


carbomex®

INVESTIGACIÓN Y PRODUCCIÓN DE NANOMATERIALES



September 2021 / 1st EDITION

PRODUCT
CATALOG

We bring nanotechnology to Life

CARBOMEX Nanotech is a company that helps Latin-American industry and high impact science to assemble value chains with the help of nanotechnology and Entrepreneurship culture. We believe that science is for everyone and therefore we challenge technology to be sustainable and do business.

WE ARE CARBOMEX®

CARBOMEX® is the set of years of experience, effort and results so that nanotechnology made in Mexico can improve the quality of life in Latin America. Since 2016 we have invested our resources and knowledge to make nanomaterials highly scalable and meet the needs of an emerging market around the world.

The year 2020 was a period of reflection and new challenges for many industries, adaptability was and continues to be key for companies to create high-impact business models from which innovation arises in the face of adversity. For CARBOMEX®, 2020 was a period of revolution in which we faced the best version of ourselves, to emerge victorious as a solid company that can challenge science and technology to coexist with the human, ecological and economic demands of Mexico before international markets. CARBOMEX® is discovered as a more humane and intelligent institution in the process of evolution. Our greatest strength is the agility of execution and the scientific brilliance to create true disruption in various markets.

Our values:

Learning, sustainability, and freedom

They are now a new way to find solutions and break the paradigms that have always stigmatized science and have confined it to the shelves of a library. Everything so that in 2025 it will be the iconic Mexican science company that challenges technology for its application in the challenges of sustainability and business. The accelerated growth of CARBOMEX® led us to design our own research methodologies, achieving a real technology transfer. From ideas to commercialization of a development based on nanotechnology. Fast Track Science® is how we now share the knowledge of our years of experience to give our clients technically, financially and marketing informed decision making.

CARBOMEX® is now the pinnacle of first-rate scientific, production, quality, and ingenuity human resources so that nanotechnology made in Mexico can define a future in science and virtue. Our goal is not only to grow our indicators, but also for thousands of scientists to open the market to the unimaginable. We work to bring solutions with nanotechnology, in CARBOMEX we bring nanotechnology to Life.




THOMAS ANTOINE ESPINOZA / CEO



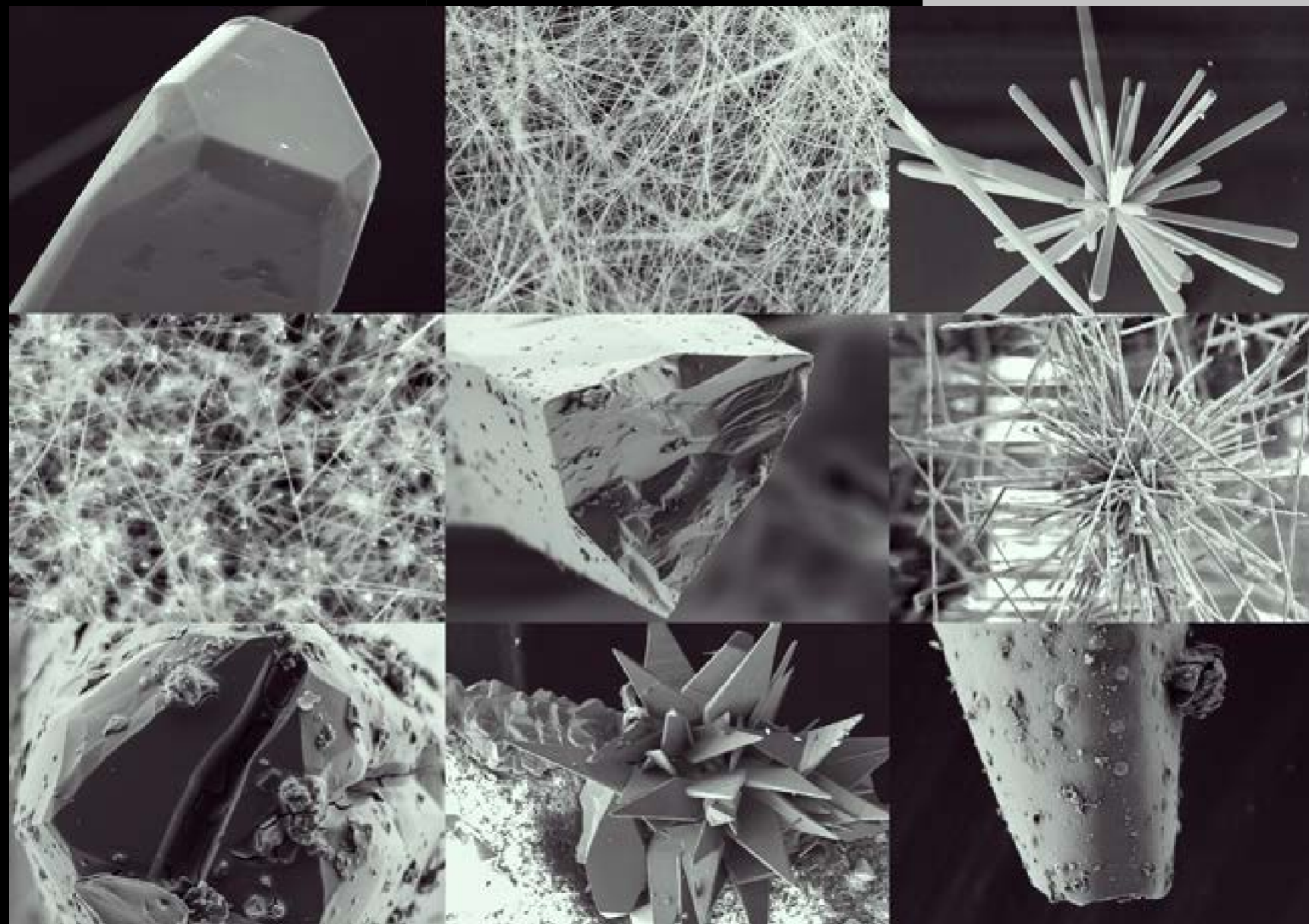
OUR VISSION

Vission.

To be the Leading Company in the production, research, training and dissemination of Nanotechnology in Mexico and Latin America by 2025

Mission.

Provide solutions based on Nanotechnology and Innovation to the problems that the new technological era demands from our clients



Learning

Sustentainability

Freedom

OUR COMMITMENT TO THE ENVIRONMENT

We are currently facing the greatest challenge humanity has ever faced: climate change. Due to excessive consumption, the abuse in the taking of natural resources, the lack of innovation in production processes, the lack of attention to science in the use of new materials and lax regulatory frameworks to implement their use, putting the well-being of the entire world population at risk.

We firmly believe that an environmental commitment is not a document signed lightly, it is built through the implementation of cleaner production processes that seek the greatest benefit with the least impact on the environment. We are convinced that the use of science and technology must be focused on providing solutions, providing new materials, disruptive processes, and innovative products.

Based on the above, we develop a corporate culture of respect and awareness for the environment providing quality products to support our clients to meet current technological challenges, considering the environment as our main client.



We base our actions on the following principles:

- All our research implements circular economy from design.
- We quantify the environmental impacts applicable to the activities of our value chain.
- We generate environmental indicators to measure the impact of our activity on the environment.
- We implemented the ZERO WASTE Campaign.
- We collaborate with stakeholders to join efforts towards the preservation of the environment.
- We create products that support or solve environmental problems.

The activities, services and products developed by CARBOMEX are aligned with the Sustainable Development Goals (SDG) proposed by the United Nations, resulting in a business model that seeks strategies that allow us to meet them.

In the coming years we will have a positive impact on 9 of the 17 Sustainable Development Goals. Throughout the 5 years since the founding of CARBOMEX we have developed various products that impact the environment; NANOx paint that catalyzes nitrous oxides in the air, Fenton Cleantech that catalyzes organic compounds and dyes in water, as well as adsorbs heavy metals. Also, additives for clean concrete that break down air pollutants or reduce the amount of cement and water. On the other hand, our production of copper nanoparticles revalues second-life raw materials, generating a sustainable value chain.

At CARBOMEX we are creating the materials of the future through a sustainable value chain and in search of a circular world.



