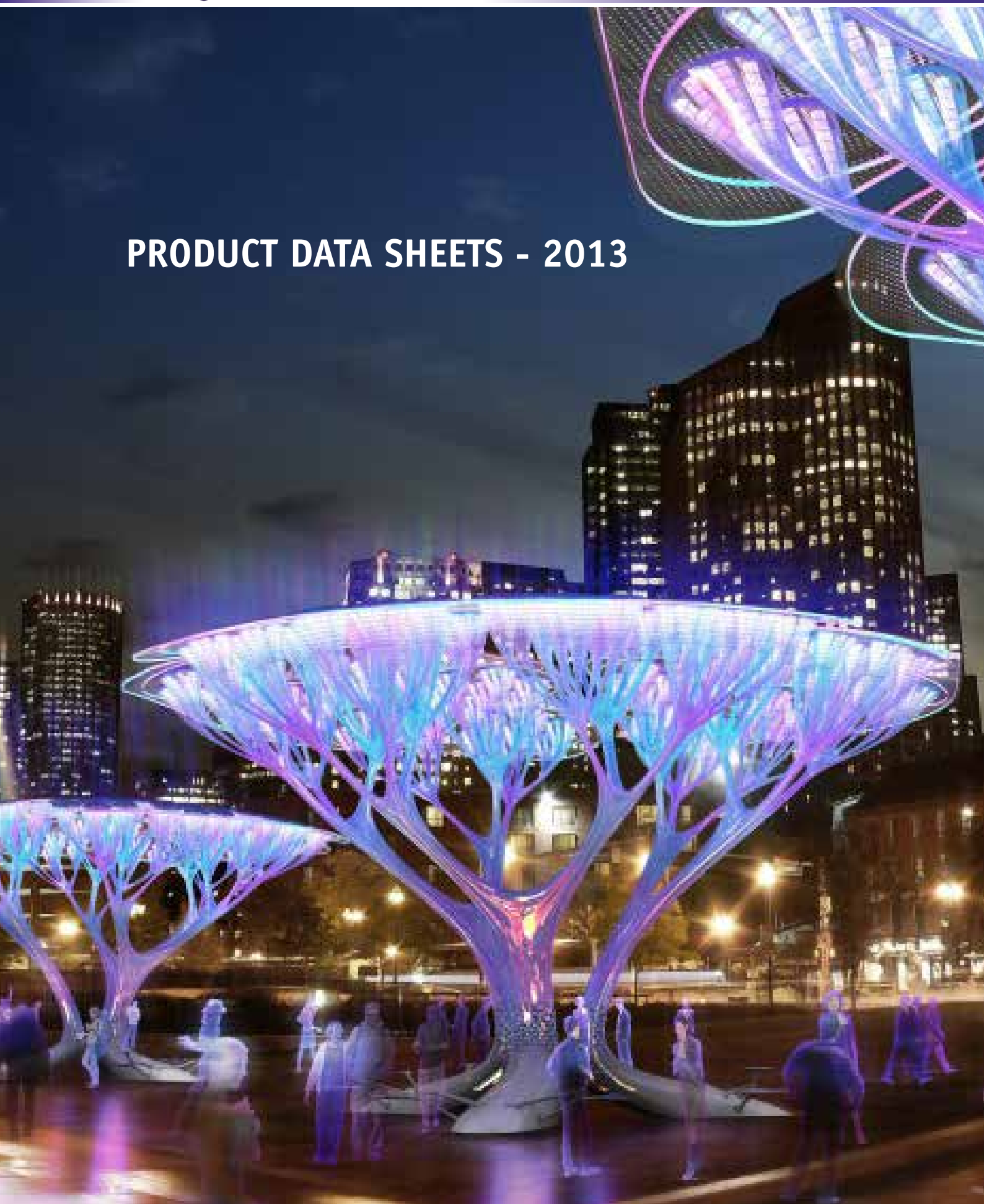


PRODUCT DATA SHEETS - 2013

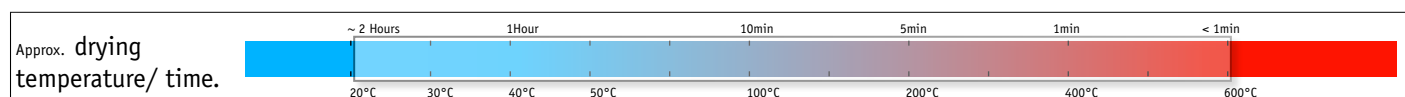
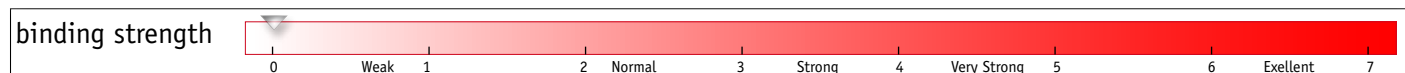


PRODUCT FAMILY	Product Code	Product Color Code	Page
UNIVERSAL	TSU38-01	U- Code	1
	TSU38-02		2
EXTERIOR	TSA50-02	A- Code	3
	TSA50-03		4
	TSA51-02HD		5
DISINFECTION Antimikrobial Coating	TSS40-05AG	S- Code	6
	TSS40-06AG		7
	TSA42-05AG		8
GLASS COATING	TSG38-P	G- Code	9
	TSG50-02		10
	TSG80-01HD		11
TitanShield® SolarCoat	TS-SolarCoat	TS-SolarCoat	12
PLASTIC & POLYMER	TSK50-01	K- Code	13
	TSK50-02		14
	TSK51-01HD		15
ODOR ELIMINATION & AIR PURIFICATION	TSV50-02	V- Code	16
	TSV51-02HD		17
FILTER TECHNIC	TSP60-01	P- Code	18
	TSP60-02		19
PRIMER	TSB-01	B- Code	20
	TSB-02		21
	TSB-03		22
INDUSTRIAL	TSH1-05HD 5% Slurry		23
	TSH1-10HD 10% Slurry		24
	TSH1-15HD 15% Concentrat		25
	TSNP-01 TiO ₂ Nano Powder		26
	TSNP-02 N ₂ ,TiO ₂ Nano Powder		27
	TSNP-03 AG,TiO ₂ Nano Powder		28

UV Reactiv Nano TiO2 Sol General Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic/ Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

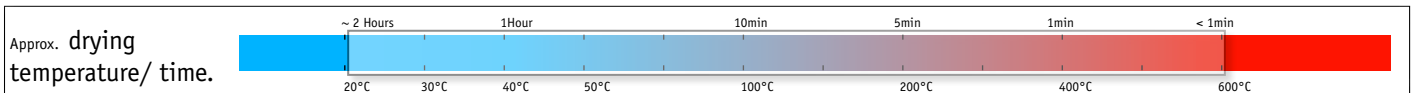
* Primer might be needed.



