

Toro EL



HOMOGENEOUS FLOORCOVERING

VINYL



- > Static control floorcovering
- > All sensitive environments
- > Conductive PUR – patent pending
- > Low maintenance iQ floorcovering

**No wax.
No polish.
For life.**

3RD GENERATION PUR



High safety in sensitive environments



Our conductive floorcovering Toro EL, with unique polyurethane reinforcement (PUR) invented by Tarkett, offers advanced conductive properties and outstanding maintenance characteristics. Toro EL is part of our iQ range, which means it is a high-quality, low maintenance floorcovering that will need no polish or wax during its whole lifetime. Toro EL can be combined easily with our other iQ floorcoverings because they all have exactly the same maintenance needs.

- Suitable for all areas where static discharges can cause problems: the electronic and petrochemical industries, operating theatres, computer rooms, clean rooms and similar areas.
- With a resistance of 10^4 to 10^6 ohms, Toro EL meets, among others, the EN standards, BS and ASTM for conductive floors.
- iQ floorcovering with conductive 3rd generation PUR for durability and excellent cleaning characteristics.
- Pure carbon backing for easy installation using standard gluing methods, and safer performance due to improved conductivity.
- Nine modern colourways give good opportunities for design applications.





Why static control floorcovering?

All the time, everywhere around us, electrostatic charges are generated. We often call it static electricity, and everyone has experienced it in everyday life. The charges are created when one material is rubbed against or separated from another. This friction causes an electrical imbalance on the materials' surfaces. In everyday domestic life, the static electricity is harmless and causes no problem.