MANUEL MERAZ / CFO



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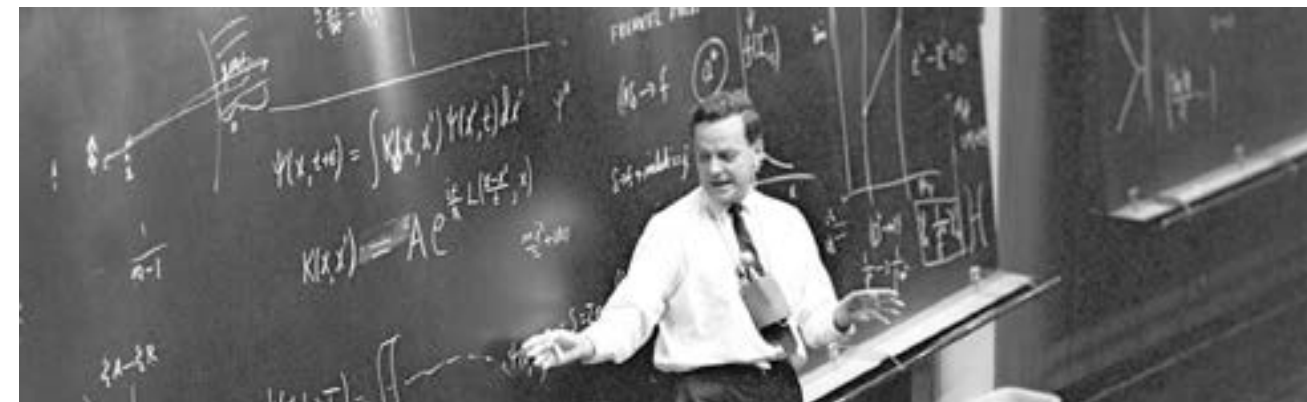
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INTRODUCTION



“THERE’S PLENTY OF ROOM AT THE BOTTOM”
-RICHARD FEYNMAN | 1959

Nanotechnology is now a field that has moved from pure scientific interest to generating innovative solutions to real-world problems. There are very exciting and innovative applications in fields such as biomedicine, energy, environmental remediation, advanced coatings, and novel materials that can be used to design novel cements, plastics, alloys, and composites.

At Carbomex®, we are convinced that nanotechnology will be a game changer for today's industrial challenges. We have the knowledge to recommend what kind of nanomaterials might be a better fit to develop the right solution for your product, so that you can become more competitive and attractive to your consumers.

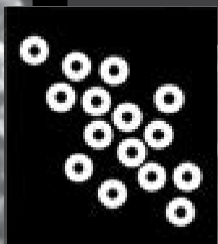
At Carbomex® we have the experience to design a professional research project that can be useful to identify how Nanotechnology will become an important piece in your business. Through the collaborative work of our team, we will be happy to offer you a variety of options and assessments, so that you can choose the best Nanotechnology for your company. Let us be your partner in finding innovative technology solutions for your clients.

We are Carbomex®. The Nanotechnology Solutions Company.



MIGUEL ANGEL MENDEZ / CRO

NANOMATERIALS



01.

02.

05.

03.

06.

04.

07.

Thank you for your interest!

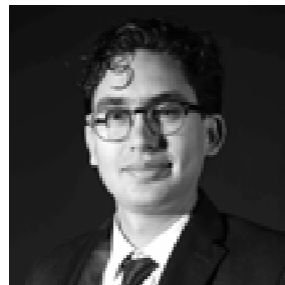
We would like to thank you for your interest in purchasing our product catalog.

This catalog was developed with the greatest passion and love for science and the promotion of technology for Mexico and the world.

Below, we present our line of nanomaterials, product of the relentless effort of the Carbomex® team whose talent and perseverance has allowed us to bring to reality products that challenge technology and push the industry beyond its limits.

These products have been tested and verified with the most rigorous quality control in order to provide world-class products that solve industrial, domestic and environmental problems in the most efficient and economical way.

At Carbomex®, quality characterizes us, and talent makes us great.



GERARDO PARTIDA / COO

01. Zinc Oxide Nanoparticles (ZnO NPs)

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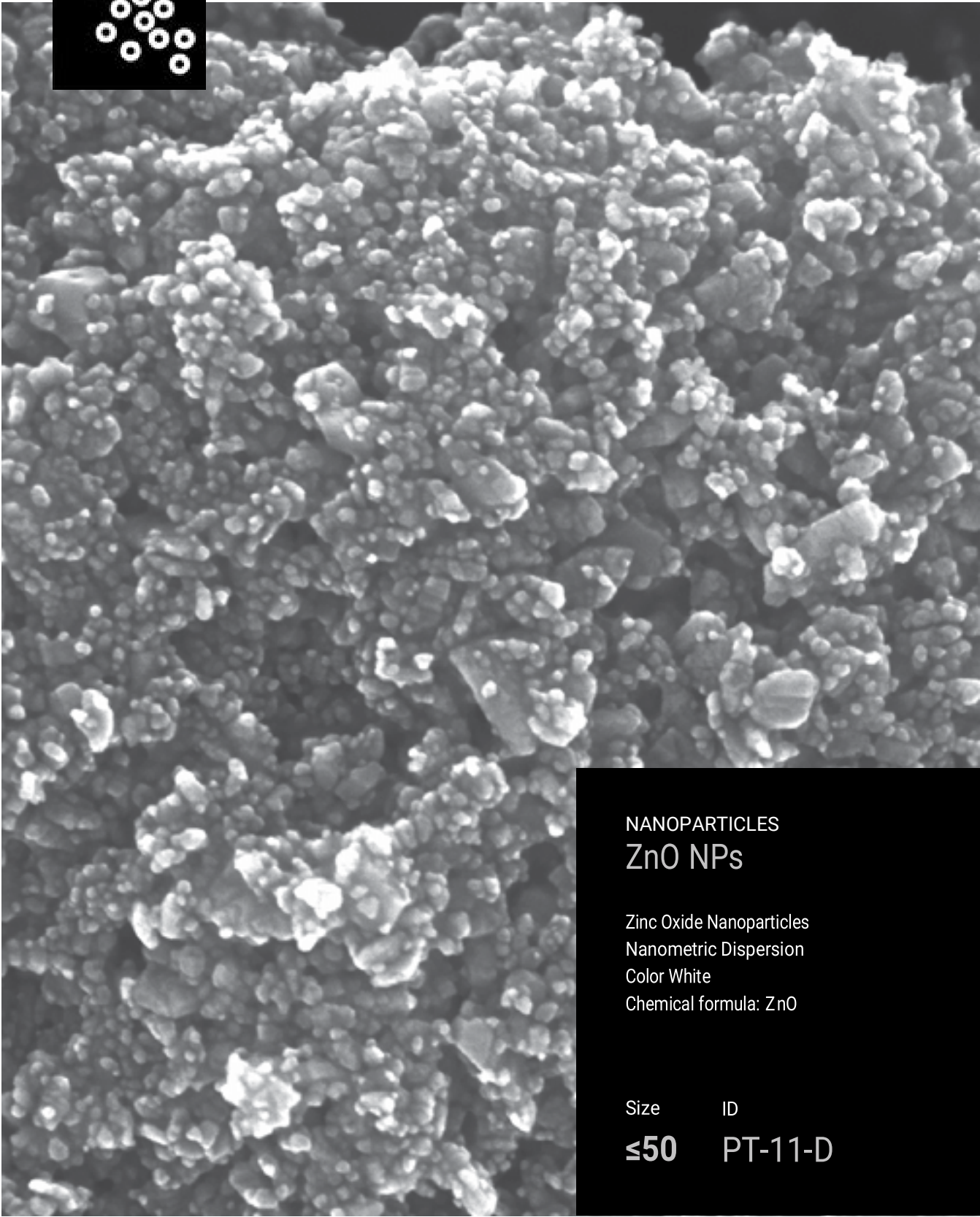
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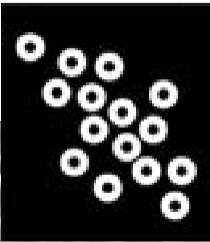
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07. Silver Nanoparticles (Ag NPs)

