

Visible-light-driven photocatalyst

What is advanced photocatalysis?

Minacoat_® consists of a visible-light-driven photocatalyst, and that can facilitate photocatalysis with in-house light sources even without sunlight (ultraviolet). MinaPower_® is the cleaner made from minacoat_®.

Adding antibacterial, deodorant, mold-proof properties of the advanced photocatalyst, minacoat.

Organic items at home

Coffee, ketchup, soy source, blood, etc.

Persistent colored stain Invisible organic substances

Molds, colibacilli and bacteria, norovirus, etc.

Bacteria and viruses, odors and stains

Harmful organic chemicals

Nitrogen oxide like Nox and PM 2.5 and organic solvents including toluene

Nitrogen oxide, organic solvents and harmful substances

Thorough cleaning & Powerful antibacterial and antivirus agent

It even decomposes and removes endospore difficult to sterilize like norovirus.

The apatite catches bacteria and starts decomposing when it absorbs light.

Anti-bacterial effect of a minacoat® applied product to endospore (Unit: individual/specimen)

Test conditions	Specimen	duration of activity			Antibacterial activity value
		Immediately	24 hours	48 hours	Antiba
2 UV lights	Normal glass specimen	1,700	1,500	120	2.0
	minacoat-applied glass specimen		210	1	
Dark place	Normal glass specimen		2,800	48,000	
	minacoat-applied glass specimen		2,100	1,600	

[Source] Kitasato Research Center for Environmental Science

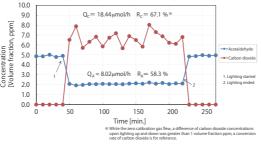
Test report on anti-bacterial effect of a minacoat* applied product to endospore under irradiation of light (ultraviolet) by the standard JIS R1702: 2012.

standard JIS R1702: 201 (Kitasato Science Issued No. 25-0040)

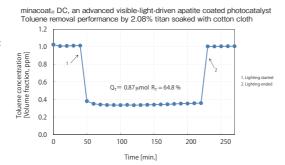
Even works for

- Detoxifying substances Controlling O-157, staphylococcus aureus, etc.
 Keeping surfaces dirt/stain-resistant
- Detoxifying harmful VOC Solution for sick building syndrome
 Long-term deodorant effect

Acetaldehyde removal performance by 2.08% titan soaked with cotton cloth



minacoat_® DC, an advanced visible-light-driven apatite coated photocatalyst



Contact us for the advanced photocatalyst, minacoat®

Deodorant & Disinfectant



Minature is a deodorant and disinfectant by simply adding it to water.

Minature 5 (concentrated), and Minature 10 (ready for use) are available.

Not only as cleaning agent, Miniature can be used as a preventive measure for skin disease among goldfish by adding an appropriate amount in an aquarium



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minaPower

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相模原市指令(産雇

Visible-light-driven apatite coated



Innovative cleaner originated from an advanced visible-light-driven photocatalyst!

Powerful cleaning and deodorant & disinfectant

 $MinaPower_{\circledast}$ is a very safe cleaner, made with natural ingredients and a photocatalyst approved as a food additive.

It offers excellent detergency, deodorant, and disinfectant effects.

The cleaner oxidizes, decomposes, and removes dirt with

power of photocatalysis. It is in powder form and cost-effective by diluting it to 1/100 to 1/800 as required.

MinaPower has the potentials for a variety of cleaning products according to detergency and application per dilution ratio.



Spraying and cleaning with MinaPower oxidizes, decomposes, and removes dirt with power of photocatalysis.

Powerful detergency & Safe and secure ingredients

Apatite coated titanium dioxide, the main ingredient of MinaPower, is safe for it is used as a food additive in chewing gums and lip sticks.