Special properties: <ul style="list-style-type: none"> • water-based nano TiO2 sol • low cost (economical choice) • no additive, surfactant and binder, suitable for re-processing 	Technical Information: <p>Chemical description: nano titanium dioxide sol</p> <p>• appearance: Bluish White transparent liquid</p> <p>Active matter content:</p> <p>TiO2 0.75% - 1,0%</p> <p>• Water content: 99% ± 1%</p> <p>• Alcohol content: 0%</p>
Example of application: <ul style="list-style-type: none"> • economical exterior UV/PCO coating for atmosphere purification • UV/PCO filter & part coating (especial for deodorization) • raw material or additive for other commercial PCO product 	Specification: <p>• PH Value: PH 8 - 10</p> <p>• primary particle size: < 8 nm</p> <p>• crystal structure: TiO2 Anatasee</p> <p>• agglomeration index: 2-4 %</p> <p>• density: 1.0075-1.01 g/ml</p> <p>• Viscosity: 1.0050 mPa.s</p> <p>• binding strength: very weak (level 0)</p>
Usage instructions: <ul style="list-style-type: none"> • recommend air mix pressure spraying (HVLP) • brush for rough surface • dipping for irregular surface <p>Dosage instruction:</p> <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 60-100 ml/m². for marble & stone, 30-50ml/m². for tile 	<p>• Drying time at 25°C</p> <p>Primary drying time: 30 minutes</p> <p>Final setting time: 30 days</p>
Transport Information No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C	Package: 10 L, 25 L, Plastic / Polymer barrel with carton 30 L, 100 L, 200 L Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet

UV Reactiv Nano TiO2 Sol General Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic/ Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO2 sol
- low cost (economical choice)
- no additive, surfactant and binder, suitable for re-processing
- Improved binding strenght

Example of application:

- ExteriorUV/PCO coating for atmosphere air purification
- economical exterior UV/PCO coating for atmosphere purification
- UV/PCO filter & part coating (especial for deodorization)
- raw material or additive for other commercial PCO product

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular surface
- Mixing to produce PCO products

Dosage instruction:

- refer to relevant coverage data sheet or product manual
- 60-100 ml/m². for marble & stone, 30-50ml/m². for tile

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano titanium dioxide sol

• **appearance:** Yellowish transparent liquid

Active matter content:

TiO2 0.75% - 1,0%

• **Water content:** 99% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7.5 - 10

• **primary particle size:** < 8 nm

• **crystal structure:** TiO2 Anatase

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Strong (level 3)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

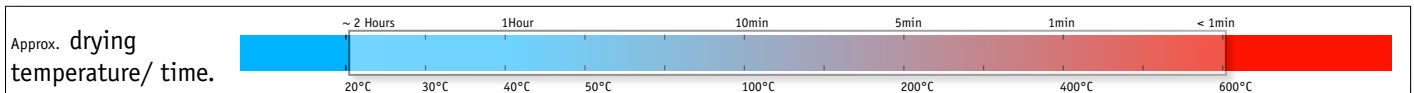
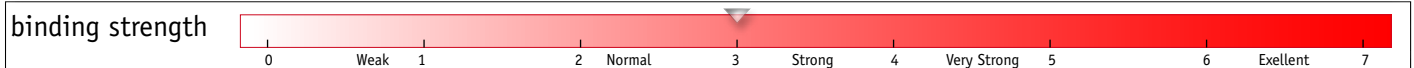
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) MATERIAL SAFETY DATA SHEET

Visible Light Reactiv Nano TiO₂ Sol Exterior Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic/ Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- high efficiency
- self-cleaning application optimization
- room temperature to 600°C drying
- Improved binding strenght for exterior application

Example of application:

- building exterior self-cleaning coating
- stone surface anti moss coating
- high efficient exterior UV/PCO coating for atmosphere purification

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular surface
- Mixing to produce PCO products

Dosage instruction:

- refer to relevant coverage data sheet or product manual
60-100 ml/m² for marble & stone, 30-50ml/m² for tile

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano titanium dioxide sol

• **appearance:** Yellowish transparent liquid

Active matter content:

TiO₂ 0.75% - 1,0%

• **Water content:** 99% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7.5 - 10

• **primary particle size:** < 8 nm

• **crystal structure:** TiO₂ Anatase

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Strong (level 3)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

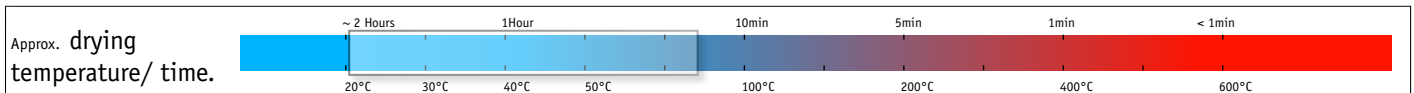
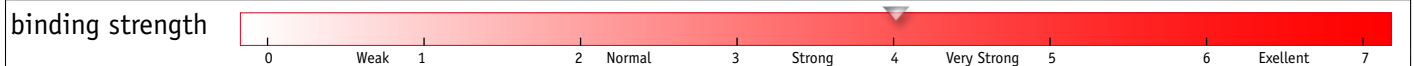
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) MATERIAL SAFETY DATA SHEET

Visible Light Reactiv Nano TiO₂ Exterior Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic/ Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- high efficiency
- self-cleaning application optimization
- room temperature to 600°C drying
- extra binding strength for porous and rough substrate

Example of application:

- building exterior self-cleaning coating
- stone surface anti moss coating
- high efficient exterior UV/PCO coating for atmosphere purification

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular surface
- Mixing to produce PCO products

Dosage instruction:

- refer to relevant coverage data sheet or product manual
60-100 ml/m² for marble & stone, 30-50ml/m² for tile

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano titanium dioxide sol

• **appearance:** Bluish white transparent liquid

Active matter content:

TiO₂ 0.75% - 1,0%

• **Water content:** 99% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7.5 - 10

• **primary particle size:** < 8 nm

• **crystal structure:** TiO₂ Anatase

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** very strong (level 4)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

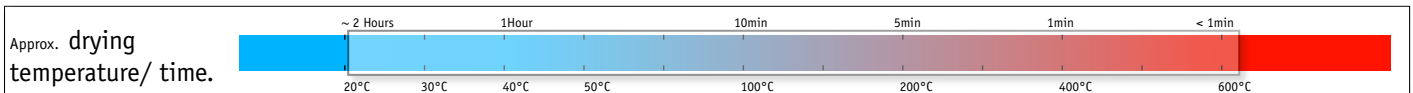
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) MATERIAL SAFETY DATA SHEET

HD Visible Light Reactiv Nano TiO₂ High Performance Exterior Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic/ Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- high efficiency
- self-cleaning application optimization
- room temperature to 600°C drying
- extra binding strength for porous and rough substrate

Example of application:

- building exterior self-cleaning coating
- stone surface anti moss coating
- high efficient exterior UV/PCO coating for atmosphere purification

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular surface
- Mixing to produce PCO products

Dosage instruction:

- refer to relevant coverage data sheet or product manual
60-100 ml/m² for marble & stone, 30-50ml/m² for tile

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano titanium dioxide sol

• **appearance:** Yelowish transparent liquid

Active matter content:

• **TiO₂** 2,2 – 2,5 %

• **Water content:** 97% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7.5 - 10

• **primary particle size:** < 8 nm

• **crystal structure:** TiO₂ Anatase

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Strong (level 3)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

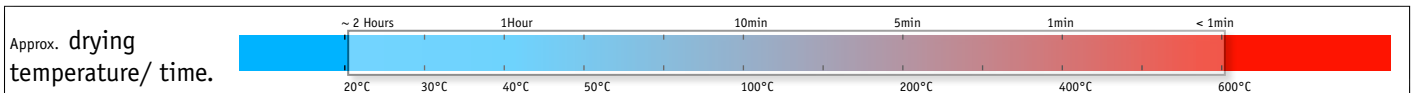
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) MATERIAL SAFETY DATA SHEET

Nano Silver modified TiO2 Sol Antimicrobial Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO2 sol
- nano silver modification, high performance for anti-bacterial
- improved wetting feature on fabric
- improved Coating feature on Plastic
- improved binding strength

Example of application:

- anti-bacterial & anti-virus fabric coating & treatment
- air filter coating (especial for anti-bacterial & anti-virus)
- home sanitization (for house, cloth, ...)
- public place anti-bacterial coating (hospital, bus, train, school)
- high efficient indoor anti-bacterial & anti-virus coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items
- Trigger Spray to use at home, office and car

Dosage instruction:

- refer to relevant coverage data sheet or product manual

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO2	0,75 – 1,0 %
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 9,5
• primary particle size:	< 8 nm
• crystal structure:	TiO2 Anatase
• agglomeration index:	2-4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 3)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:
















The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

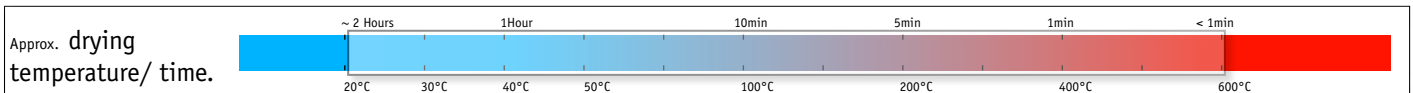
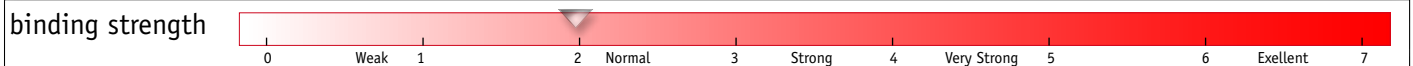
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano Silver modified TiO2 Sol Antimicrobial Coating Agent

Substrate Applicability:	Feature & Performance:
Stone 	Water purification 
Tile 	Odor Elimination 
Glass 	Super-hydrophilic 
Plastic / Polymer 	Anti-moss 
Metal 	Air purification 
*Paint 	Antimicrobial 
*Fabric 	Self-cleaning 
*Wood 	* Primer might be needed.



