

PRODUCT INFORMATION

INFRALIT Powder Coatings



CONTENTS

INFRALIT POWDER COATINGS	5
THREE CORE ELEMENTS LIE AT THE HEART OF THE TEKNOS WAY PARTNERSHIP	6
POWDER COATINGS FOR DIFFERENT PURPOSES	8
EFFECTS & STRUCTURES	9
FUNCTIONAL COATINGS	10
POWDER COATING AS A CORROSION PROTECTION METHOD	12
PAINT SYSTEMS	13
CALCULATIONS	14
PRIMERS	16
FACADE POWDER COATINGS	16
SUPER DURABLE POWDER COATINGS	18
INDUSTRIAL POWDER COATINGS, SMOOTH FINISHES	18
INDUSTRIAL POLYESTERS, SMOOTH FINISHES	20
CLEAR COATS	20
DESIGN EFFECT POWDER COATINGS:	20
STRUCTURED POWDER COATINGS:	22
TEXTURED POWDER COATINGS:	22
FUNCTIONAL COATINGS	24
PIPELINE COATINGS	26
LOW TEMPERATURE CURING POWDER COATINGS	28
CLEANING POWDER	28
PACKAGE SIZE	29
STORAGE & HANDLING INSTRUCTIONS	30
INFRALIT POWDER COATINGS NAMING	30
INFRALIT POWDER COATINGS KEY TO ITEM NUMBERS	31



INFRALIT POWDER COATINGS

Powder coating is at the core of our strongest area of expertise. As recognition of our skills in this area, we have reached the position of market leader in the Nordic countries and we have a growing presence across the rest of Europe.

Being completely solvent-free and able to eliminate VOC emissions, powder coatings are an environmentally friendly choice for paint shops and industrial professionals. They can be recovered and recycled which helps the users to minimise waste and further improve the cost efficiency of their processes.

Our complete powder coating tinting system offers an almost unlimited choice of colours. As we operate close to our customers, even tight delivery schedules can be met.