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NANOPARTICLES
ZnO NPs

Zinc Oxide Nanoparticles
Nanometric Dispersion
Color White
Chemical formula: ZnO

Size	ID
≤50	PT-11-D

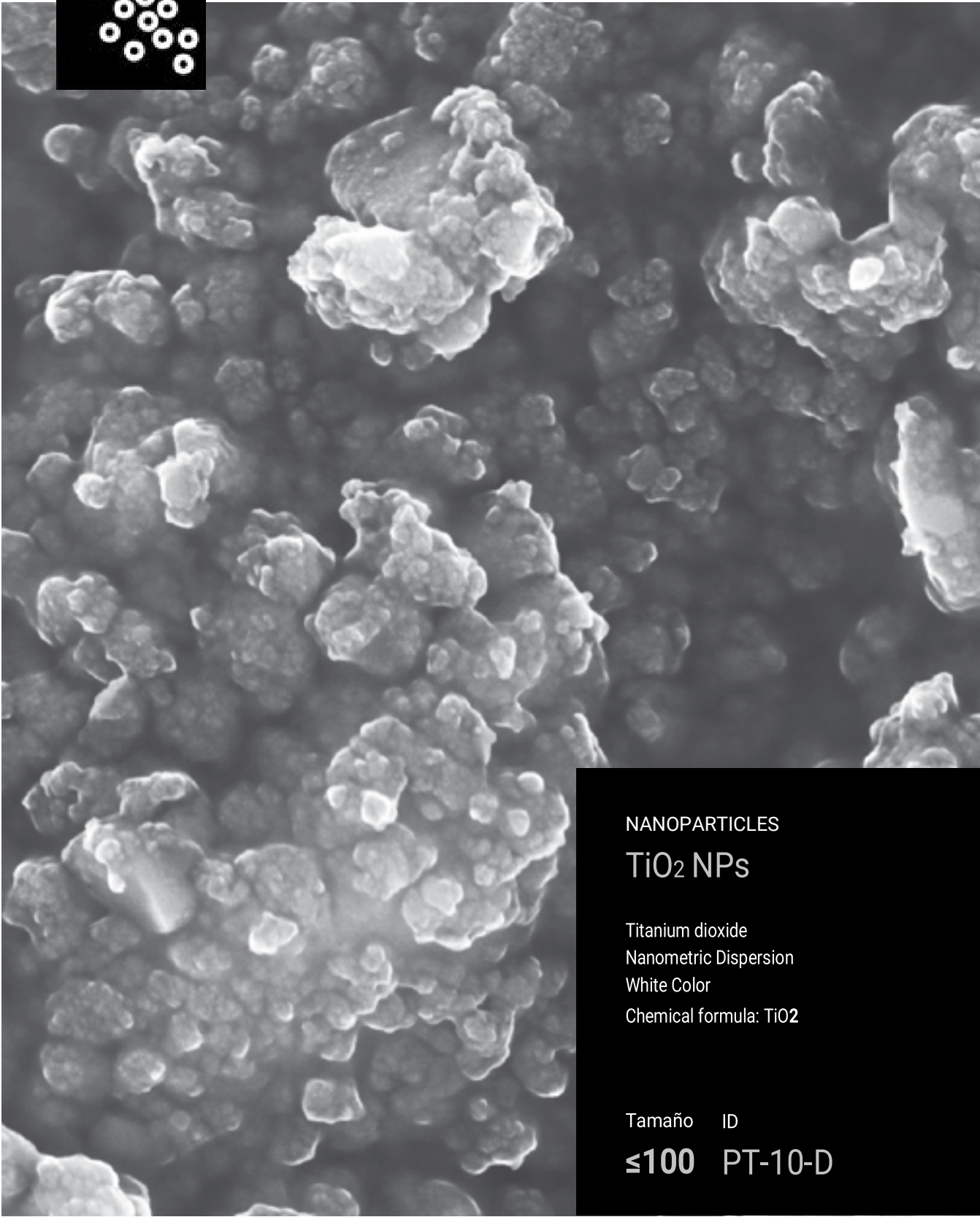
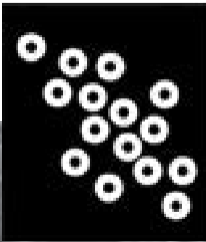


Applications

- Cosmetic Industry
Removal of contaminants in water and air
Electronics Industry
Textile Inks
- Sunscreens
Synthetic fibers
Paper bleaching
Waterproofing agents

Presentations	Description
#PT-11-D-050G	50g
#PT-11-D-100G	100g
#PT-11-D-001K	1Kg

ZnO NPs are zinc oxide nanoparticles obtained by a proprietary process of Carbomex®. They are nanostructures with a spherical morphology and a homogeneous particle size distribution (average particle size of 100 nm, according to dynamic light scattering (DLS) and scanning electron microscopy (SEM) measurements). Due to their small size, they have a high surface area, which allows them to exhibit excellent catalytic activity.



NANOPARTICLES

TiO₂ NPs

Titanium dioxide
Nanometric Dispersion
White Color
Chemical formula: TiO₂

Tamaño	ID
≤100	PT-10-D



Applications

- | | |
|--|----------------------|
| Cosmetics Industry | Sunscreens |
| Removal of contaminants in water and air | Synthetic fibers |
| Electronics Industry | Paper bleaching |
| Textile Inks | Waterproofing agents |

Presentaciones	Descripción
#PT-10-D-050G	50g
#PT-10-D-100G	100g
#PT-10-D-001K	1Kg

TiO₂ NPs are titanium oxide nanoparticles obtained by a proprietary process of Carbomex®. Their nature of nanostructures of spherical morphology and a homogeneous particle size distribution (average particle size of 80-100 nm, according to measurements performed by dynamic light scattering (DLS) and scanning electron microscopy (SEM) techniques. Due to their small size, they have a high surface area, which allows them to present excellent catalytic activity for wastewater treatment and degradation of dyes, colorants, and other organic molecules present.



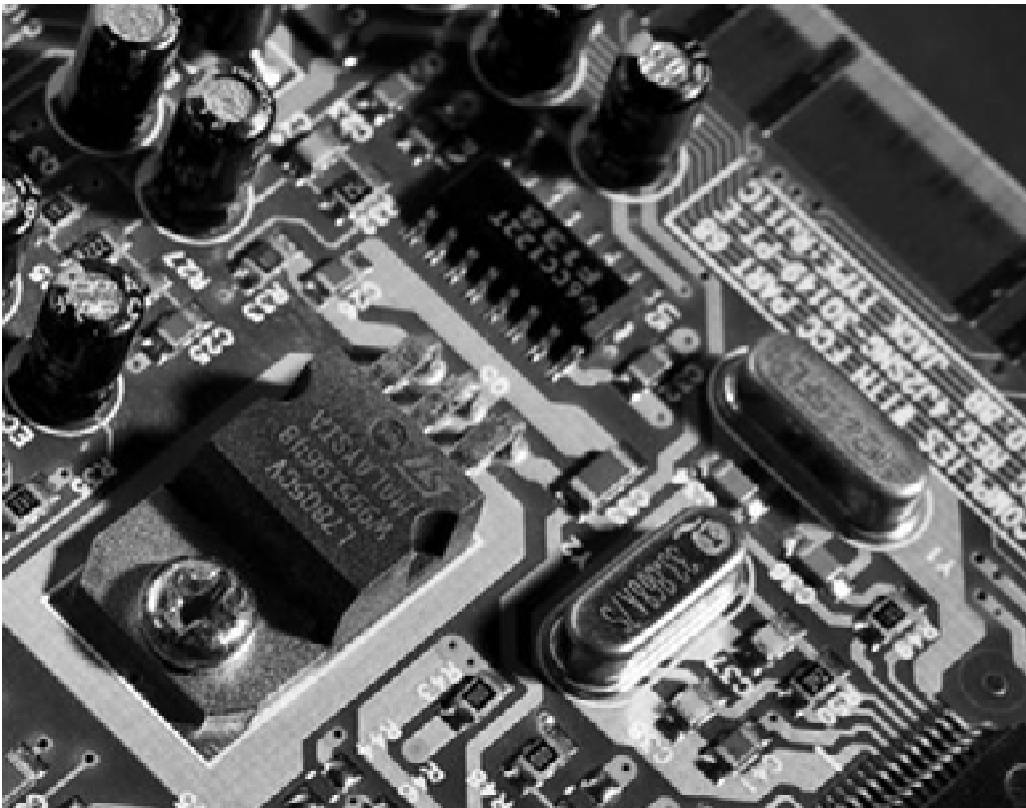
NANOPARTICLES

Cu NPs

Copper Nanoparticles
Nanometric Dispersion
Cooper color
Chemical formula: CuO

Tamaño ID

≤100 PT-03-D



Applications

- Catalytic agent
- Semiconductors
- High temperature resistant materials
- Sensors (pH, humidity, gases)
- Bactericidal materials
- Textiles

Presentations	Description
#PT-03-D-001L	1L
#PT-03-D-002L	2L
#PT-03-D-004L	4L

CuNPs NPs are copper nanoparticles obtained by a proprietary process of Carbomex®. They are nanostructured powders with a spherical morphology and a homogeneous particle size distribution (average particle size in the range of 80 to 100 nm, according to measurements performed by dynamic light scattering (DLS) and scanning electron microscopy (SEM) techniques). Due to their small size, they have a high surface area, which allows them to exhibit excellent catalytic activity. In the form of dispersions (aqueous or ethanolic) they remain stable for months when stored at temperatures below 20 °C and without movement.