Special properties:

- water-based nano TiO2 sol
- nano silver modification, high performance for anti-bacterial
- improved wetting feature on fabric
- improved Coating feature on Plastic
- improved binding strength

Example of application:

- anti-bacterial & anti-virus fabric coating & treatment
- air filter coating (especial for anti-bacterial & anti-virus)
- home sanitization (for house, cloth, ...)
- public place anti-bacterial coating (hospital, bus, train, school)
- high efficient indoor anti-bacterial & anti-virus coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items
- Trigger Spray for home, office and car use

Dosage instruction:

- refer to relevant coverage data sheet or product manual

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO2	0.75% - 1,0%
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 10
• primary particle size:	< 8 nm
• crystal structure:	TiO2 Anatase
• agglomeration index:	2-4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Normal (level 2)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

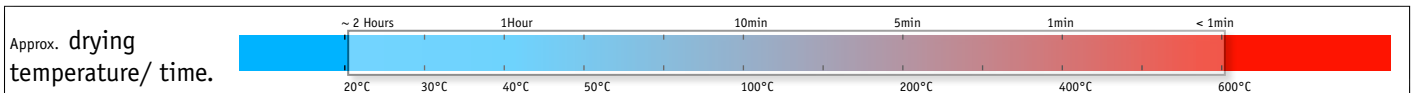
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano Silver modified TiO2 Sol Antimicrobial Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO2 sol
- excellent performance for anti-bacterial
- improved wetting feature on fabric
- improved Coating feature on Plastic
- improved binding strength

Example of application:

- anti-bacterial & anti-virus fabric coating & treatment
- air filter coating (especial for anti-bacterial & anti-virus)
- home sanitization (for house, cloth, ...)
- public place anti-bacterial coating (hospital, bus, train, school)
- high efficient indoor anti-bacterial & anti-virus coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items
- Trigger Spray for home, office and car use

Dosage instruction:

- refer to relevant coverage data sheet or product manual

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO2	0.75% - 1,0%
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 8,0 - 10
• primary particle size:	< 8 nm
• crystal structure:	TiO2 Anatase
• agglomeration index:	2-4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 3)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

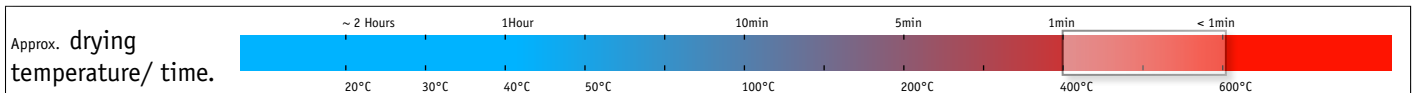
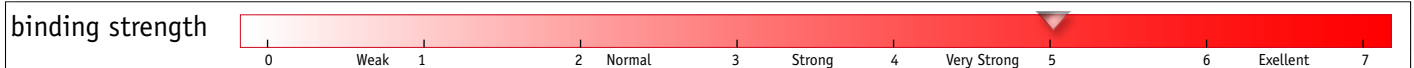
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Industry Nano TiO₂ Sol for Glass & Ceramic Heat Coating Agent

Substrate Applicability:	Feature & Performance:
Stone	Water purification
Tile	Odor Elimination
Glass	Super-hydrophilic
Plastic / Polymer	Anti-moss
Metal	Air purification
*Paint	Antimicrobial
*Fabric	Self-cleaning
*Wood	* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- Glass surface passivation modification
- extra improved binding strength
- need heat over 400°C after coating

Example of application:

- self-cleaning & anti-fog Glass surface processing
- self-cleaning & anti-moss marble, granite surface processing
- self-cleaning & anti-bacterial tile surface processing
- self-cleaning & anti-rust metal surface processing

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- Industry Spray System
- Spinning coating
- Dipping coating

Dosage instruction:

- refer to relevant coverage data sheet or product manual
25-30ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO₂	0,75%- 1,0%
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 6,5 - 8,5
• primary particle size:	< 8 nm
• crystal structure:	TiO ₂ Anatase
• agglomeration index:	2-4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 5)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

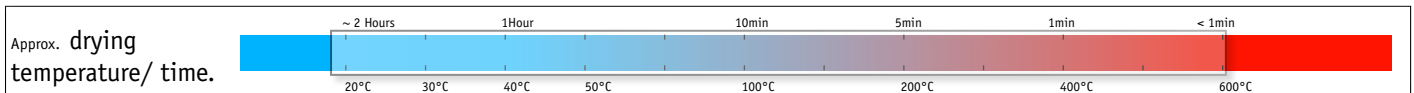
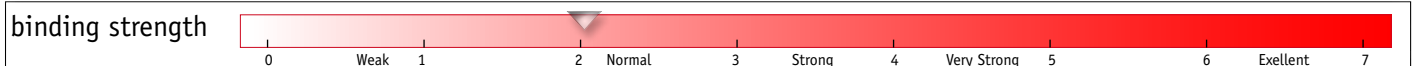
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano TiO₂ Sol Glass & Ceramic Coating Agent

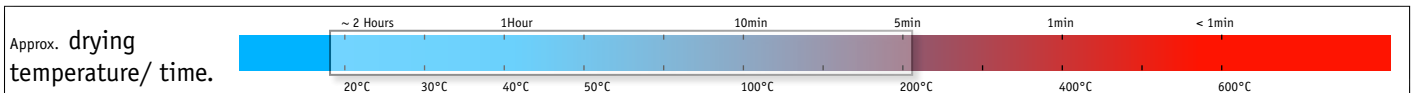
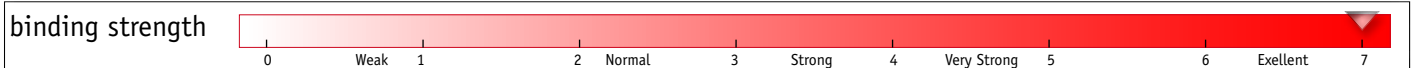
Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★☆☆☆☆
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties: <ul style="list-style-type: none"> • water-based nano TiO₂ sol • high efficiency • self-cleaning application optimization • optimization for Glass surface, excellent optical feature on Glass • room temperature to 600°C drying 	Technical Information:
	Chemical description: nano titanium dioxide sol • appearance: Yellowish transparent liquid Active matter content: • TiO₂ 0,6%– 0,8% • Water content: 99% ± 1% • Alcohol content: 0%
Example of application: <ul style="list-style-type: none"> • building exterior self-cleaning coating • exterior Glass surface self-cleaning coating • self-cleaning & anti-bacterial tile surface processing • exterior glossy metal self-cleaning coating 	Specification:
	• PH Value: PH 7,5 - 10,0 • primary particle size: < 8 nm • crystal structure: TiO ₂ Anatase • agglomeration index: 2-4 % • density: 1.0075-1.01 g/ml • Viscosity: 1.0050 mPa.s • binding strength: Normal (level 2)
Usage instructions: <ul style="list-style-type: none"> • recommend HVLP air mix pressure spraying • polish coating Dosage instruction: <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 25-40ml/m² 	• Drying time at 25°C
	Primary drying time: 30 minutes Final setting time: 30 days
Transport Information No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI
	Package: 10 L, 25 L, Plastic / Polymer barrel with carton 30 L, 100 L, 200 L Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C	

HD Nano TiO₂/WO₃/SiO₂ Sol transparent photocatalyst for self-cleaning Glass & tile

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
*Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- Water/ Alcohol based nano TiO₂/WO₃/SiO₂ sol
- high efficiency
- Excellent degree of dispersion for water and alcohol based system
- room temperature to 200°C drying

Example of application:

- Coatings on the Glass or Tile
- Specially higher pencil hardness above 7H
- high efficient Outdoor Visible Light PCO coating for Selfcleaning
- Excellent transparency on the Glass
- * Glossy Tiles will appear slightly lower gloss then before!