OUR CUSTOMER PROMISES

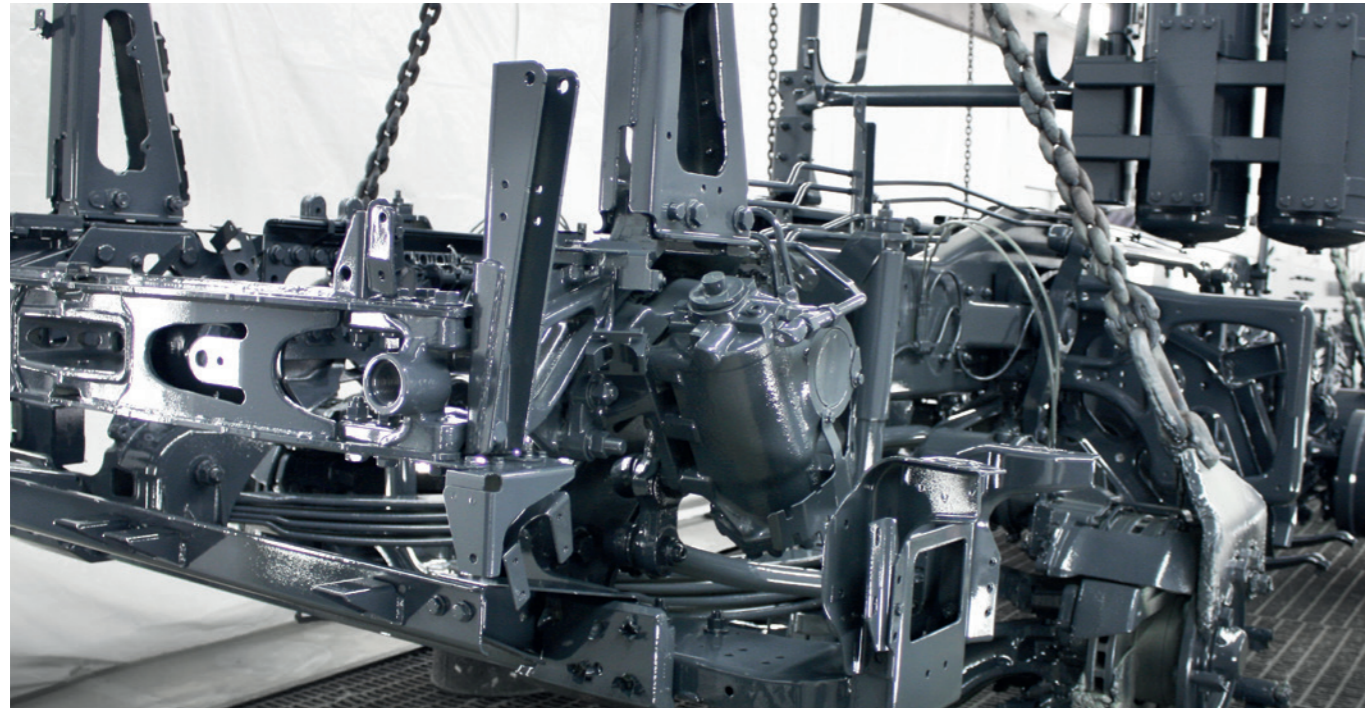
Technically superior surfaces

Unique technical service

Reliable supply

Consistent quality

Local presence



THREE CORE ELEMENTS LIE AT THE HEART OF THE TEKNOS WAY PARTNERSHIP

INNOVATION

Innovations are the foundation of Teknos. Superior product quality and performance standards coupled with new, more demanding environmental regulations continue to shorten product lifecycles, presenting us with new challenges on an ongoing basis. We continuously invest in R&D to ensure that we can meet these requirements.

VALUE ADDED

We offer comprehensive paint solutions and services with the optimal balance of price, performance and service.

RELIABILITY

Prompt, reliable deliveries and quality are one of today's key business priorities. Teknos' supply chain, modern production facilities, and tinting systems ensure prompt and reliable deliveries in all our chosen markets.



SUSTAINABLE CHOICE

BEING COMPLETELY SOLVENT-FREE* AND ABLE TO ELIMINATE VOC EMISSIONS, POWDER COATINGS ARE AN ENVIRONMENTALLY FRIENDLY CHOICE FOR PAINT SHOPS AND INDUSTRIAL PROFESSIONALS.

*Teknos powder coating products are solvent-free. However, they may contain some volatile organic compounds as residuals from additives, though the quantities are very low.



POWDER COATINGS FOR DIFFERENT PURPOSES

PRIMERS

Primers are used to improve adhesion when the surface has low adhesion and to fulfil high corrosivity category needs for corrosion protection in demanding conditions. Primers are also used for smoothing the surface quality and colour variation of painted substrate.

FACADE POWDER COATINGS

GSB AND QUALICOAT APPROVED

To fulfil the demands of GSB and Qualicoat Class 1 standards. Used in applications where higher weather resistance, e.g. very good gloss & colour retention are needed. These powder coatings cover a wide range of use, from interior to demanding exterior and facade applications, available in both smooth and textured finishes.

SUPER DURABLE POWDER COATINGS

GSB AND QUALICOAT APPROVED

To fulfil the demands of GSB Master and Qualicoat Class 2 standards. For Facade applications in which extreme gloss & colour retention are needed. For example when painting with customer brand colours, the shade of the colour needs to stay exactly the same for years, despite of weather conditions. Available in both smooth and textured finishes.

INDUSTRIAL POWDER COATINGS, SMOOTH FINISHES

Epoxy powder coatings have excellent mechanical and chemical resistance, whilst polyester powder coatings are flexible and a good choice for exterior industrial use. Epoxypolyesters combine good features from both binders and there is a range of different gloss levels for smooth surfaces.

CLEAR COATS

Clear coats are used to finish off the painted surface by raising the gloss level and deepening the colour shade. Clear coats also protect the paint surface. By applying certain clear coats, you can add functions for the surface, for example anti-graffiti and hygienic (antimicrobial) features.

DESIGN EFFECT POWDERS

SNAKE SKIN & WRINKLE FINISHES

The new eye-catching surface finishes, snake skin and wrinkle

bring, variation to the range of finishes. Being polyurethane based, these powder coatings have excellent weather and chemical resistance and can be used in wide range of applications - from industrial applications to design products.

STRUCTURE POWDER COATINGS

HAMMER FINISH

Structured finishes provide vivid and visual appearance. The structured finish also forgives minor mistakes on substrate surface. Structured powder coatings are available as epoxy, polyester and hybrid.

FINE TEXTURE POWDER COATINGS

SANDPAPER FINISH

Textured surface quality has the look and feel of sandpaper. The products are available as epoxy, polyester and hybrid.

