

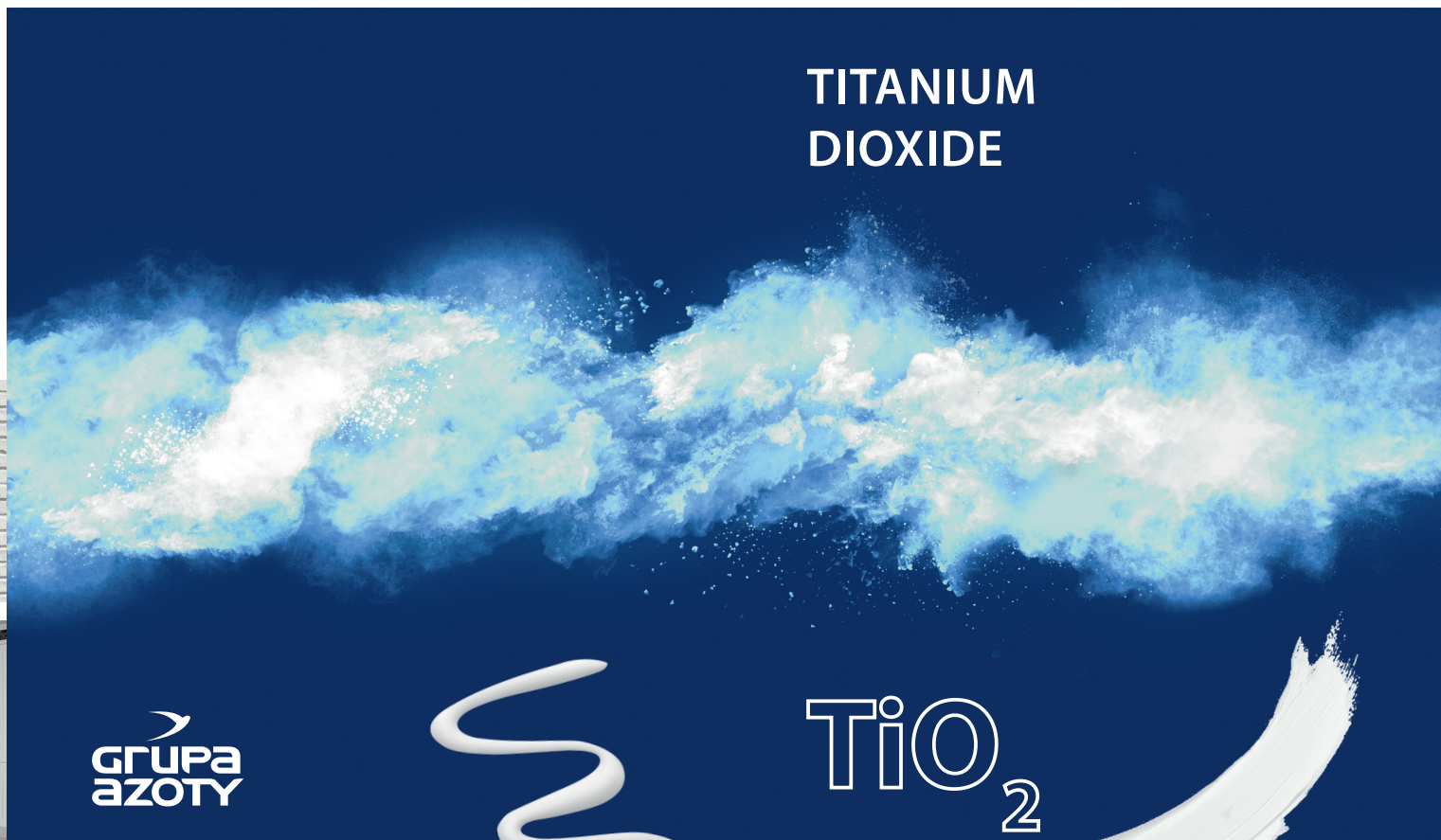
Titanium Dioxide (TiO₂)

Titanium dioxide, known as titanium white, is the most important and most widespread inorganic pigment. It is used in a wide range of products we use every day, giving them appropriate appearance: the color, opacity or texture. Its main advantages are an excellent scattering of visible light, UV absorption and safety.