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- bar coating

Dosage instruction:

- refer to relevant coverage data sheet or product manual
80ml/m² for Stone, 30-40ml/m² for Mirror

Transport Information

- * refer to relevant (MSDS) Material Safety Data Sheet



Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano TiO₂/WO₃/SiO₂ sol

• **appearance:** transparent liquid

Active matter content:

TiO₂ 0.5% WO₃ 0.5% SiO₂ 2% ± 0.1%

• **Water content:** 37% ± 1%

• **Alcohol content:** 60% ± 1%

Specification:

• **PH Value:** PH 3.5-4.0

• **primary particle size:** 20-30 nm

• **crystal structure:** TiO₂ Anatase

• **agglomeration index:** 8 - 10 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Exelent (level 7) H7

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:
















The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

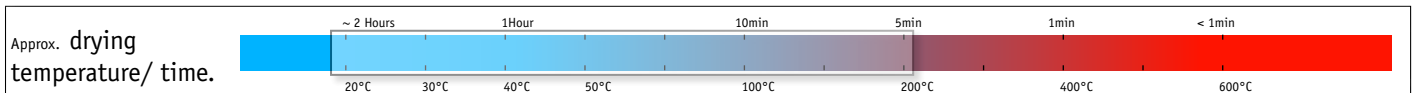
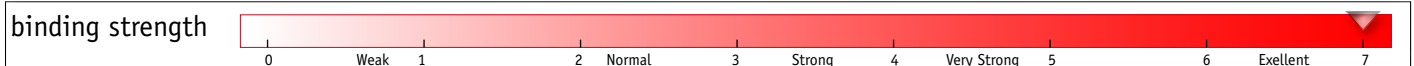
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano TiO₂, SiO₂ Sol Anti Reflectiv transparent photocatalyst for self-cleaning glass and solar panels

Substrate Applicability:	Feature & Performance:
Stone 	Water purification 
Tile 	Odor Elimination 
Glass 	Super-hydrophilic 
Poly Silicon Iron Glass 	Anti-moss 
Metall 	Air purification 
FTO Glass 	Antimicrobial 
*Fabric 	Self-cleaning 
*Wood 	* Primer might be needed.



Special properties:

- Water/ Alcohol based nano TiO₂/WO₃/SiO₂ sol
- high efficiency
- Excellent degree of dispersion for water and alcohol based system
- room temperature to 200°C drying

Example of application:

- Photocatalytic and Transmittance enhancer for Solar cell glass
- Excellent transmittance on the Poly Silicon Iron Glass & FTO Glass
- Specially higher pencil hardness above 7H
- high efficient Visible Light PCO coating for Selfcleaning on Greenhouses
- Excellent antireflect coating for glass and metal

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- bar coating

Dosage instruction:

- refer to relevant coverage data sheet or product manual 30-50ml/m²

Transport Information

- * refer to relevant (MSDS) Material Safety Data Sheet



Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description: nano TiO₂, SiO₂ sol

• appearance: milky transparent liquid

Active matter content:

TiO₂ 0.5% SiO₂ 2% ± 0.1%

• Water content: 37% ± 1%

• Alcohol content: 60% ± 1%

Specification:

• PH Value: PH 3.5 - 4.0

• primary particle size: 20 nm

• crystal structure: TiO₂ Anatase

• agglomeration index: 8 - 10 %

• density: 1.0075-1.01 g/ml

• Viscosity: 1.0050 mPa.s

• binding strength: Exelent (level 7) H6-7

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

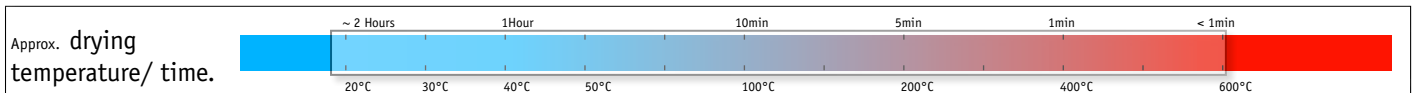
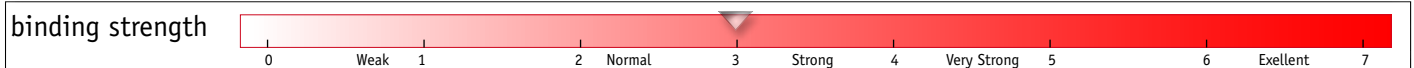
10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano TiO₂ Sol Plastic / Polymer & Glass Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- improved wetting feature for plastic and polymer coating
- self-cleaning application
- room temperature to 600°C drying

Example of application:

- high efficient plastic coating
- high efficient metal coating
- polymer fabric coating & processing
- exterior glossy metal self-cleaning coating

Usage instructions:

- recommend HVLP air mix pressure spraying
- Spinning coating
- dipping for fabric & irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual
25-40ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO₂	0,75% – 1,0%
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 10,0
• primary particle size:	< 8 nm
• crystal structure:	TiO ₂ Anatase
• agglomeration index:	2 - 4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 3)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

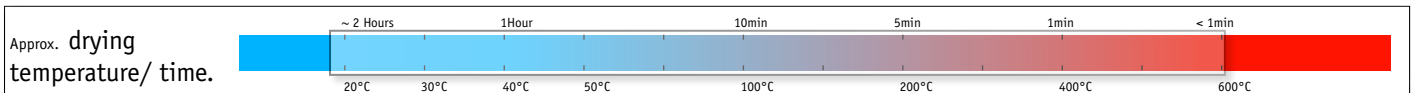
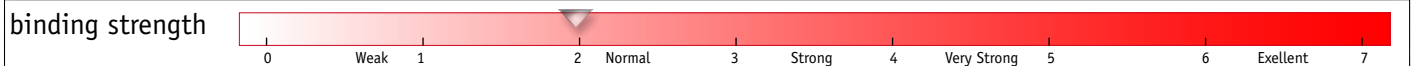
10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano TiO₂ Sol Plastic, Polymer, Polymer Fabric & Glass Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- improved wetting feature for plastic and polymer coating
- self-cleaning application
- room temperature to 600°C drying

Example of application:

- high efficient plastic coating
- high efficient metal coating
- polymer fabric coating & processing
- exterior glossy metal self-cleaning coating

Usage instructions:

- recommend HVLP air mix pressure spraying
- Spinning coating
- dipping for fabric & irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual
25-40ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO₂	0,6% – 0,8%
• Water content:	99% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 10,0
• primary particle size:	< 8 nm
• crystal structure:	TiO ₂ Anatase
• agglomeration index:	2 - 4 %
• density:	1.0075-1.01 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Normal (level 2)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