LTC, LOW TEMPERATURE CURING POWDER COATINGS

For curing, powder coatings need the painted object to heat approximately up to 180°. With massive steel components, the heating takes a lot of energy and time. LTC coatings cure at significantly lower temperatures, providing savings in energy and time with significantly faster throughput in line. Coatings are recommended for heavy components and objects that cannot stand the heat of 180°. The range offers LTC powders curing from 130°, with different gloss levels and effects.

CLEANING POWDER

Cleaning powder is designed for cleaning of powder coating painting lines between colour changes. Powder is blown through hoses, venturis, painting booths, cyclones etc, and when going through the system it releases and gathers excess powder coating and other impurities.

Cleaning powder is especially recommended with challenging changes, for example when changing from black to white, or from structured to smooth finish. Cleaning powder helps eliminating quality problems after colour change. The product should not be used as replacement for regular cleaning of the powder coating line.

EFFECTS & STRUCTURES

DESIGN EFFECT:
WRINKLE

STRUCTURE:
HAMMER FINISH

DESIGN EFFECT:
SNAKE SKIN

FINE TEXTURE:
SANDPAPER FINISH



FUNCTIONAL COATINGS



HYGIENIC COATINGS

Antimicrobial coating solutions have demonstrated remarkable reductions in bacteria in independent laboratory tests, as well as significant reductions of healthcare-associated infections in real-life hospital environments. Antimicrobial paints are ideal for facilities with high hygiene standards, such as hospitals, schools, kindergartens, and homes for the elderly, to help reduce microbial populations on contact surfaces. Antimicrobial coatings can be applied to, for example, door handles, arm supports, railings, faucets, vents, furniture, and walls, all of which serve as vehicles for microbes.

The effect of antimicrobial paint is based on silver phosphate glass added to the paint. It is distributed throughout the paint's composition. This ingredient of the paint actively destroys bacterial growth and prevents bacterial division. The antibacterial effect of the coating will last as long as any paint remains, as the antimicrobial active ingredient is distributed throughout the paint.

- Reduction of the number of diseases and infections transmitted through contact
- Reduction of the spread of antibiotic-resistant bacterial diseases
- Reduction of healthcare costs
- Reduction of the rate of absence from work due to illness

FLEXIBLE COATINGS

When there is a need for elasticity within the paint film because of the painted object or its usage, flexible powder is the solution. These powder coatings are designed for post-forming and bending afterwards.

CONDUCTIVE COATINGS

Usually, the paint film functions as insulation but conductive powder coatings conduct electricity. These coatings can be used for example in the electronic industry, preventing static charge from damaging sensitive electronic components. Conductive powder coatings are available with smooth and textured surfaces.



ANTI-GRAFFITI COATINGS ENABLING EASIER CLEANING

To facilitate the removal of unwanted graffiti, Teknos has developed powder coatings with anti-graffiti properties. Anti-graffiti coatings provide the greatest benefits to structures in public places such as bus stops, trash cans and bridges and in applications that are exposed to dirt and need to be cleaned regularly, for instance trains.

- Forms a dense protective film that withstands solvent-based graffiti-removers and prevents the graffiti from penetrating deep in to the surface
- The film has a slippery finish which aids in the removal of graffiti
- Tolerates cleaning chemicals well with no changes within the paint gloss and colour.



OTHER FUNCTIONAL COATINGS

Included in our selection is also superstrong epoxy for extremely hard mechanical and chemical abrasion, to be used for example in tanks and containers, immersion applications and industrial/heavy-duty applications. Superstrong epoxy can be applied as thick film up to 480 µm with a single layer.

The functional powder coatings range covers also camouflage paints, which are non-reflective for IR. These products are for military applications.



HEAT-RESISTANT COATINGS

Heat and rapid temperature fluctuations contribute to surface cracking and corrosion. Teknos has developed coatings that can withstand heat and prevent corrosion at the same time. Heat-resistant powder coatings solutions are suitable for objects that are exposed to high temperatures, such as:

- Pipelines
- Exhaust pipes
- Heat shields
- Stoves
- Grills
- Fireplaces
- Chimneys



POWDER COATING AS A CORROSION PROTECTION METHOD

Teknos INFRALIT Powder Coating systems have been designed to fulfil the test methods and testing times defined for specific corrosivity category in ISO 12944-6, even though powder coatings are not covered by the standard.