NANOPARTICLES

CuO NPs

Copper Oxide Nanoparticles
Nanometric dispersión
Color Dark Gray
Chemical formula: CuO

Tamaño	ID
≤100	PT-02-D

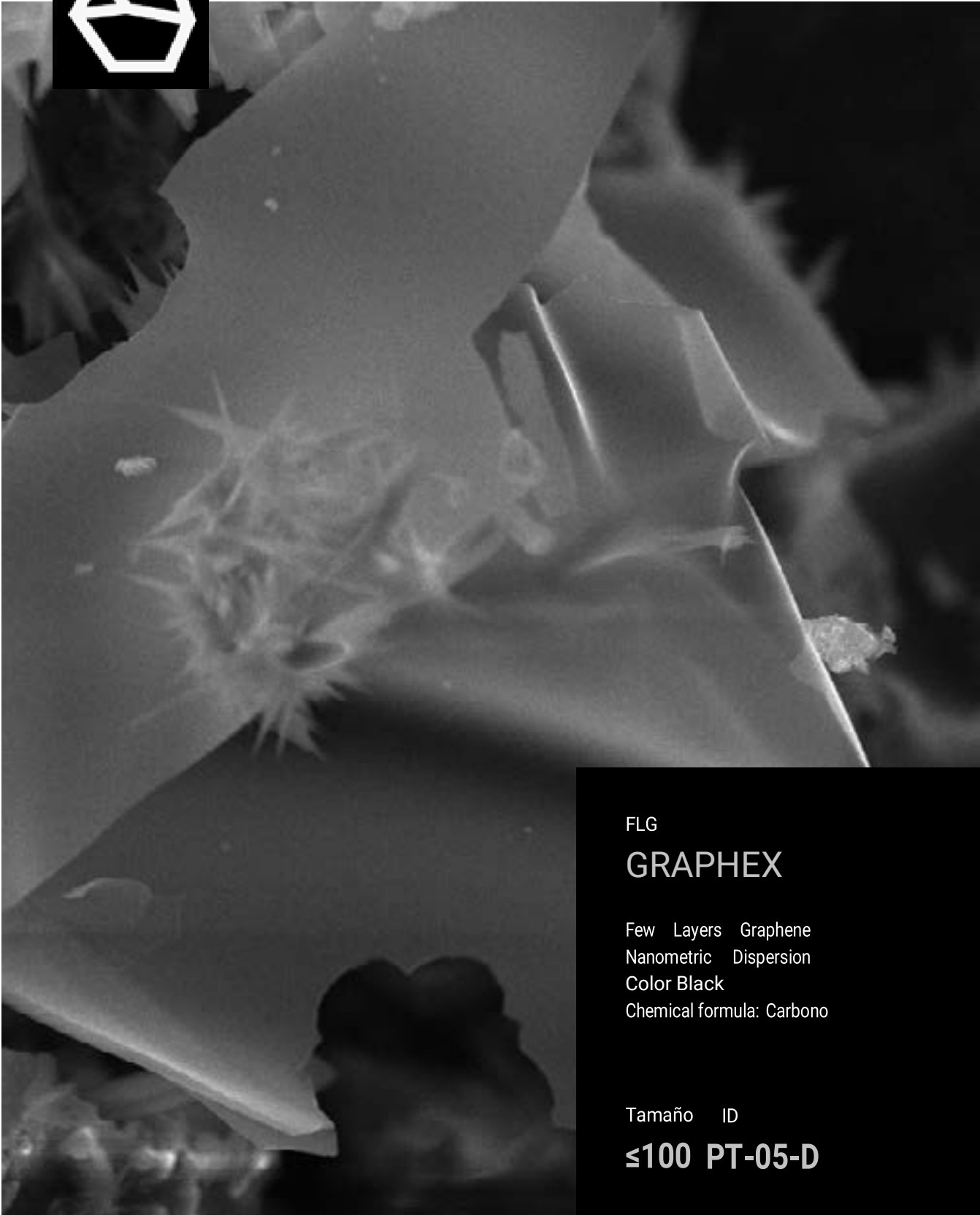


Applications

- Catalytic agent
- Semiconductors
- High temperature resistant materials
- Sensors (pH, humidity, gases)
- Bactericidal materials
- Textiles

Presentations	Descriptions
#PT-02-D-001L	1L
#PT-02-D-002L	2L
#PT-02-D-001K	4L

CuONPs are copper oxide nanoparticles obtained by a proprietary process of Carbomex®. They are nanostructures with a spherical morphology and a homogeneous particle size distribution (average particle size in the range of 80 to 100 nm, according to measurements performed by dynamic light scattering (DLS) and scanning electron microscopy (SEM) techniques). Due to their small size, they have a high surface area, which allows them to exhibit excellent catalytic activity. In the form of dispersions (aqueous or ethanolic) they remain stable for months when stored at temperatures below 20 °C and without movement.



FLG
GRAPHEX

Few Layers Graphene
Nanometric Dispersion
Color Black
Chemical formula: Carbono

Tamaño ID
≤100 PT-05-D

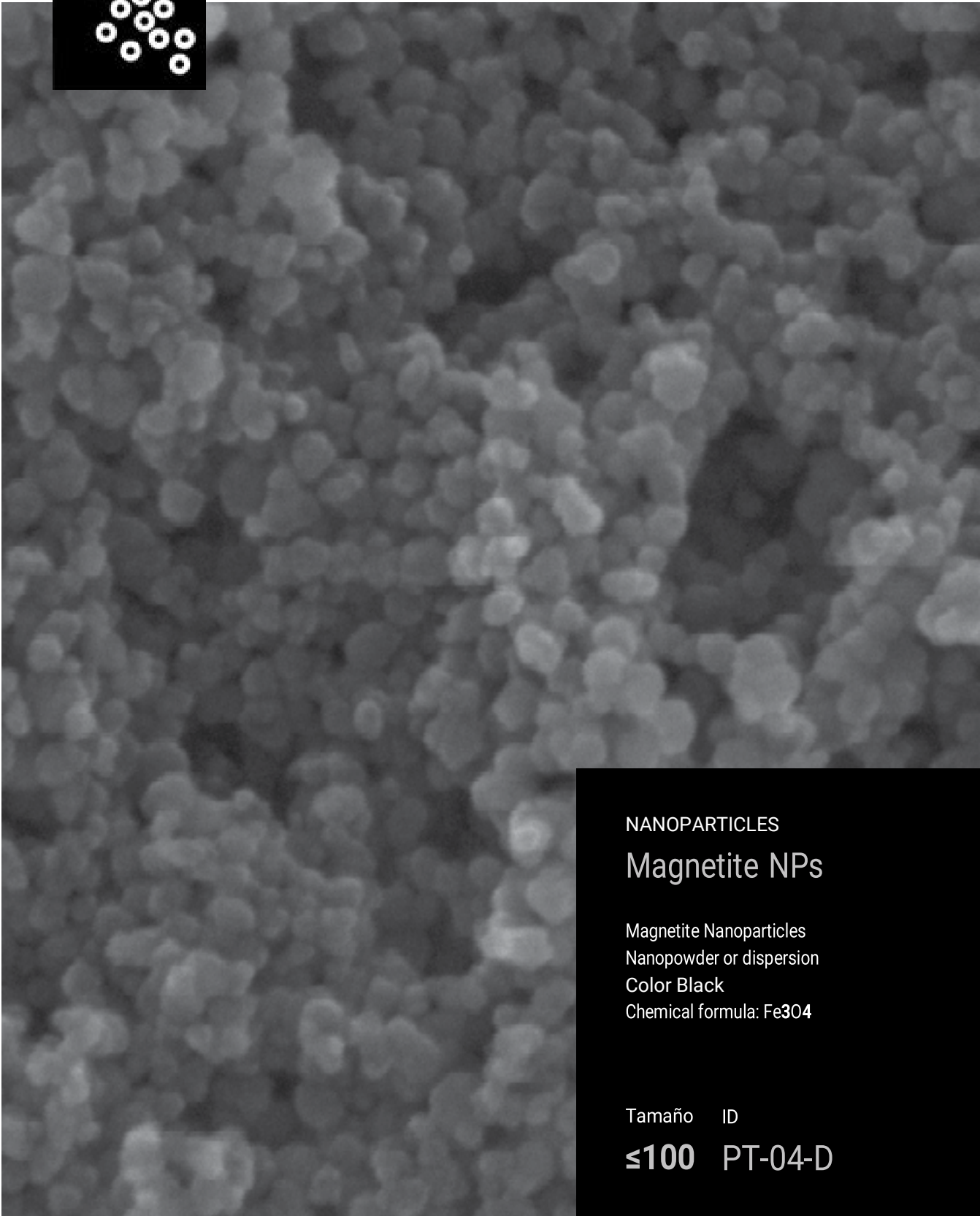


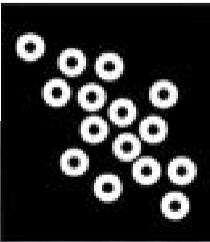
Applications

- Concrete Paints
- Electronics
- Plastics
- Textiles
- Coatings

Presentations	Description
#PT-05-D-001L	1L
#PT-05-D-002L	2L
#PT-05-D-004L	4L

GAPHEX are few-flake graphene (FLG) flakes (variable size between 50-800 nm) obtained by a proprietary process of Carbomex®. Their nature as nanostructures and their small size with a high surface area, allows them to present excellent activity for adsorption of environmental pollutants (air, water), as well as to generate homogeneous dispersions when incorporated as an additive in different types of materials. It can be dispersed in polar and non-polar solvents, using an appropriate surfactant or stabilizing agent; suspensions remain stable for months when stored at temperatures below 20 °C and without movement. For use as an additive for formulation of antistatic coatings, conductive coatings, pigment in textiles or inks, antistatic additive for plastics, cosmetic products, educational and research use.