- Titanium dioxide (photocatalyst)
 *Approved food additive
- Natural organic acids
 *Percarbonic acid, citric acid, oleic acid, etc
- Purified water

Product No.: MPB500

Ingredients: Water solution mixed with titanium dioxide, percarbonic acid, citric acid,

oleic acid and mixture of natural fat Appearance: Clear pH: Alkalescent to neutral

[How to use]

Dilute MinaPower according to dirtiness and condition of items to clean. Cost-effective solution: dilute 1 pack (10 g) of MinaPower with 5 litter of water (0.05%).

Once open the pack of MinaPower, use up the pack or store it in an air-tight container to keep it dry.

Make a solution by solving 1 pack (10 g) of MinaPower with 1 litter of water (0.01%): dilute the concentrated solution as required for purpose of use.

MinaPower, when reacted with water, produces carbon dioxide; close the container after it goes flat.

Application	Dilution rate		
Painted surface cleaning	1/100 to 1/200		
Fat removal of kitchen equipment			
Factory cleaning			
Returnable container cleaning	1/200 to 1/300		
High pressure jet cleaner			
Tile and carpet cleaning	1/300 to 1/400		
Soak cleaning for dishes	1/500 to 1/600		
Cleaning glasses, mirrors and stainless steel & acrylic boards	1/600 to 1/800		

MinaPower is a trademark of Opeth Co., Ltd. The same product is also trademarked as 美奈力 in China



Powerful but easy detergency control



No more wipes for shinny windows

Spray MinaPower and dry off the window with wipe once. The window glasses start shining and spot-less. After wiping, they stay fat-resistant by the power of photocatalysis.

No rinsing! Tile and carpet cleaning

It degreases tiles and carpets for the cleaner dioxides and decompose protein and fat. Spray MinaPower and wait for a while before wiping the item.





For cleaning counters, tables, and chairs

Spray MinaPower and wipe the item with a dry cloth. Not only the greasy stain is easily removed but the cleaned surface becomes shiny. It has disinfectant effect, keeping the cleaned surface hygienic.

Works as deodorant and disinfectant!

Addition to cleaning, simply spray MinaPower to clothes and rooms as deodorant and disinfectant.

Shoe boxes and closets

MinaPower also works as mold control and deodorant by spraying it on humid places.



Living rooms

Spraying MinaPower removes odor and organic stains on cloth-covered sofa without damaging the fabric.

Perfectly suit for

disinfecting/deodorizing pet

products. It is unscented;

smell-sensitive pets stay



Clothes and beddings

Since the disinfectant/deodorant spray is made from a photocatalyst, it is safe for not only clothes and bedding but also for baby underwear.





Spray it to sweat-stained areas on clothes and smelly hats and caps. That controls odor and

Pet products

stress-free.



Kitchens and bathrooms

Bacteria prefer damp places like kitchen and bathrooms. Use MinaPower after using them to help control odor and bacteria.

Application 1

Scent and rinse-free carpet cleaner

Decomposing and removing dirt & stains on the floor! No rinsing and quick dry!

(Natural dry for 2-3 hours in summer, 4-5 hours in winter)

Applicable to acrylic and wool carpets, marbles, and other flooring materials!







Application 2

MinaPower is used anywhere!

Darken block walls is perfectly cleaned with MinaPower: the 1/200-solution is weak but the 1/100 worked!

Cleaning, disinfecting and stain-resistant processes are all done at once.













Upward ventilation kitchen hood escalator railing (rubber)

smokers' rooms (glass)

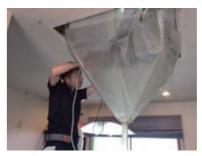
care home baths (plastic)

Application 3

Cleaning air conditioners (no rinsing)

MinaPower® does not contain poisonous, toxic or surfactant, and can go without rinsing which

requires a lot of water. Simply wipe the sprayed surface and let it dry. No damage to the machine and minimum curing compress work time.



to dishwashers

Brighter glasses!



Excellent cleaner of better fat removal. shorter rinsing and quick dry!

*Make a cleaning solution at a ratio: 5 spoons of dish detergent and 5 spoons of MinaPower diluted to 1/500.