Examples of the equivalence of wet paint and powder coating

ISO 12944-5:2018 System no.	Powder coating paint system code	Powder coating paint system structure INFRALIT	Wet paint system code example	Wet paint system structure example
C3/M	P218b	PE 8350-15 80-1 FeSa 2 1/2	TEC3.05/M/A5	PUR120/1-FeSa 2½
C4/M	P218d	PE 8350-15 100/1 FeSa 2 1/2	TEC4.05/M/A5	PUR180/2-FeSa 2½
C5/M	P229j	PE 8350-15 140/2 ZnSaS	TEC5.02/M/A5	PUR240/2-FeSa 2½
C5/H	P219f	EP/PE 8086-05 60/1 PE 8350-15 100/1 FeSa 2 1/2	TEC5.07/H/A3	EPZn(R)PUR260/3-FeSa 2½
C5/H	P219a	EP/PE 8086-05 60/1 EP 8026-00 100/1 FeSa 2 1/2	TEC5.07/H/A1	EPZn(R)EP260/3-FeSa 2½
C5/VH	P229i	EP/PE 8087-30 60/1 PE 8350-15 80/1 ZnSaS	TEG3.04/VH/T4	EPPUR160/2-ZnSaS
Im3/VH	P234c	EP 8024-00 480/1 (2) FeSa 2 1/2	TEI.04/VH/A1	EP540/3-FeSa 2½

These Teknos painting systems have been tested in accordance with ISO 12944:2017-2018 standards. In order to reach the durability ranges in specified corrosivity categories, care must be taken to ensure full compliance of steel construction design, steel prework and surface preparation quality with ISO 12944 standards.



PAINT SYSTEMS

Atmospheric corrosivity categories ISO 12944-5: 2018

Paint systems

Corrosivity category	Powder coating paint system code	Paint system	Iron phosphating	Zinc phosphating	Thin film technology, TFT
C3/M	P243a	INFRALIT PE 8350 80/1	x	x	x
C4/M	P243b	INFRALIT PE 8350 100/1		x	x
C4/H	P243c	INFRALIT PE 8350 80/1 INFRALIT PE 8350 80/1		x	x
C4/H	P243d	INFRALIT EP/PE 8087-30 80/1 INFRALIT PE 8350 80/1		x	x
C5/H	P243f	INFRALIT EP/PE 8086-05 60/1 INFRALIT PE 8350 100/1		x	x
C5/H	P243e	INFRALIT EP 8024 120/1		x	x
C5/H	P243g	INFRALIT PE 8350 80/1 INFRALIT PE 8350 80/1		x	

Steel surfaces: Chemical pre-treatment should be made according to instructions given by the pre-treatment chemical supplier. The pre-treatment should cover all areas of the target substrate.

TESTING METHODS

EN ISO 9227 Corrosion tests in artificial atmospheres. Salt spray tests
 EN ISO 6270-1 Paints and varnishes. Determination of resistance to humidity. Part 1: Continuous condensation
 EN ISO 2812-2 Paints and varnishes. Determination of resistance to liquids. Part 2: Water immersion method

Tests have been performed on test panels prepared in laboratory conditions



CALCULATIONS

Powder Coating

Theoretical spreading rate m²/ kg

Powder coating's density g/cm³

FT μm	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
30	33.33	30.30	27.78	25.64	23.81	22.22	20.83	19.61	18.52	17.54
35	28.57	25.97	23.81	21.98	20.41	19.05	17.86	16.81	15.87	15.04
40	25.00	22.73	20.83	19.23	17.86	16.67	15.63	14.71	13.89	13.16
50	20.00	18.18	16.67	15.38	14.29	13.33	12.50	11.76	11.11	10.53
60	16.67	15.15	13.89	12.82	11.90	11.11	10.42	9.80	9.26	8.77
65	15.38	13.99	12.82	11.83	10.99	10.26	9.62	9.05	8.55	8.10
70	14.29	12.99	11.90	10.99	10.20	9.52	8.93	8.40	7.94	7.52
75	13.33	12.12	11.11	10.26	9.52	8.89	8.33	7.84	7.41	7.02
80	12.50	11.36	10.42	9.62	8.93	8.33	7.81	7.35	6.94	6.58
85	11.76	10.70	9.80	9.05	8.40	7.84	7.35	6.92	6.54	6.19
90	11.11	10.10	9.26	8.55	7.94	7.41	6.94	6.54	6.17	5.85
100	10.00	9.09	8.33	7.69	7.14	6.67	6.25	5.88	5.56	5.26
120	8.33	7.58	6.94	6.41	5.95	5.56	5.21	4.90	4.63	4.39
140	7.14	6.49	5.95	5.49	5.10	4.76	4.46	4.20	3.97	3.76
160	6.25	5.68	5.21	4.81	4.46	4.17	3.91	3.68	3.47	3.29
180	5.56	5.05	4.63	4.27	3.97	3.70	3.47	3.27	3.09	2.92