NANOPARTICLES

Magnetite NPs

Magnetite Nanoparticles
Nanopowder or dispersion
Color Black
Chemical formula: Fe₃O₄

Tamaño	ID
≤100	PT-04-D

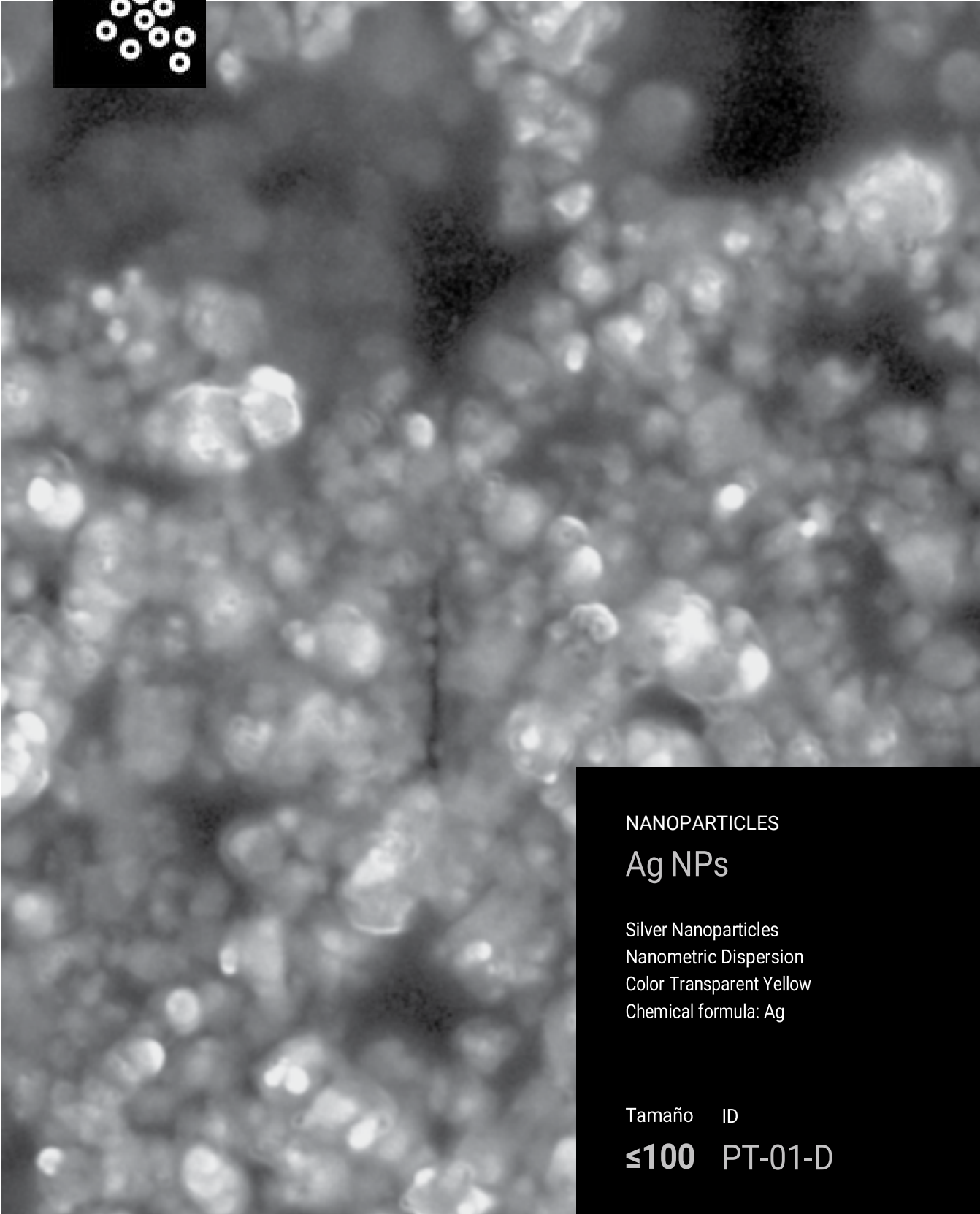
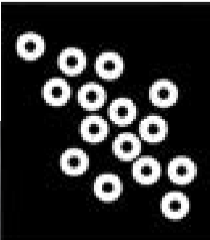


Applications

- Concrete reinforcement and
electromagnetic wave protection in
concrete.
Photocatalytic degradation of dyes in
water.
- Magnetic paints
Pigments Ferrofluids
Lubricants
Resonance contrast
Removal of heavy metals

Presentations	Description
#PT-04-D-050G	50g
#PT-04-D-100G	100g
#PT-04-D-001K	1Kg

Fe₃O₄NPs are iron oxide nanoparticles (Fe₃O₄, magnetite) obtained by a proprietary process of Carbomex®. They are nanostructures with a spherical morphology and a homogeneous particle size distribution (average particle size of 20-30 nm, according to dynamic light scattering (DLS) and scanning electron microscopy (SEM) measurements). Due to their small size, they have a high surface area, which allows them to present an excellent catalytic activity for wastewater treatment and degradation of dyes, colorants and other organic molecules present in the environment.



NANOPARTICLES

Ag NPs

Silver Nanoparticles
Nanometric Dispersion
Color Transparent Yellow
Chemical formula: Ag

Tamaño	ID
≤100	PT-01-D



Applications

- Anticorrosion coatings
Bactericidal materials
Antiviral materials
Textiles
- Electronics industry
Water treatment
Pharmaceutical industry

Presentations	Description
#PT-01-D-500M	500ml
#PT-01-D-001L	1L
#PT-01-D-002L	2L

AgNPs are silver nanoparticles obtained by a proprietary process of Carbomex®. They are nanostructures with a spherical morphology and a homogeneous particle size distribution (average particle size of 10-30 nm, according to dynamic light scattering (DLS) and scanning electron microscopy (SEM) measurements). Due to their small size, they have a high surface area, which allows them to present excellent antimicrobial and antiviral activity as well as their use in electronic materials, anti-corrosion coatings and a wide use in research in the pharmaceutical and biological industry.



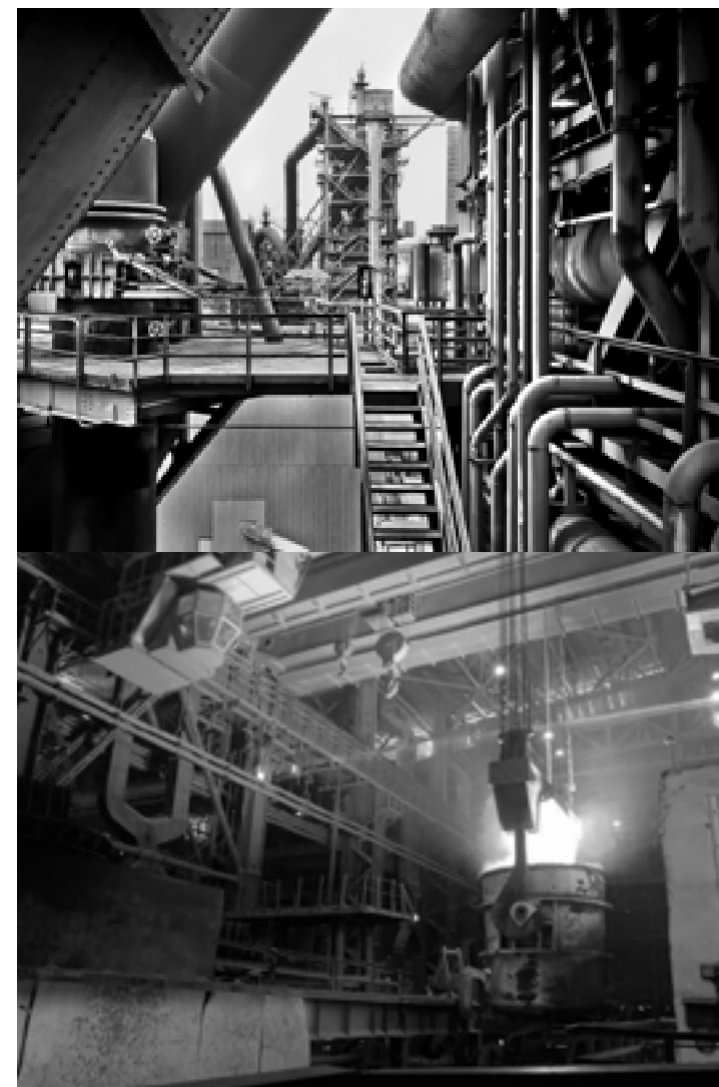
N-Tech

Anticorrosion coatings family that protects and inhibit corrosion effects, formulated by the dispersion of nanoparticles in controlled proportions that adapt to the characteristics of various polymeric coatings of the paint industry. The use of this formulation adds characteristics of photoresistance, mechanical resistance and biocide effect (antifungal and antimicrobial) to the dispersion vehicle to be used.