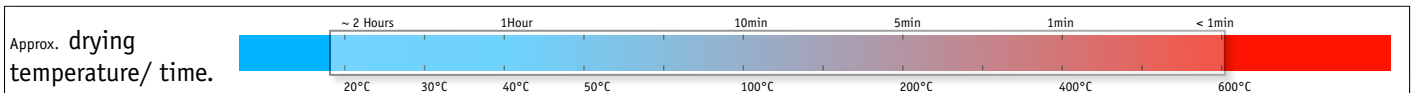
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Nano TiO₂ Sol Plastic, Polymer, Polymer Fabric & Glass Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- improved wetting feature for plastic and polymer coating
- self-cleaning application
- room temperature to 600°C drying

Example of application:

- high efficient plastic coating
- high efficient metal coating
- polymer fabric coating & processing
- exterior glossy metal self-cleaning coating

Usage instructions:

- recommend HVLP air mix pressure spraying
- dipping for fabric & irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual 25-40ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.
Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO₂	2,0%– 2,5%
• Water content:	97% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 10,0
• primary particle size:	< 8 nm
• crystal structure:	TiO ₂ Anatase
• agglomeration index:	2 - 4
• density:	1.02-1.03 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 3)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

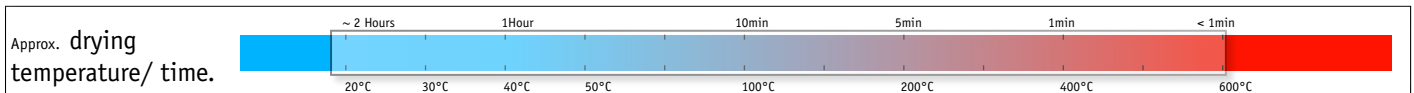
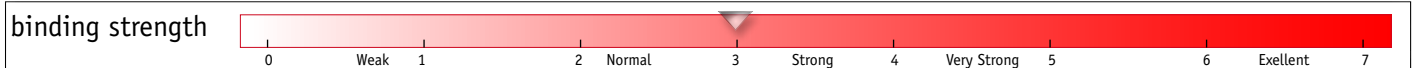
10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Visible Light Response Deodorization & Air Purification Nano TiO₂ Sol Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

* Primer might be needed.



Special properties:

- water-based nano TiO₂ sol
- high efficiency
- excellent deodorization & air purification performance
- no additive, surfactant and binder, suitable for re-processing
- improved binding strength

Example of application:

- UV/PCO filter & part coating (especial for deodorization)
- home and public deodorization & air purification coating
- industrial air purification and deodorization coating
- raw material or additive for other commercial PCO product

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items
- mix with binder or other modified active matter
- Trigger Spray to use at home, office and car

Dosage instruction:

- refer to relevant coverage data sheet or product manual
25-40ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

12 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description:	nano titanium dioxide sol
• appearance:	Yellowish transparent liquid
Active matter content:	
• TiO₂	0,75% – 1,0%
• Water content:	97% ± 1%
• Alcohol content:	0%

Specification:

• PH Value:	PH 7,5 - 10,0
• primary particle size:	< 8 nm
• crystal structure:	TiO ₂ Anatase
• agglomeration index:	2-4 %
• density:	1.02-1.03 g/ml
• Viscosity:	1.0050 mPa.s
• binding strength:	Strong (level 3)

• Drying time at 25°C

Primary drying time:	30 minutes
Final setting time:	30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

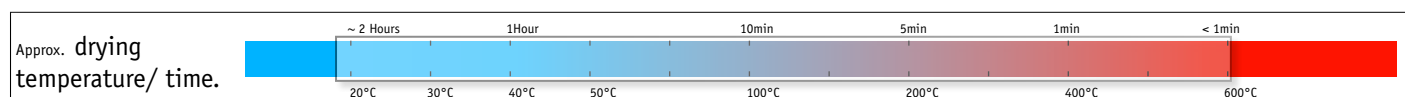
10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

HD Visible Light Response Deodorization & Air Purification Nano TiO₂ Sol Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

* Primer might be needed.

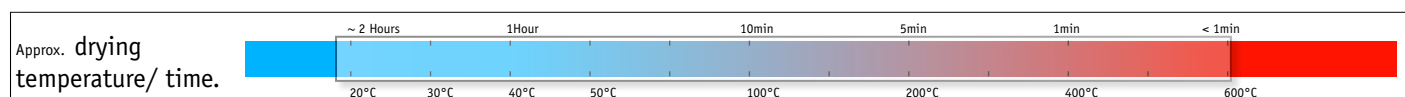
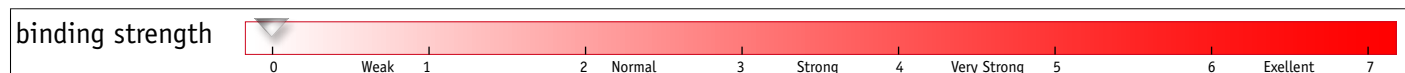


Special properties: <ul style="list-style-type: none"> • water-based nano TiO₂ sol • high efficiency • excellent deodorization & air purification performance • no additive, surfactant and binder, suitable for re-processing • improved binding strength 	Technical Information: <p>Chemical description: nano titanium dioxide sol</p> <p>• appearance: Yellowish transparent liquid</p> <p>Active matter content:</p> <ul style="list-style-type: none"> • TiO₂ 2,0% – 2,5% • Water content: 97% ± 1% • Alcohol content: 0% 				
Example of application: <ul style="list-style-type: none"> • UV/PCO filter & part coating (especial for deodorization) • home and public deodorization & air purification coating • industrial air purification and deodorization coating • raw material or additive for other commercial PCO product 	Specification: <ul style="list-style-type: none"> • PH Value: PH 7,5 - 10,0 • primary particle size: < 8 nm • crystal structure: TiO₂ Anatase • agglomeration index: 2-4 % • density: 1.02-1.03 g/ml • Viscosity: 1.0050 mPa.s • binding strength: Strong (level 3) 				
Usage instructions: <ul style="list-style-type: none"> • recommend air mix pressure spraying (HVLP) • brush for rough surface • dipping for irregular items • mix with binder or other modified active matter • Trigger Spray to use at home, office and car <p>Dosage instruction:</p> <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 25-40ml/m² 	<ul style="list-style-type: none"> • Drying time at 25°C <table border="1"> <tbody> <tr> <td>Primary drying time:</td> <td>30 minutes</td> </tr> <tr> <td>Final setting time:</td> <td>30 days</td> </tr> </tbody> </table>	Primary drying time:	30 minutes	Final setting time:	30 days
Primary drying time:	30 minutes				
Final setting time:	30 days				
Transport Information <p>No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods</p>	Registration status: <p>The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI</p>				
Storage stability: <p>12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C</p>	Package: <p>10 L, 25 L, Plastic / Polymer barrel with carton 30 L, 100 L, 200 L Plastic / Polymer barrel</p> <p>* refer to relevant (MSDS) Material Safety Data Sheet</p>				

Platinum doping modified Nano TiO₂ Sol Coating Agent

Substrate Applicability:	Feature & Performance:
Stone	Water purification
Tile	Odor Elimination
Glass	Super-hydrophilic
Plastic / Polymer	Anti-moss
Metal	Air purification
*Paint	Antimicrobial
Polymer Fabric	Self-cleaning
*Wood	

* Primer might be needed.