POWDER COATINGS CAN BE RECOVERED AND RECYCLED, HELPING USERS TO MINIMISE WASTE AND FURTHER IMPROVE THE COST EFFICIENCY OF THEIR PROCESSES.

Primers

Description	Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
INFRALIT EP/PE 8087-30 Zinc-free primer, High corrosion environment Developed mainly for use as a primer under another INFRALIT powder coating. A paint system of two coats provides a thicker protective layer and helps the coating of sharp edges. Fast availability: Stock item ID BM80624020 (RAL 7001)	Hybrid	Matt	10/180°C	Group M1 Classification IMO FTPC part 5 and part 2
INFRALIT EP/PE 8086-05 Zinc-rich, Extreme corrosion environment Based on epoxy and polyester resin containing metallic zinc, which has very good anticorrosive properties. Suitable as a primer under another INFRALIT powder coating. A paint system of two coats provides a thicker protective layer and helps the coating of sharp edges. Fast availability: Stock item ID BZN8000020 (ZINC GREY)	Hybrid	Semi-gloss	10/180°C	

Facade powder coatings GSB & Qualicoat approved

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PE 8339-02 Architectural & Facade applications, High Gloss Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. Suitable for corona only.	●	●	●		Polyester, smooth	Gloss 81-99	10 - 25 min/180°C, 7 - 12 min/200°C	Qualicoat class 1
INFRALIT PE 8339-09 Metallic shade, Architectural & Facade applications, High Gloss Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. Suitable for corona only.	●	●	●		Polyester, smooth	Gloss 81-99	10 - 25 min/180°C, 7 - 12 min/200°C	Qualicoat class 1
INFRALIT PE 8350-07 Bonded metallic shade, Architectural & Facade applications, Semi-gloss Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. RAL Classic colours 841-GL metallics available as stock items.	●	●	●		Polyester, smooth	Semi-gloss 65-85	10 - 25 min/180°C, 9 - 15 min/190°C, 7 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles
INFRALIT PE 8350-15 Architectural & Facade applications, Semi-gloss Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. RAL Classic colours 841-GL available as stock items.	●	●	●		Polyester, smooth	Semi-gloss 71-85	10 - 25 min/180°C, 9 - 15 min/190°C, 7 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles
INFRALIT PE 8350-20 Architectural & Facade applications, Semi-gloss, Fast delivery time, Batch size starting from 5kg Fast and flexible service and delivery for custom colours & smaller batches.	●	●	●		Polyester, smooth	Semi-gloss 65-85	10 - 25 min/180°C, 9 - 15 min/190°C, 7 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles
INFRALIT PE 8350-77 DECO Bonded metallic shade, Architectural & Facade applications, Semi-gloss, Fast delivery time Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. RAL 841-GL Classic colours with three different metal pigmentations.	●	●	●		Polyester, smooth	Semi-gloss 65-85	10 - 25 min/180°C, 9 - 15 min/190°C, 7 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles
INFRALIT PE 8921-00 Architectural & Facade applications, Textured Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	●	●	●		Polyester, fine texture	Matt 5-15	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 1
INFRALIT PE 8928-00 Architectural & Facade applications, Matt Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. RAL Classic colours 841-HR available as stock items.	●	●	●		Polyester, smooth	Matt 23-33	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles
INFRALIT PE 8928-07 Bonded metallic shade, Architectural & Facade applications, Matt Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	●	●	●		Polyester, smooth	Matt 23-33	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	GSB standard, Qualicoat class 1 Marine equipment approval Group M1 classification EN45545: Fire protection on railway vehicles