N-Tech

Advantages

- High chemical stability
- Excellent abrasion resistance
- Tolerant to poor surface preparation
- Resistant to hydrocarbons



N-Tech

ESMALT

Manufactured from alkyd resin-modified with nanotechnology, N-Tech Enamel is the best coating for metal exteriors to prevent corrosion and wear caused by adverse environmental conditions.

Color

Multicolor

ID

PT-06-F

N-Tech

HIGH TEMPERATURE

N-Tech High Temperature allows to protect metal surfaces against damage caused by environments where the temperature is particularly high (maximum 600°C).

Color

Aluminun

ID

PT-07F



N-Tech

TRANSPARENT

Ideal for automotive, smithy and any metal surface where a glossy finish is required. N-Tech Transparent gives protection and shine to the paint, and above all with its characteristic protection against corrosion and damage.

Color

Transparent

ID

PT-08-F

SANIA



ISs a water-based sanitizer containing photoactive nanoparticles, environmentally friendly, designed for use in outdoor spaces and thinking about the importance of recovering mobility in cities.

The use of photo-active nanoparticles for application on surfaces as effective antiviral agents has been abundantly reported in the scientific literature, confirming their usefulness in combating bacteria and viruses. The use of this germicidal agent allowing the disinfection of crowded places.

Also, the versatility of this product allows it to cover a wide field of application. In addition to offering a coating for all types of surfaces (metallic, textile, plastic, concrete and/or paper) in different areas.

Color: Translucent with pearl effect.

Application: We recommend the use of an atomizer or sprayer to cover a larger area.

Drying: Thanks to our formulation the drying is fast, leaving a photo-active layer.

Germicidal effect: Inhibits the growth of bacteria and inactivates different types of viruses, thanks to the effect of sunlight. Through its activation with sunlight, it maintains a sterile area protected for up to 72 hours after its application.



ID

PT-009-F



NANOx

ID

PT-012-F

Nanox , Nanox is a photocatalytic paint with nanotechnology that cleans the air by degrading NOx particles.

It is capable of degrading the equivalent in pollution of up to 60 km produced by a sedan car.

The NOx particle is created in the combustion process, acts as a greenhouse gas, is a major cause of acid rain and is corrosive to the skin and respiratory tract.

Evaluation of nitrogen dioxide (NO₂) levels as a contributing factor to coronavirus death (COVID-19). The results indicate that long-term exposure to this pollutant (NO₂) may be one of the most important contributors to COVID-19 fatality in these regions and perhaps worldwide. Yaron Ogen. Science of The Total Environment Vol. 726, 15 July 2020, 138605, Germany.



SILVER NANOPARTICLES

H2BAC

Water-based antimicrobial and antiviral effective against gram-positive and gram-negative bacteria, fungi and enveloped and non-enveloped viruses. It works against more than 650 types of pathogenic microorganisms. Has excellent miscibility with water, ethanol, and other polar compounds.

ID

PE-S3-01



SILVER NANOPARTICLES

POLIBAC

Organic-based liquid antimicrobial and antiviral effective against gram-positive and gram-negative bacteria and enveloped and non-enveloped viruses. It fights against more than 650 types of bacteria. Its antimicrobial action also includes fungi and algae harmful to humans.

ID

PE-S3-02



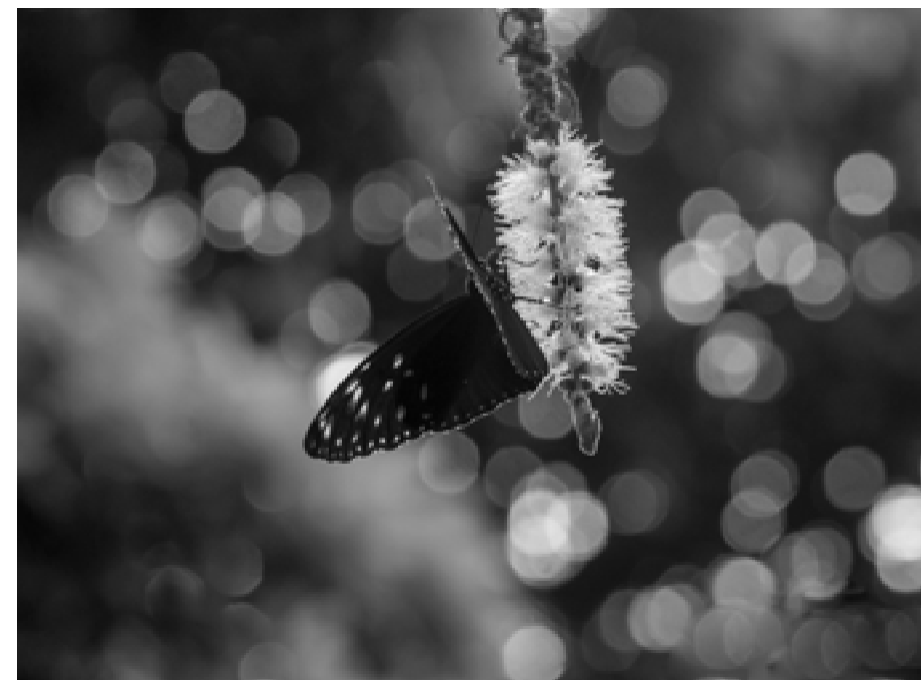
NANOPARTICLES

IRON NPS

A versatile magnetically active material with applications in electronics, medicine, imaging, environmental management, data storage and many more applications.

ID

PE-S3-03



NANO

AGRO TOTAL

Melaleuca essential oil, citronella essential oil and neem essential oil encapsulated in biocompatible and biodegradable nano particles, indicated for agricultural use with adhesive spreading and emulsifying action.

ID

PE-NA-01



NANO

AGRO NEEM

Neem oil encapsulated in biocompatible and biodegradable nano particles, indicated for agricultural use with adhesive spreading and emulsifying action.

ID

PE-NA-0205



NANO

AGRO CROP

Oregano essential oil encapsulated in biocompatible and biodegradable nano particles, indicated for agricultural use with adhesive spreading and emulsifying action.

ID

PE-NA-030



ANTIVIRAL VIRUPROTECT PLUS

Permanent antiviral (long lasting) that inhibits the growth of viruses and bacteria. Specially indicated for all types of masks and fabrics. Biocidal effect starts after the first 15 minutes. Reduces washing needs up to 5 times.

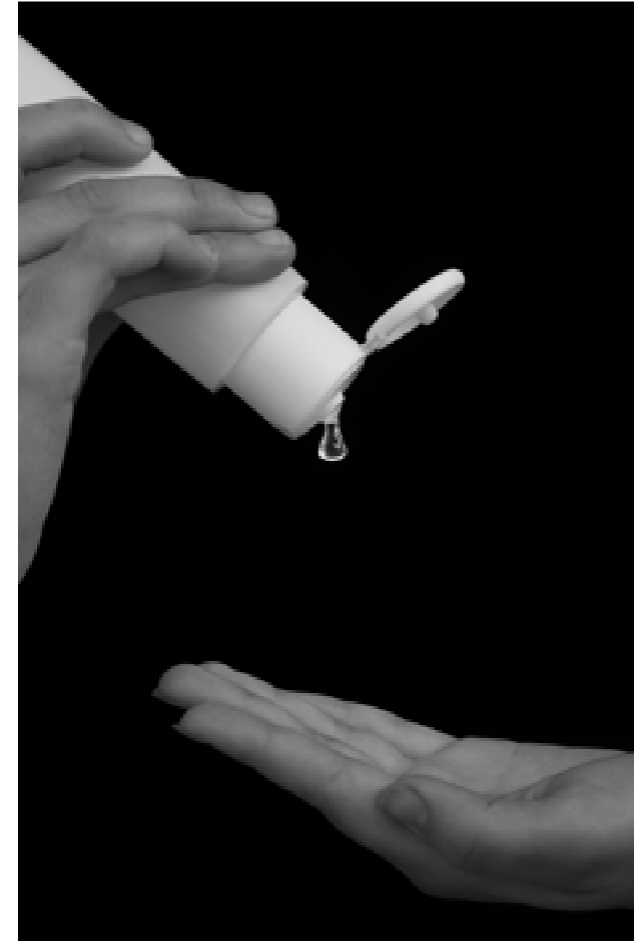
ID
PE-OP-01



Surface protection VIRUSPROTECT MULTISUPERFICIES

Permanent physical barrier (long lasting) that stops the development of viruses and bacteria on all types of porous and non-porous surfaces: metals, plastics, wood, natural stone, as well as any other building material.