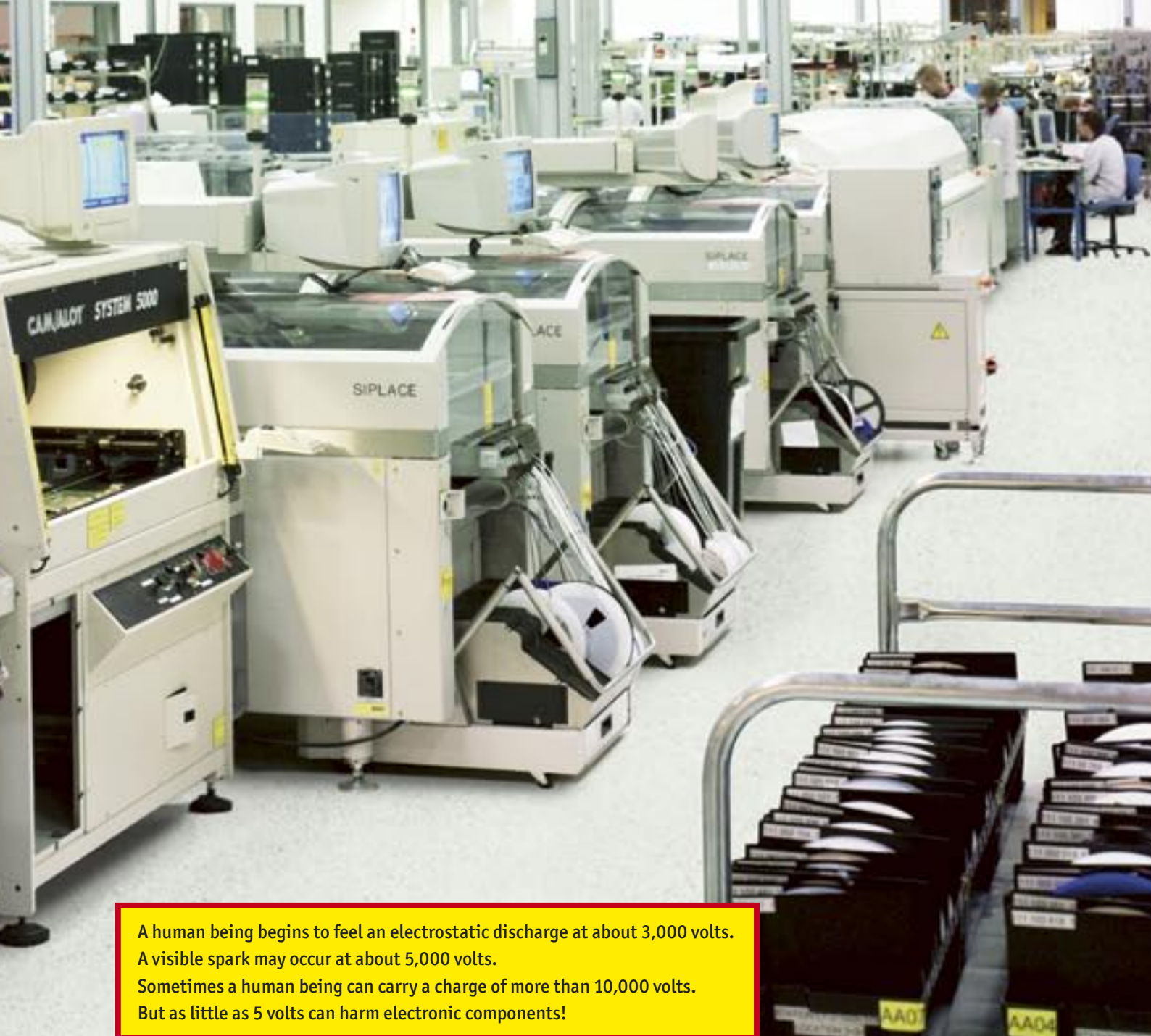
Electrostatic discharge

All matter in our world strives towards balance. Every electric charge tries to discharge itself whenever it can in order to reach that balance. When two materials with different charges come sufficiently close to each other, an electrostatic discharge (ESD) occurs.

This can be a huge problem in modern electronic working environments, with sensitive equipment experiencing catastrophic or latent failure.

Studies show that almost 50% of all defects in electronic components are due to ESD. If we look at systems already in operation, the rate reaches approximately 60%.

This means that the amount of money lost every year due to ESD could total billions.



A human being begins to feel an electrostatic discharge at about 3,000 volts.
A visible spark may occur at about 5,000 volts.
Sometimes a human being can carry a charge of more than 10,000 volts.
But as little as 5 volts can harm electronic components!

The solution: earthing

The earth acts as a large uncharged reservoir with relatively good conductivity, so it can always accept charges without problems. Materials – objects as well as human beings – that are in constant contact with the earth will not accumulate sufficient charge for an ESD.

A good ESD protection programme is based on knowledge, and implies several parts working together as a total solution. Wrist straps and static control floorcovering are the most common earthing methods for draining electrostatic charges effectively from human bodies.

All sensitive environments

The electrical resistance of a floorcovering material indicates how well it will discharge static electricity. The lower the resistance, the better the floor's conductivity. The level of conductivity needed in particular premises is indicated by factors such as the types of operations and the availability of other protection equipment. The aim is to keep the electrical potential difference between people and their surroundings as low as possible. In these circumstances, discharges are not noticed and cause no damage. Toro EL is a conductive floorcovering suitable for all areas where static discharges can cause problems: the electronic and petrochemical industries, operating theatres, computer rooms and similar areas.

Toro EL is the first floorcovering ever with conductive PUR

- for durability and easy cleaning

Toro EL is a homogeneous conductive floorcovering with excellent wear resistance. The construction gives a very consistent conductive capacity and an optimal resistance range. With a resistance of 10^4 to 10^6 ohms, Toro EL meets the EN standards, BS, ASTM for conductive floors. It exceeds the requirements for protecting sensitive equipment.

Low maintenance floorcovering

Toro EL is one of our iQ floorcoverings, which means it is a high-quality low maintenance floorcovering. Thanks to conductive 3rd generation PUR, our own patent pending innovation, we can now guarantee the excellent iQ maintenance characteristics. 3rd generation PUR offers significant functional and environmental improvements, and makes the surface very durable and easy to clean. Combined with the well-balanced, high-quality raw materials and ingenious production techniques, it gives Tarkett iQ floorcovering all its advantages. These include good ergonomic conditions for staff, and savings in water and chemicals. And less time and money is spent on maintenance.