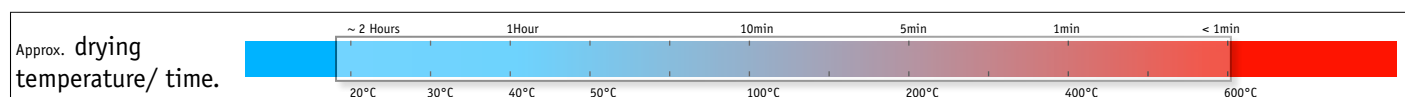


Special properties: <ul style="list-style-type: none"> • water-based nano TiO₂ sol • platinum doping modification, very high efficient • excellent performance for most applications • high stability under harsh condition • no additive, surfactant and binder, suitable for re-processing 	Technical Information:			
Example of application: <ul style="list-style-type: none"> • PCO filter & part coating (good balance for most application) • PCO water treatment device part coating • industrial air purification and deodorization coating • raw material or additive for other commercial PCO product 	Chemical description: nano titanium dioxide sol • appearance: bluish white transparent liquid			
	Active matter content: <ul style="list-style-type: none"> • TiO₂ 0,75 – 1,0% • Water content: 98% ± 1% • Alcohol content: 0% 			
Usage instructions: <ul style="list-style-type: none"> • recommend air mix pressure spraying (HVLP) • dipping for irregular items • mix with binder or other modified active matter Dosage instruction: <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 	Specification: <ul style="list-style-type: none"> • PH Value: PH 8,0 - 10,0 • primary particle size: < 8 nm • crystal structure: TiO₂ Anatase • agglomeration index: 2-4 % • density: 1.02-1.03 g/ml • Viscosity: 1.0050 mPa.s • binding strength: Very weak (level 0) 			
	<ul style="list-style-type: none"> • Drying time at 25°C <table border="1"> <tr> <td>Primary drying time:</td> <td>30 minutes</td> </tr> <tr> <td>Final setting time:</td> <td>30 days</td> </tr> </table>	Primary drying time:	30 minutes	Final setting time:
Primary drying time:	30 minutes			
Final setting time:	30 days			
Transport Information No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI			
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C	Package: 10 L, 25 L, Plastic / Polymer barrel with carton 30 L, 100 L, 200 L Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet			

Platinum doping modified Nano TiO₂ Sol Coating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	Air purification ★★★★★
*Paint ★★★★★	Antimicrobial ★★★★★
Polymer Fabric ★★★★★	Self-cleaning ★★★★★
*Wood ★★★★★	

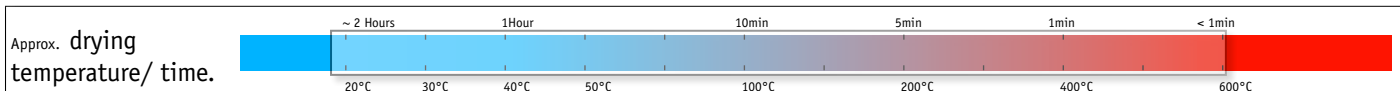
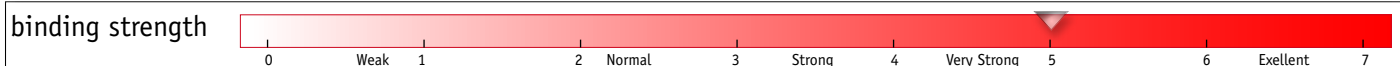
* Primer might be needed.



Special properties: <ul style="list-style-type: none"> • water-based nano TiO₂ sol • platinum doping modification, very high efficient • excellent performance for most applications • high stability under harsh condition • no additive, surfactant and binder, suitable for re-processing 	Technical Information:
	Chemical description: nano titanium dioxide sol • appearance: yellowish transparent liquid Active matter content: <ul style="list-style-type: none"> • TiO₂ 0,75 – 1,0% • Water content: 98% ± 1% • Alcohol content: 0%
Example of application: <ul style="list-style-type: none"> • PCO filter & part coating (good balance for most application) • PCO water treatment device part coating • industrial air purification and deodorization coating • raw material or additive for other commercial PCO product 	Specification: <ul style="list-style-type: none"> • PH Value: PH 7,5 - 10,0 • primary particle size: < 8 nm • crystal structure: TiO₂ Anatase • agglomeration index: 2-4 % • density: 1.02-1.03 g/ml • Viscosity: 1.0050 mPa.s • binding strength: Strong (level 3)
	• Drying time at 25°C <ul style="list-style-type: none"> Primary drying time: 30 minutes Final setting time: 30 days
Usage instructions: <ul style="list-style-type: none"> • recommend air mix pressure spraying (HVLP) • dipping for irregular items • mix with binder or other modified active matter Dosage instruction: <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI
	Package: 10 L, 25 L, Plastic / Polymer barrel with carton 30 L, 100 L, 200 L Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet
Transport Information No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C	

Primer General TiO₂ undecoating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	UV Block ★★★★★
Paint ★★★★★	PCO Protect ★★★★★
Polymer Fabric ★★★★★	Binding enhance ★★★★★
Wood ★★★★★	



Special properties:

- water-based primer for nano photocatalyst top coating
- block UV
- protect organic substrate from photocatalytic oxidization damage
- enhance binding strength of top photocatalyst coating
- Reduce Top Coat

Example of application:

- primer on acrylic paint surface to protect substrate
- primer on stone to enhance photocatalyst coating binding
- block UV coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual
30-60ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description: deactivated nano titanium dioxide sol

• **appearance:** yellowish transparent liquid

Active matter content:

• **TiO₂** 0,75 – 1,0%

• **Water content:** 98% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7,5 - 10,0

• **primary particle size:** 3-8 nm

• **crystal structure:** TiO₂ Anatase / amorph

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Exellent (Index 5)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

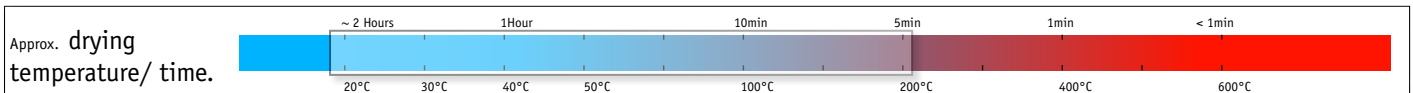
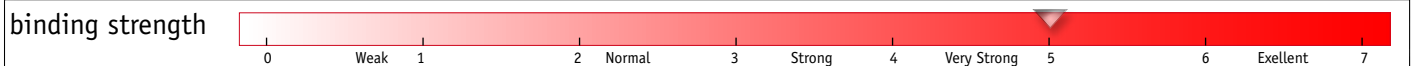
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Rough Surface Primer TiO₂ Undecoating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★★★★	Water purification ★★★★★
Tile ★★★★★	Odor Elimination ★★★★★
Glass ★★★★★	Super-hydrophilic ★★★★★
Plastic / Polymer ★★★★★	Anti-moss ★★★★★
Metal ★★★★★	UV Block ★★★★★
Paint ★★★★★	PCO Protect ★★★★★
Fabric ★★★★★	Binding enhance ★★★★★
Wood ★★★★★	



Special properties:

- water-based primer for nano photocatalyst top coating
- block UV
- protect organic substrate from photocatalytic oxidization damage
- enhance binding strength of top photocatalyst coating
- Reduce Top Coat Dosage

Example of application:

- primer on acrylic paint surface to protect substrate
- primer on stone to enhance photocatalyst coating binding
- block UV coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual
50-100ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description: deactivated nano titanium dioxide sol

• **appearance:** yellowish transparent liquid

Active matter content:

• **TiO₂** 0,75% - 1,0%

• **Water content:** 98% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 7,5 - 10,0

• **primary particle size:** 3-8 nm

• **crystal structure:** TiO₂ Anatase / amorph

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Exellent (Index 5)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

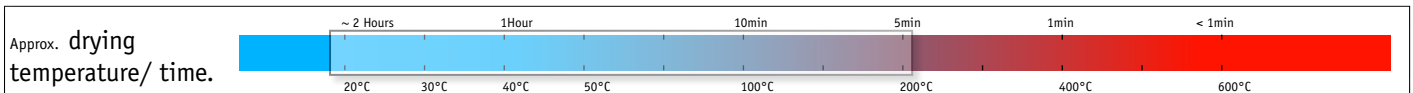
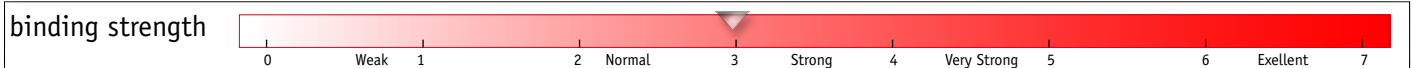
Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