ID
PE-OP-02



HAND SANITIZER SANTEC GEL

Cosmetic hydroalcoholic hand sanitizing product for deep cleaning of hands. It is a hydroalcoholic solution, with high alcohol content (85% v/v), with no need for rinsing or drying of the hands. Direct application treatment.

ID
PE-OP-03



SURFACE SANITIZER SANTEC TOTAL

Hydroalcoholic sanitizing cleaners for all types of surfaces (deep cleaning). Immediate effect. Fully sprayable on surfaces. Fast evaporation. Its alcoholic formula eliminates any contaminant. For domestic and industrial use.

ID
PE-OP-04



POROUS MATERIALS AQUASHIELD ULTIMATE

Superhydrophobic nanotechnology-based product nanotechnology for vertical and inclined surfaces.

ID

PE-OP-05



POROUS MATERIALS PRS PERFORMANCE

H Latest generation nanotechnology-based water repellent, oil repellent and anti-stain for horizontal and vertical surfaces. Abrasion resistant.

ID

PE-OP-06



METALS, CERAMICS AND PLASTICS METALCOAT

Highly durable non-stick and corrosion resistant protective coating for metals, ceramics, and plastics.

ID

PE-OP-07



GLASS SURFACES VETROSMAR

Anti-limescale and water repellent protector for screens. High durability of up to 10 years (on new glass). Very easy to apply.

ID

PE-OP-09



GLASS SURFACES SELF CLEAN ULTRA

Superhydrophilic coating based on nanotechnology that provides self-cleaning properties to the glass where it is applied.

ID

PE-OP-10



NANO COBRE FLAKE COATING ANTIÓXIDO

Coated copper nanoparticles, which protects it from immediate oxidation, allowing its antimicrobial action to last longer.

ID

PE-OP-11

GLASS SURFACES GWR

Rain, snow, and ice repellent for vehicle glass. High durability up to 1 year/20,000 km Very easy application with manual spray.

ID

PE-OP-08



NANO CALCIUM CARBONATE

It can be applied in the food industry, as a food additive, thickener, and stabilizer. In the pharmaceutical industry it can be used as a food supplement.

ID

PE- OP-12



BEAUTY CARE

Nanocosmetics as a science consists of the addition of nanoparticles in classic cosmetic products to improve their properties, especially in terms of stability. In this way, the active substance is included within the nanometric structures, which serves to maintain the properties of the cosmetic for a longer period both inside the container and on the skin. By using nanoparticles, it is possible to control the depth of penetration of the cosmetic into the skin and the speed at which the active substance will be released, as well as to control the filtration of ultraviolet radiation and the release of active substances on the skin care.

We work with nano-sized systems that protect the active ingredients from degradation, encapsulating them, increasing skin penetration and improving therapeutic performance. Our technology allows us to obtain biocompatible and biodegradable ingredients that provide health and well-being.

NANO

VITAMIN C

Blend of vitamin C and red fruits nano encapsulated, indicated for the reduction of wrinkles and expression lines. Self-stimulates collagen production and improves skin firmness and texture. Improves the appearance of photodamaged skin due to its whitening action. In hair, it exerts antioxidant and revitalizing action.

ID

PE-BC-01

NANO

AVOCADO

Contains moisturizing, emulsifying, soothing and softening action. Due to its high vitamin E content, it contributes to skin tone and vitality. In hair, it is indicated for its moisturizing and revitalizing actions.

ID

PE-BC-02

NANO

CAFFEINE COMPLEX

Blend of active ingredients that stimulate blood circulation, reduce inflammation, and promote lipolysis of adipose tissue. Ideal for the treatment of cellulite, localized fat deposits and size reduction.

ID

PE-BC-03





NANO

CALMING

It contains anti-inflammatory and soothing actions, being indicated for application after sun exposure, healing, in reactions of allergic nature and after depilatory and shaving procedures.

ID

PE-BC-04



NANO

CoQ10

Endogenous antioxidant that contains moisturizing and skin rejuvenating action, increasing firmness, and improving texture. In hair, it contains anti-aging and follicle strengthening action.

ID PE-BC-05



NANO

GOLDEN OIL

Softens and moisturizes the hair, reconstructing and recovering the strands after chemical procedures. On the skin, it has a nourishing effect, preventing dryness and aging.

ID PE-BC-06



NANO

KOJIC

Depigmenting inhibitor of tyrosinase, a limiting enzyme in the production of melanin. Recommended for whitening of age spots, dark circles and melasma. Does not cause photosensitivity and is active of choice for patients with hydroquinone allergy.

ID

PE-BC-07



NANO

RETYNIL

Prevents signs of early aging, improves firmness and texture, reduces wrinkles and expression lines. In acne, it acts smoothing scars and reducing pores. Reduces dryness and dullness of the hair, promoting a healthier appearance and reducing split ends.

ID PE-BC-08



NANO

TEA TREE +

Blend of nano-encapsulated active ingredients with antifungal and antibacterial properties that promotes cleansing and unclogging of hair follicles and pores, reducing oiliness. In addition, it has an anti-inflammatory effect, regulating itching and flaking of the scalp, in addition to improving the appearance of acne.

ID PE-BC-09



NANO

TOCOPHEROL

Contains powerful antioxidant action. Nourishes, moisturizes and recovers hair, guaranteeing softness and resistance. Acts on the skin inhibiting the action of two free radicals and preventing premature aging..

ID

PE-BC-10



NANO

WINE ACTIVE

Blend of natural antioxidants found mainly in purple grapes. Contains potent antioxidant activity, acting in the prevention and reduction of wrinkles and expression lines. It can be used as a skin whitener due to its tyrosinase inhibiting action.

ID

PE-BC-11



MICELLAR

HYALURONIC

Hyaluronic acid is a glycosaminoglycan that makes up the extracellular matrix of the skin, being indicated for the maintenance of elasticity and firmness. It prevents and cares for wrinkles and expression lines, developing the natural skin tone.

ID

PE-BC-12



NANO

MELALEUCA

Contains antimicrobial and anti-inflammatory action, being efficient in a variety of infections affecting the skin and mucous membranes, such as acne vulgaris, seborrheic dermatitis and dandruff. Contains antiseptic and antiviral activities.

ID

PE-BC-13



CARRYING

FLUID

Contains antimicrobial and anti-inflammatory action, being efficient in a variety of infections affecting the skin and mucous membranes, such as acne vulgaris, seborrheic dermatitis and dandruff. It contains antiseptic and antiviral activities.

ID

PE-BC-14



CARRYING

NanoSkin

Vehicle for liquid dermatological formulas of easy application and spreading. It provides spreading with very low viscosity, allowing spray application. Contains excellent sensory, promoting a sensation of softness without leaving the skin with an oily appearance..

ID

PE-BC-15

VETERINARY LINE

The line of nano-encapsulated ingredients for veterinary use, developed exclusively for our furry companions and best friends.

Our active ingredients were selected based on the specific needs of pets, adhesion, prolonged release, improved performance, safety, and green technology. In addition, they use biocompatible and biodegradable ingredients, prioritizing the use of natural active ingredients using water as a vehicle.

NANO HYDRATE

Mixture of highly moisturizing nano-encapsulated active ingredients that restore skin hydration, preventing dryness, irritation and itching. The nanocapsules adhere to the animal's coat, providing deep and prolonged hydration of the coat and skin.

ID
PE-LV-01



NANO OJON

Promotes deep repair of damaged hair. Due to its similarity to hair lipids, this active ingredient promotes a complete reconstruction of the hair, providing strength, softness and shine..

ID
PE-LV-02



NANO OMEGAS

Mixture of nano-encapsulated active ingredients rich in essential fatty acids (omega 3 and 6), indicated for skin and hair nourishment. Promotes emolliency and contributes to the physiological balance of dry and/or sensitive skin.

ID
PE-LV-03



NANO PHYTOSPHINGOSINE

Nanoencapsulated phytosphingosine indicated to restore the integrity of the skin barrier, in addition to antimicrobial and anti-inflammatory activities.

ID
PE-LV-04



NANO
VITAMIN A

Regeneration and maintenance of normal epidermal conditions. This active ingredient plays a fundamental role in the cell renewal process, regulating the growth of epithelial cells and stimulating the production of collagen and hyaluronic acid.

