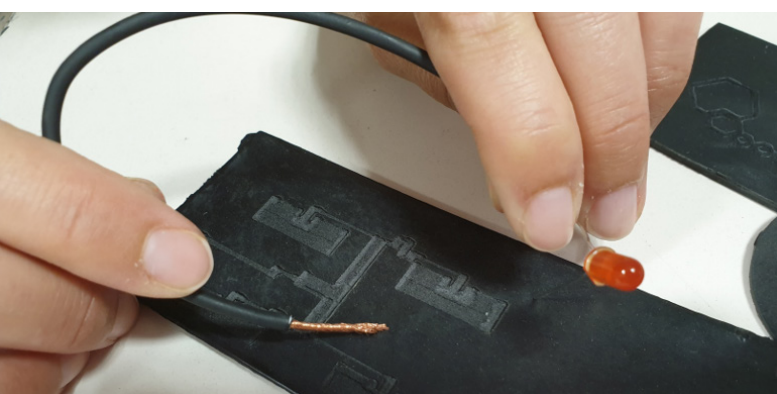
Comfortable for flooring.



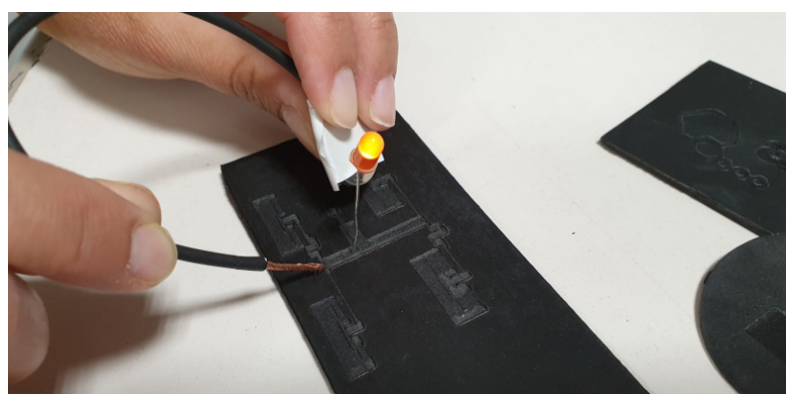
Laser activation

Flexible and embedded electronics, injection insulation pieces, active by lasering, generating embedded inductive circuits.

Applications: Antennas, circuits, flexible electronics, embedded electronics...



Insulative



Conductor

Flexible magnetic rubber profile

Through the action of an electromagnet, the profile adheres to the door frame, closing the system hermetically.