Pure carbon backing for safer installation

Toro EL is manufactured by a unique double belt press technique, which makes it a safer application because the conductive elements run straight through the product. The backing is coated with pure carbon, for increased and consistent conductivity. It also makes installation much easier and quicker, using standard gluing methods. Conductive glue is not needed when installing rolls.



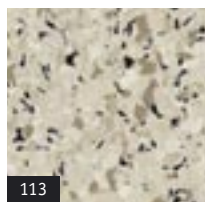
Colours for an attractive environment

Toro EL makes the environment safer and more comfortable for the people who work there. The floorcovering's colours and design create a pleasant atmosphere without an institutional affect. The colour nuances are co-ordinated with Tarkett's ordinary homogeneous range to enable harmonious transitions between areas with different functions. Toro EL is available in a range of nine colourways, giving many opportunities for design applications.

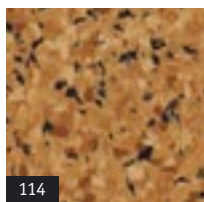




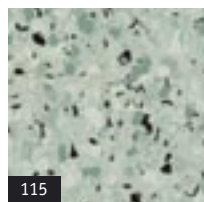
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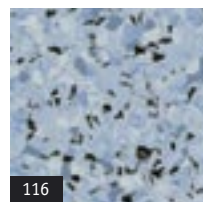
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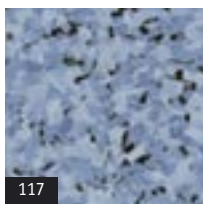
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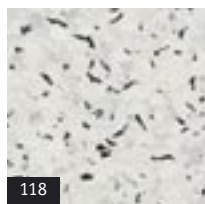
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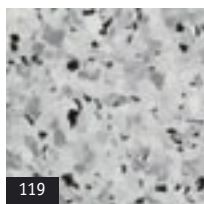
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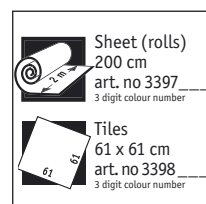
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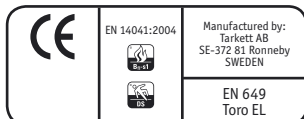


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NCS S 4005-R80B
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According to European
Classification EN 685



Toro EL

Toro EL is a pressed, homogeneous, conductive resilient floorcovering with 3rd generation PUR for excellent wear resistance and cleaning characteristics. The advanced conductive properties are achieved by carbon-black particles running straight through the product, and a pure carbon backing. Rolls are installed with standard floorcovering adhesive. Tiles and copper strips always require conductive adhesive. The patent pending conductive PUR, invented by Tarkett, and the raw material composition give Toro EL the strong advantages of our iQ floorcoverings during its lifetime. Toro EL has a non-directional design available in nine colours. The range is colour co-ordinated with other resilient floorcoverings from Tarkett. Areas of application for Toro EL: Electronic and petrochemical industries, operating theatres, computer rooms, clean rooms and similar areas.

Technical data		TORO EL
Type of floorcovering	EN 649	Conductive, homogeneous pressed vinyl floorcovering
Classification	EN 685	Commercial: 34 Industrial: 43
Wear layer thickness	EN 429	2.0 mm
Polyurethane reinforced		yes
Total thickness	EN 428	2.0 mm
Total weight/m ²	EN 430	3 000 g
Dimensional stability	EN 434	≤ 0.40 %
Abrasion. Volume loss	EN 660: Part 2	Group P: ≤ 4.0 mm ³
Residual indentation	EN 433	approx. 0.03 mm
Castors wheel test	EN 425	suitable
Underfloor heating		suitable – max. 27°C
Electrical insulation	VDE 0100, Part 600	$R_i \leq 5 \times 10^4 \text{ Ohm}$
Electrical resistance	ESD:S7:1 ESD-approval. SP-method 2472 EN 1081 IEC 61340-4-1	$R \leq 10^6 \text{ Ohm}$ $R \leq 10^8 \text{ Ohm}$ $R_1 \leq 10^6 \text{ Ohm}$ $R_2 \leq 10^6 \text{ Ohm}$ $R \leq 10^6 \text{ Ohm}$
Static electrical charge	EN 1815	< 2 kV
Impact sound reduction	EN ISO 717/2	Approx. + 4 dB
Thermal resistance	DIN 52612	0.008 m ² K/W
Reaction to fire	EN ISO 13501-1 EN ISO 9239-1 EN ISO 11925-2	Class B _{fl} s1 ≥ 8 kW/m ² pass
Light fastness	EN ISO 105-B02	≥ level 6
Chemical resistance	EN 423	good resistance
Fungi and Bacteria resistance	DIN EN ISO 846-A/C	Does not favour growth
Slip resistance	DIN 51130 EN 13893	R9 ≥ 0.3
Colours		9
Form of delivery	EN 426 Sheet (rolls) EN 427 Tiles (box)	approx. 23 r m x 200 cm art. no. 3397 _ _ _ 3 digit colour number 61 x 61 cm 14 tiles / box = 5.21 m ² art. no. 3398 _ _ _ 3 digit colour number