ID
PE-LV-05



NANO
VITAMIN E

Active ingredient with antioxidant and moisturizing properties. Protects the animal's skin against oxidative damage induced by external agents and against the deleterious effects of solar radiation.

ID
PE-LV-06



NANO
COATING

Barrier nanocapsules that protect against microorganisms and dirt deposition, while moisturizing and protecting the animal's skin and coat. Ideal for dry shampoos and cleansers for sensitive areas (folds and ears).

ID
PE-LV-07



NANO
CHAMOMILE

Whitening nanocapsules indicated for use in grooming products for light-haired animals, as well as for cleaning of tears and dirt from the periocular region and muzzle.

ID
PE-LV-08



NANO

MELALEUCA

Natural active ingredient with antimicrobial action, effective in skin and mucosal infections, such as dermatitis and fungal infections caused by *Malassezia pachydermatis*. The nanocapsules increase the penetration of the active ingredient into the skin and prolong its release, resulting in a more effective and long-lasting treatment.

ID

PE-LV-08



NANO

CALENDULA

Lipidic nanoparticles for the protection of feet and calluses. Active ingredient indicated for healing and regeneration of skin, wounds, and cracks.

ID

PE-LV-10



NANO

REPEL

WHO recommended active ingredient promotes prolonged repellency of disease-carrying insects, including sandflies, flies, ticks, mites and fleas.

Odorless product.

ID

PE-LV-11



NANO

CITRONELLA PLUS

Natural active ingredients with insect repellent properties, including mosquitoes, flies, ticks, and fleas. Effective in the prophylaxis of dermatophytosis in the domestic environment.

ID

PE-LV-12

LUBRICANTS, GREASES AND OILS

Lubricants are of great importance in industry and world markets, and for years innovation has been sought without success. Now nanotechnology-based lubricants penetrate deep into the contact surfaces, making the system work by rolling friction.

The 20 nm nanoparticles give it new and improved properties.

IMPACT GENERATED BY OUR PRODUCTS:

- Fuel savings of up to 12% Cost reduction in lubricants and greases of at least 2X.
- Reduction in operating costs due to lower consumption of spare parts.
- Energy savings of over 3%.
- Reduction in wear metals by up to 68%.
- Stabilization of operating temperatures.
- Fuel consumption reduction between 2% and 12%.
- Reduced carbon footprint generated by fuel combustion.
- Reduction in lubricant usage and waste by up to 2.5X

Nano PRO MT

PENETRATING LUBRICANT

A penetrating lubricant with multi-purpose nanotechnology capable of penetrating at the nano level between contact surfaces. Reduces friction to extraordinarily low levels, reducing wear and increasing lubrication efficiency. Works quickly to dissolve corrosion by penetrating deep into surfaces. Eliminates friction welds.

ID

PE-PL-01

Nano PRO MT

DRY LUBRICANT

High performance dry lubricant based on CERFLON and Nanoparticles, proven in military applications and ideal for lubrication without oily residues, increasing heat transfer, promoting high resistance to wear, oxidation, and corrosion. Ideal for applications subject to high pressure, friction, corrosion, and elevated temperatures. Does not stick or leave oily residues.

ID

PE-PL-02

Nano PRO MT

GRASA DE SERVICIO EXTREMO

Nano PRO MT Extreme Service Grease is an NLGI No. 2 calcium sulfonate grease specially designed with a synthetic base combined with Nanoparticles, ideal for the most adverse environmental conditions, high humidity levels and with a high resistance to wear and oxidation in corrosive environments, protecting your equipment from wear and oxidation.

ID

PE-PL-03





Nano PRO MT

HIGH TEMPERATURE AND PRESSURE GREASE

Specially designed grease with lithium-NLGI No. 2 complex and a synthetic base combined with Nanoparticles, designed for the most extreme conditions of speed, pressure and temperature, offering excellent protection against wear, corrosion and oxidation at high and low temperatures.

ID

PE-PL-04

Nano PRO MT

GEAR OIL 75w-90

Nano PRO MT 75w-90 Gear Oil is designed with a 75W-90 synthetic base and Nanoparticles, ideal for reducing friction and optimizing heat transfer of your equipment, tested and verified by the United States Military Forces. It offers great stability and exceptional shear resistance in the oil film. Excellent low temperature performance. Viscosity tested at - 40°C according to ASTM D-2988 standard.

ID

PE-PL-05



Nano PRO MT

ENGINE OIL ADDITIVE

High performance engine oil additive with semi-synthetic base and nanoparticles, specially designed to reduce friction and optimum heat transfer increasing power and reducing wear.

Unique with specially designed nanoparticles smaller than 20 nanometers.

Reduces the level of mechanical wear. Compatible with conventional and mineral oils.

ID

PE-PL-06



Nano PRO MT

INDUSTRIAL OIL ADDITIVE

Nano PRO MT industrial oil additive is an ISO 68 base oil with nanoparticles specially designed for friction reduction, vibration reduction and heat transfer optimization in your industrial equipment, ensuring a more efficient operation.

ID

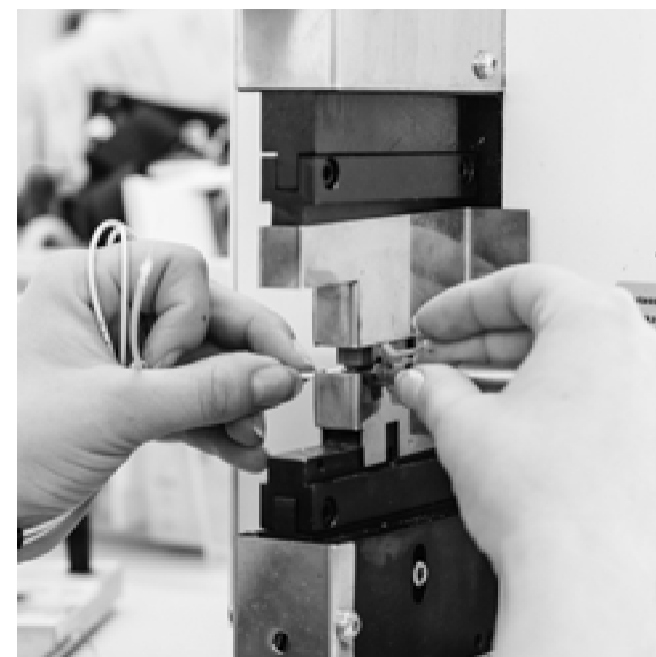
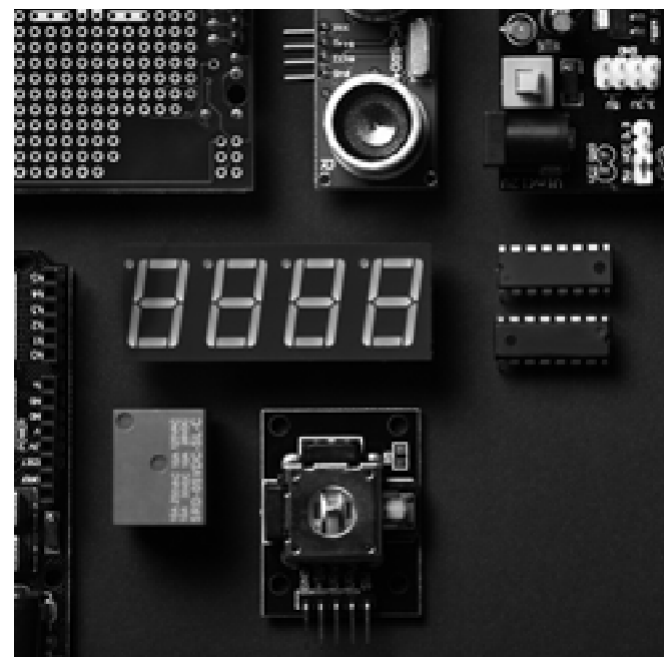
PE-PL-07



CARBOMEX®

FAST TRACK SCIENCE

Fast Track Science is a Research and Development methodology created by CARBOMEX® based on our experience in the development of more than 40 nanomaterials, based on Design Sprint and Agile to give our clients an effective technology transfer of their ideas in 6-week work plans. We deliver a technological, market and financial analysis for decision making.



To ensure effective accelerated research, all **Fast-Track Science** developments made at CARBOMEX® are based on the use of Nanotechnology.

We provide all the necessary information for decision making and how to bring your development to the market.



CARBOMEX®

ADDRESS

Independencia, 632, 16 de septiembre
Sur, Puebla, Puebla. C.P. 72474

CONTACT

+52 (222)-405-8529
(00) 0000 0000

ONLINE

contacto@carbomex.mx
carbomex.mx