Tytanpol®

GRUPA
AZOTY



GRUPA
AZOTY

TiO₂

Titanium dioxide pigments produced by Grupa Azoty POLICE under trade name TYTANPOL® fulfill the European Union requirements and have been registered under Regulation 1907/2006/EC (REACH) as amended. TYTANPOL® pigments can be used in products that come into contact with foodstuffs.

Grupa Azoty Zakłady Chemiczne „Police” S.A.
ul. Kuźnicka 1, 72-010 Police, Polska | Poland

Sales Department – Poland
Tel. +48 91 317 47 73
Fax +48 91 317 38 33

Application Laboratory
Tel. +48 91 317 34 94

Sales Department – Export
Tel. +48 91 317 12 87
Fax +48 91 317 38 33

www.tytanpol.com
tytanpol@grupaazoty.com

Grupa Azoty Zakłady Chemiczne „Police” S.A. is the only manufacturer of titanium dioxide in Poland. TYTANPOL® titanium dioxide pigments are produced at the plant in Police for 40 years.



TITANIUM DIOXIDE

application

1 BUILDING EXTERIOR

[R-003, R-210, R-211]

- indispensable in paints for walls and special roof coverings
- reflects sun's rays
- extends the life of paints and plasters
- keeps buildings cool (reducing energy consumption by air conditioning)

2 PLASTIC WINDOWS AND DOORS [R-220]

- provides whiteness and brightening
- protects against discoloration and cracking caused by UV light
- extends the lifetime of doors and window frames

3 WINDOW GLASS

- TiO₂ glass coating provides a self-cleaning (break down pollutants into simple compounds such as CO₂ and water, and the rain washes away the dirt)
- helps to maintain the cleanliness of

window panes and car windows and mirrors

4 DISPLAYS

- TiO₂ provides a self-cleaning of LCD displays in smartphones, TV sets and computers

5 CARS [R-003, R-210, R-001]

- gives the bodywork a proper color
- protects the bodywork from UV radiation preventing from color change
- protects elements of interior from UV radiation
- TiO₂ in catalyst systems decompose the compounds harmful to the environment

6 PHARMACEUTICALS

- provides appropriate color (helps to distinguish tablets)
- protects active ingredients from light
- prolongs the pharmaceutical shelf life

7 CLOTHING

- provides a proper color to the leather
- reduces the shine of the yarns and provides the opacity to man-made fibers
- helps protect clothing and footwear against degradation from UV light
- makes plastic soles in sports shoes more durable and hard wearing

8 FOOD

- provides an appropriate color (e.g. chewing gum, sweets)
- provides an opacity and texture

9 FOOD PACKAGING

[R-001, RS, R-210]

- provides an appropriate color and appealing appearance (printing inks)
- protects the contents from light (e.g. plastic matting and opacifying)
- extends the food shelf life

10 PLASTIC BAGS

[R-001, RS, R-003]

- provides appropriate color and appealing appearance to plastic
- protects the contents from light
- improves lightfastness

11 COSMETICS

- provides an appropriate color and opacity of cosmetics to help them cover the skin
- provides the UV filter (appropriate SPF) to makeup and creams to prevent burning of the skin (sunscreen)
- does not irritate the skin

12 TOOTHPASTE

- not only gives the white color, but due to the polishing properties helps to clean teeth

13 QUALITY PAPER [R-310]

- provides opacity and lightfastness

of high-quality paper for laminates (laminated flooring, furniture and worktops)

14 WHITE CONSUMER GOODS

[R-001, R-210]

- Adds brightness, whiteness and opacity to household items (fridges, kettles, microwaves, toasters and washing machines)

15 CROPS

- in plastics films protects crops from extreme temperatures
- enhance durability of films suppressing weeds
- helps to maintain an appropriate humidity

16 ENVIRONMENTAL PROTECTION

- titanium dioxide having a catalytic activity decomposes environmental pollutants

17 BOOKS

- provides opacity even to thin sheets

18 PAINTS [R-001, R-003, R-210, R-211, R-002]

- TiO₂ is the most widely used pigment in all paints (except black)
- adds brightness to our homes
- reflects light to minimize need for internal lighting