Rough Surface Primer TiO₂ Undecoating Agent

Substrate Applicability:	Feature & Performance:
Stone ★★☆☆☆	Water purification ★☆☆☆☆
Tile ★★★★★	Odor Elimination ★☆☆☆☆
Glass ★★★★★	Super-hydrophilic ★☆☆☆☆
Plastic / Polymer ★★★★★	Anti-moss ★☆☆☆☆
Metal ★★★★★	UV Block ★★★★★
Paint ★★★★★	PCO Protect ★★★★★
Fabric ★★★★★	Binding enhance ★★★★★
Wood ★★☆☆☆	



Special properties:

- water-based primer for nano photocatalyst top coating
- block UV
- protect organic substrate from photocatalytic oxidization damage
- enhance binding strength of top photocatalyst coating
- Reduce Top Coat Dosage

Example of application:

- primer on acrylic paint surface to protect substrate
- primer on stone to enhance photocatalyst coating binding
- block UV coating

Usage instructions:

- recommend air mix pressure spraying (HVLP)
- brush for rough surface
- dipping for irregular items

Dosage instruction:

- refer to relevant coverage data sheet or product manual
50-100ml/m²

Transport Information

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in closed container 5-45°C, dark condition.
Protect solution in opened container from Oxygen.

Avoid freezing! storind above 5°C

Technical Information:

Chemical description: deactivated nano titanium dioxide sol

• **appearance:** yellow transparent liquid

Active matter content:

• **TiO₂** 0,75% – 1,0%

• **Water content:** 98% ± 1%

• **Alcohol content:** 0%

Specification:

• **PH Value:** PH 6.0-8.0

• **primary particle size:** 3-8 nm

• **crystal structure:** TiO₂ Anatase / amorph

• **agglomeration index:** 2-4 %

• **density:** 1.0075-1.01 g/ml

• **Viscosity:** 1.0050 mPa.s

• **binding strength:** Strong (Index 3)

• Drying time at 25°C

Primary drying time: 30 minutes

Final setting time: 30 days

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

10 L, 25 L, Plastic / Polymer barrel with carton
30 L, 100 L, 200 L Plastic / Polymer barrel

* refer to relevant (MSDS) Material Safety Data Sheet

HD High Performance Nano TiO₂ Concentrate BET surface area 160m²/g

Special properties: <ul style="list-style-type: none"> • high concentration water-based nano TiO₂ sol • low agglomeration, super fine particle size • high stability & quick gel feature • high surface area • high efficiency & performance 	Technical Information: <table border="1"> <tr> <td>Chemical description:</td> <td>nano titanium dioxide sol</td> </tr> <tr> <td>• appearance:</td> <td>yellowish semi-transparent gel</td> </tr> <tr> <td colspan="2">Active matter content:</td> </tr> <tr> <td>• TiO₂</td> <td>5%(±1%)</td> </tr> <tr> <td>• Water content:</td> <td>95% ± 1%</td> </tr> <tr> <td>• Alcohol content:</td> <td>0%</td> </tr> </table>	Chemical description:	nano titanium dioxide sol	• appearance:	yellowish semi-transparent gel	Active matter content:		• TiO₂	5%(±1%)	• Water content:	95% ± 1%	• Alcohol content:	0%								
Chemical description:	nano titanium dioxide sol																				
• appearance:	yellowish semi-transparent gel																				
Active matter content:																					
• TiO₂	5%(±1%)																				
• Water content:	95% ± 1%																				
• Alcohol content:	0%																				
Example of application: <ul style="list-style-type: none"> • cosmetic additive (UV block, whiten, anti-bacterial, anti-allergen) • paint additive (deodorization, anti-moss, air purification) • dye sensitized solar battery • air purification system (coat on reaction part, filter, duct) 	Specification: <table border="1"> <tr> <td>• PH Value:</td> <td>PH 7,5 - 10,0</td> </tr> <tr> <td>• primary particle size:</td> <td>< 8 nm</td> </tr> <tr> <td>• crystal structure:</td> <td>TiO₂ Anatase</td> </tr> <tr> <td>• agglomeration index:</td> <td>5-10 %</td> </tr> <tr> <td>• density:</td> <td>1.0075-1.01 g/ml</td> </tr> <tr> <td>• Viscosity:</td> <td>1.0050 mPa.s</td> </tr> <tr> <td>• binding strength:</td> <td></td> </tr> <tr> <td colspan="2">• Drying time at 25°C</td> </tr> <tr> <td>Primary drying time:</td> <td>30 minutes</td> </tr> <tr> <td>Final setting time:</td> <td>30 days</td> </tr> </table>	• PH Value:	PH 7,5 - 10,0	• primary particle size:	< 8 nm	• crystal structure:	TiO ₂ Anatase	• agglomeration index:	5-10 %	• density:	1.0075-1.01 g/ml	• Viscosity:	1.0050 mPa.s	• binding strength:		• Drying time at 25°C		Primary drying time:	30 minutes	Final setting time:	30 days
• PH Value:	PH 7,5 - 10,0																				
• primary particle size:	< 8 nm																				
• crystal structure:	TiO ₂ Anatase																				
• agglomeration index:	5-10 %																				
• density:	1.0075-1.01 g/ml																				
• Viscosity:	1.0050 mPa.s																				
• binding strength:																					
• Drying time at 25°C																					
Primary drying time:	30 minutes																				
Final setting time:	30 days																				
Usage instructions: <ul style="list-style-type: none"> • high speed cutting and mix up • roller print • Spinning coating • Dipping coating • air mix pressure spraying Dosage instruction: <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 1-5% 	Registration status: <p>The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI</p>																				
Transport Information <p>No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods</p>	Package: <p>1 Kg, 10 Kg, 25Kg, Plastic barrel with carton 30 Kg, 100 Kg, 200 Kg Plastic / Polymer barrel</p> <p>* refer to relevant (MSDS) Material Safety Data Sheet</p>																				
Storage stability: <p>24 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen.</p> <p>Avoid freezing! storind above 5°C</p>																					

HD High Performance High Concentrate Nano TiO₂ Sol BET surface area 160m²/g

Special properties: <ul style="list-style-type: none"> • high concentration water-based nano TiO₂ sol • flow agglomeration, super fine particle size • high stability & quick gel feature • high surface area • high efficiency & performance 	Technical Information: <p>Chemical description: deactivated nano titanium dioxide sol</p> <p>• appearance: White aqueous slurry</p> <p>Active matter content:</p> <p>• TiO₂ 10%(±1.5%)</p> <p>• Water content: 90% ± 1%</p> <p>• Alcohol content: 0%</p>
Example of application: <ul style="list-style-type: none"> • cosmetic additive (UV block, whiten, anti-bacterial, anti-allergen) • paint additive (deodorization, anti-moss, air purification) • dye sensitized solar battery • air purification system (coat on reaction part, filter, duct) 	Specification: <p>• PH Value: PH 7,5 - 10,5</p> <p>• primary particle size: > 8 -11 nm</p> <p>• crystal structure: TiO₂ Anatase</p> <p>• agglomeration index: > 20-30 %</p> <p>• density: 1.08-1.11 g/ml</p> <p>• Viscosity: 1.0050 mPa.s</p> <p>• BET surface area: BET 160 m²/g</p>
Usage instructions: <ul style="list-style-type: none"> • high speed cutting and mix up • roller print • Spinning coating • Dipping coating • air mix pressure spraying <p>Dosage instruction:</p> <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 	<p>• Drying time at 25°C</p> <p>Primary drying time: 30 minutes</p> <p>Final setting time: 30 days</p>
Transport Information No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect solution in opened container from Oxygen. Avoid freezing! storind above 5°C	Package: 1 Kg, 10 Kg, 25Kg, Plastic barrel with carton 30 Kg, 100 Kg, 200 Kg Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet

