

Europe Possesses Highest Number of Nanotechnology Products in Construction Industry

2016-10-30

According to statistics of Nanotechnology Products Database (NPD), a number of 667 nanotechnology products have been found by June 2016 in the field of construction. The products have been produced by 149 companies from 28 countries in the world. Europe possesses the highest number of nanotechnology products in this field. Titanium dioxide, silicon dioxide, and graphene are the most commonly used nanostructures in these products.

Although nanotechnology development is not older than two decades, there are many nanotechnology products in the global markets nowadays. Nanotechnology penetrates into human's life every day, and nanotechnology products are used by people in various aspects of life.

In order to organize information of nanotechnology products, StatNano has published a database exclusively dedicated to these products produced in different countries. According to the latest update of NPD, there are 667 individual nanotechnology products in the field of construction by the end of June 2016. These products have been produced by 149 companies from 28 countries.

The products are classified in five industrial subsectors of structural materials, paint, coating, masonry materials, and chemicals. Statistics gathered by <u>NPD</u> show that Europe possesses the highest share in the production of nanotechnology products in construction by having 15 producing countries, while Asia and Oceania possess the second rank by having 10, and Latin America possesses the third rank by having 2 countries.

<u>Taiwan</u>, the <u>United States</u> (USA), <u>Germany</u>, <u>China</u>, and <u>Spain</u> are the top countries in the production of individual brands. Among nanotechnology products of these countries, mention can be made of tiles, wooden panels, flooring, additives, primers, cement, glass, hydrophobic and anti-corrosive coatings, antibacterial and anti-scratch paints, thermal insulators, stones, and granite.

According to <u>NPD</u>, the highest number of products in this field has been produced by companies Keding Enterprises, Shanghai Huzehng, Ua Wood Floors, Proseal Products, CTC Nanotechnology, NanoSys, and NanoPhos.

Company Headquarters Office

Product Types

Keding Enterprises	Taiwan	Wood floorings
Shanghai Huzheng	<u>China</u>	Paint, paste, thermal insulators, self- cleaning coatings
Ua Wood Floors	<u>Taiwan</u>	Wood floorings
Proseal Products	<u>USA</u>	Self-cleaning, antibacterial, anti- pollution, waterproof, and scratch resistant solutions and chemicals
CTC Nanotechnology	<u>Germany</u>	Anti-pollution, dust resistant, fingerprint resistant, and anti-fungi solutions
NanoSys GmbH	Switzerland	Photocatalytic, antibacterial, and self-cleaning coatings
NanoPhos	<u>Greece</u>	Hydrophobic, self-cleaning, antiscratch and anti-pollution solutions
Graphenstone	<u>Spain</u>	Paint, paste, primer, filler, and nanocoatings
NANOBIZ.PL	<u>Poland</u>	Photocatalytic, self-cleaning, anti- pollution, and anticorrosive solutions
Nanotec- <u>USA</u>	<u>USA</u>	Hydrophobic and self-cleaning coatings

The interesting point is the presence of at least one of nanostructures of titanium dioxide, silicon dioxide, or graphene in 70% of products in construction industry. In fact, these nanostructures are the main part of nanotechnology products in the field of construction. Other nanomaterials have been used in the other 30% of nanotechnology products in this industry such as carbon nanotubes, lithium, aluminum oxide, calcium silicate hydrate, boron nitride, calcium carbonate, zinc oxide, aluminum phosphate, and clay nanoparticles.