Tarkett's instructions regarding installation, cleaning and maintenance should be observed. Please contact Tarkett at the address shown for these instructions.

The above information is subject to modification for the benefit of further improvement (08/06). For more detailed technical information, please contact Tarkett.



TARKETT SALES COMPANIES

www.tarkett-commercial.com

Australia: Tarkett Australia Pty Ltd – Tel. +61 2 96 34 73 73 • **Austria:** Tarkett AG Niederlassung Wien – Tel. +43 1 47 88 062 • **Baltic States:** Tarkett SAS – Tel. +370 37 262 220 • **Belgium:** S.A. Tarkett NV – Tel. +32 2 520 04 67 • **China:** Tarkett Asia Pacific Limited Shanghai Representative Office – Tel. +86 (21) 62 88 15 38 • **Czech Republic:** Tarkett SAS, org. slozka – Tel. +420-271 001 602 • **Denmark:** Tarkett A/S – Tel. +45 43 90 60 11 • **Finland:** Tarkett Oy – Tel. +358 9 5406 5870 • **France:** Tarkett SAS – Tel. +33 1 41 20 42 49 • **Germany:** Tarkett AG, Bereich Objekt – Tel. +49 6233 810 • **Greece:** Tarkett Monoprosopi Ltd – Tel. +30 2 10 576 3889 • **Hong Kong:** Tarkett Asia Pacific Ltd. – Tel. +852 2511 8716 • **Hungary:** Tarkett SAS – Tel. +36 1 437-8150 • **Italy:** Tarkett S.p.A. – Tel. +39 02 893 411 • **Luxembourg:** Tel. +352 949 211 8804 • **Middle East:** Tarkett Middle East – Tel. +961 1 75 2363/4 • **Netherlands:** Tarkett Benelux B.V. – Tel. +31 76 57 80 760 • **Norway:** Tarkett AS – Tel. +47 32 20 92 00 • **Poland:** Tarkett Sp. z o.o. – Tel. +48 22 598 08 81 • **Portugal:** Tarkett SA – Tel. +351 21 427 64 20 • **Russian Federation:** Tarkett Russia – Tel. +7 4 95 777 69 83 • **Slovakia:** Tarkett SAS – Tel. +421 37 6515 404 • **Singapore:** Tarkett Far East – Tel. +65 6743 53 84 • **South East Europe:** Tarkett Trade d.o.o. – Tel. +381 21 7557 649 • (44) 569 12 21 • **United Kingdom:** Tarkett-Marley Floors Limited – Tel. +44 (0) 1622 854 040 • **Spain:** Tarkett Floors S.L. – Tel. +34 91 358 00 35 • **Sweden:** Tarkett Sverige AB – Tel. +46 771 25 19 00 • **Switzerland:** Tarkett AG, Bereich Objekt Schweiz – Tel. +41 043 233 79 24 • **Ukraine:** Tarkett UA – Tel. +380380 (44) 569 12 21 • **USA/Canada:** Tarkett Inc. USA – Tel. +1 713 869 5811 • Johnsonite – Tel. +1 440 543 8916 • **Tarkett International:** Tel. +49 6233 811 755 – Tel. +33 41 20 41 01