HD High Performance High Concentrate Nano TiO₂ Sol BET surface area 240 m²/g

Special properties: <ul style="list-style-type: none"> • high concentration water-based nano TiO₂ sol • flow agglomeration, super fine particle size • high stability & quick gel feature • high surface area • high efficiency & performance 	Technical Information: <table border="1"> <tr> <td>Chemical description:</td> <td>Nano titanium dioxide slurry</td> </tr> <tr> <td>• appearance:</td> <td>White aqueous slurry</td> </tr> <tr> <td colspan="2">Active matter content:</td> </tr> <tr> <td>• TiO₂</td> <td>15 % (± 2 %)</td> </tr> <tr> <td>• Water content:</td> <td>85 % +- 1%</td> </tr> <tr> <td>• Alcohol content:</td> <td>0%</td> </tr> </table>	Chemical description:	Nano titanium dioxide slurry	• appearance:	White aqueous slurry	Active matter content:		• TiO₂	15 % (± 2 %)	• Water content:	85 % +- 1%	• Alcohol content:	0%		
Chemical description:	Nano titanium dioxide slurry														
• appearance:	White aqueous slurry														
Active matter content:															
• TiO₂	15 % (± 2 %)														
• Water content:	85 % +- 1%														
• Alcohol content:	0%														
Example of application: <ul style="list-style-type: none"> • cosmetic additive (UV block, whiten, anti-bacterial, anti-allergen) • paint additive (deodorization, anti-moss, air purification) • dye sensitized solar battery • air purification system (coat on reaction part, filter, duct) 	Specification: <table border="1"> <tr> <td>• PH Value:</td> <td>PH 7,5 - 11,0</td> </tr> <tr> <td>• primary particle size:</td> <td>> 8 -11 nm</td> </tr> <tr> <td>• crystal structure:</td> <td>TiO₂ Anatasee</td> </tr> <tr> <td>• agglomeration index:</td> <td>> 20-30 %</td> </tr> <tr> <td>• density:</td> <td>1.08-1.11 g/ml</td> </tr> <tr> <td>• Viscosity:</td> <td>1.0050 mPa.s</td> </tr> <tr> <td>• BET surface area:</td> <td>BET 240 m²/g</td> </tr> </table>	• PH Value:	PH 7,5 - 11,0	• primary particle size:	> 8 -11 nm	• crystal structure:	TiO ₂ Anatasee	• agglomeration index:	> 20-30 %	• density:	1.08-1.11 g/ml	• Viscosity:	1.0050 mPa.s	• BET surface area:	BET 240 m ² /g
• PH Value:	PH 7,5 - 11,0														
• primary particle size:	> 8 -11 nm														
• crystal structure:	TiO ₂ Anatasee														
• agglomeration index:	> 20-30 %														
• density:	1.08-1.11 g/ml														
• Viscosity:	1.0050 mPa.s														
• BET surface area:	BET 240 m ² /g														
Usage instructions: <ul style="list-style-type: none"> • high speed cutting and mix up • roller print • Spinning coating • Dipping coating • air mix pressure spraying Dosage instruction: <ul style="list-style-type: none"> • refer to relevant coverage data sheet or product manual 	<table border="1"> <tr> <td colspan="2">• Drying time at 25°C</td> </tr> <tr> <td>Primary drying time:</td> <td>30 minutes</td> </tr> <tr> <td>Final setting time:</td> <td>30 days</td> </tr> </table>	• Drying time at 25°C		Primary drying time:	30 minutes	Final setting time:	30 days								
• Drying time at 25°C															
Primary drying time:	30 minutes														
Final setting time:	30 days														
Transport No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods	Registration status: The ingredients are listed in the following chemical inventories: CAS, EINECS, TSCA, AICS, CEPA, MITI														
Storage stability: 12 months in closed container 5-45°C, dark condition. Protect Slurry in opened container from Oxygen. Avoid freezing! storind above 5°C	Package: 1 Kg, 10 Kg, 25Kg, Plastic barrel with carton 30 Kg, 100 Kg, 200 Kg Plastic / Polymer barrel * refer to relevant (MSDS) Material Safety Data Sheet														

Titandioxide Nano powder

high performance visible light response Anatase Nano TiO₂ based photocatalytic powder form catalyst.



Special properties:

- nano scale
- high surface area
- high efficiency & performance

Example of application:

- paint additive
- cement/concrete additive
- pavement additive

Typical application:

- NO_x, VOCs decomposition
- air purification
- anti-algae
- self-cleaning

Usage instructions:

- high speed cutting and mix up

Dosage instruction*

1-1,5%

* The above information is just typical data, practical test is necessary

Transport:

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in original container under cool, dark condition

Technical Information:

Chemical description: Nano Titandioxid-Pulver

• appearance: White powder

Active matter content:

TiO₂ > 99 % (±1%)

• Water content:

• Alcohol content:

Specification:

• PH Value:

-

• primary particle size:

> 10 - 20 nm

• crystal structure:

TiO₂ Anatase

• specific gravity:

4,26 g/ml

• Boiling point:

2750°C

• melting point:

1855°C

• BET surface area:

150 m²/g.

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

5kg, 10kg, 25 kg, plastic or paper bag, carton barrels

* refer to relevant (MSDS) Material Safety Data Sheet

Nitrogen Doped Nano Titanium Dioxide Powder

This titanium dioxide is nitrogen-doped



Special properties:

- nano scale
- high surface area
- high efficiency & performance
- leading nitrogen doped technology (visible light response)

Example of application:

- paint additive
- cement/concrete additive
- pavement additive

Typical application:

- NO_x, VOCs decomposition
- air purification
- anti-algae
- self-cleaning

Usage instructions:

- high speed cutting and mix up

Dosage instruction*

1-1,5%

* The above information is just typical data, practical test is necessary

Transport:

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in original container under cool, dark condition

Technische Informationen:

Chemical description: Nano Titandioxid-Pulver

• appearance: Light Brown powder

Aktives Material in Lösung:

TiO₂ > 99 % (±1%)

• Water content:

• Alcohol content:

Specification:

• PH Value:

-

• primary particle size:

10 - 20 nm

• crystal structure:

TiO₂ Anatase

• specific gravity:

4,26 g/ml

• Boiling point:

2750°C

• melting point:

1855°C

• BET surface area:

50 m²/g.

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

5kg, 10kg, 25 kg, plastic or paper bag, carton barrels

* refer to relevant (MSDS) Material Safety Data Sheet

Silver Doped Nano Titanium Dioxide Powder

This titanium dioxide is coated by 5% with nano silver



Special properties:

- nano scale
- high surface area
- high efficiency & performance
- nano silver doped technology (high anti-bacterial performance)

Example of application:

- paint additive
- cement/concrete additive
- pavement additive

Typical application:

- anti-bacteria
- anti-algae
- self-cleaning

Usage instructions:

- high speed cutting and mix up

Dosage instruction*

1-1,5%

* The above information is just typical data, practical test is necessary

Transport:

No Transport danger for Air, Sea, Highway and Rail, transportation of dangerous goods

Storage stability:

24 months in original container under cool, dark condition

Technische Informationen:

Chemical description: Nano Titandioxid-Pulver

• **appearance:** white powder

Aktives Material in Lösung:

TiO₂ > 95 % AG 5% (±1%)

• **Water content:**

• **Alcohol content:**

Specification:

• **PH Value:**

-

• **primary particle size:** 300 nm (±100)

• **crystal structure:** TiO₂ Anatasee

• **specific gravity:** 4,26 g/ml

• **Boiling point:** 2750°C

• **melting point:** 1855°C

• **BET surface area:** 50 m²/g.

Registration status:

The ingredients are listed in the following chemical inventories:
CAS, EINECS, TSCA, AICS, CEPA, MITI

Package:

5kg, 10kg, 25 kg, plastic or paper bag, carton barrels

* refer to relevant (MSDS) Material Safety Data Sheet



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