Super durable powder coatings GSB & Qualicoat approved

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PE 8735-00 Architectural & Facade applications, Superior weather resistance, Matt Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	○	○	○	●	Polyester, smooth	Matt 23-33	15 - 20 min/180°C, 12 - 15 min/190°C, 10 - 13 min/200°C	GSB MASTER Qualicoat class 2
INFRALIT PE 8791-02 Architectural & Facade applications, Superior weather resistance, Textured Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. Suitable for corona only.	○	○	○	●	Polyester, fine texture	Matt 3-10	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 2
INFRALIT PE 8791-07 Bonded metallic shade, Architectural & Facade applications, Superior weather resistance, Textured Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	○	○	○	●	Polyester, fine texture	Matt 3-10	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 2
INFRALIT PE 8795-00 Architectural & Facade applications, Superior weather resistance, Gloss Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.		○	○	●	Polyester, smooth	Semi-gloss, Gloss, 75-95	15min/180°C	
INFRALIT PE 8796-00 Architectural & Facade applications, Superior weather resistance, Semi-gloss Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.		○	○	●	Polyester, smooth	Semi-gloss 65-85	15-25 min/180 °C, 10-20 min/190 °C	GSB MASTER, Qualicoat class 2

Industrial epoxies & hybrids, smooth finishes

(Indoor & Special conditions only)

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP 8025-00 Industrial/heavy-duty applications, Excellent chemical & mechanical resistance, Gloss Recommended for indoors or to be top coated because of chalking in UV. Good abrasion and impact resistance. Excellent anticorrosive properties.	●	○			Epoxy, smooth	Gloss	10 min/180°C	
INFRALIT EP 8026-00 Industrial/heavy-duty applications, Excellent chemical & mechanical resistance, Semi-gloss Recommended for indoors or to be top coated because of chalking in UV. Good abrasion and impact resistance. Excellent anticorrosive properties.	●	○			Epoxy, smooth	Semi-gloss	10 min/180°C	
INFRALIT EP 8027-00 Industrial/heavy-duty applications, Excellent chemical & mechanical resistance, Matt Recommended for indoors or to be top coated because of chalking in UV. Good abrasion and impact resistance. Excellent anticorrosive properties.	●	○			Epoxy, smooth	Semi-matt, matt	10 min/200°C, 15 min/190°C	
INFRALIT EP/PE 8085-00 Indoor applications, Good chemical & mechanical resistance, Gloss Recommended for indoors. Hybrid chemistry combines good properties of epoxy & polyester for indoor appliance applications.	●				Hybrid, smooth	Gloss	15 min/180°C	Group M1 Classification IMO FTPC part 5 and part 2
INFRALIT EP/PE 8086-00 Indoor applications, Good chemical & mechanical resistance, Semi-gloss Recommended for indoors. Hybrid chemistry combines good properties of epoxy & polyester for indoor appliance applications.	●				Hybrid, smooth	Semi-gloss	15 min/180°C	Group M1 Classification IMO FTPC part 5 and part 2
INFRALIT EP/PE 8087-00 Indoor applications, Good chemical & mechanical resistance, Matt Recommended for indoors. Hybrid chemistry combines good properties of epoxy & polyester for indoor appliance applications.	●				Hybrid, smooth	Matt	10 min/200°C	Group M1 Classification IMO FTPC part 5 and part 2

Industrial polyesters, smooth finishes

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PE 8315-00 Outdoor & Indoor industrial applications, Gloss Good multi-use product for basic metal industry.	●	●			Polyester, smooth	Gloss	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8316-00 Outdoor & Indoor industrial applications, Semi-gloss Good multi-use product for basic metal industry.	●	●			Polyester, smooth	Semi-gloss	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8316-07 Bonded metallic shade, Outdoor & Indoor industrial applications, Semi-gloss Good multi-use product for basic metal industry.	●	●			Polyester, smooth	Semi-gloss	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8317-00 Outdoor & Indoor industrial applications, Matt Good multi-use product for basic metal industry.	●	●			Polyester, smooth	Matt	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles Marine equipment approval
INFRALIT PE 8317-10 Outdoor & Indoor industrial applications, Full-matt Good multi-use product for basic metal industry.	●	●			Polyester, smooth	Full-matt	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles Marine equipment approval

Clear coats

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PUR 8450-20 Weather & mechanical protection, Good chemical resistance, Gloss Fast availability: Stock item ID UA40110020	●	●			Polyurethane, smooth	Gloss	15 min/200°C	
INFRALIT PUR 8453-20 Weather & mechanical protection, Excellent chemical resistance, With anti-graffiti properties, Gloss. Stock Item ID: UA40136020	●	●			Polyurethane, smooth	Gloss	15 min/200°C	
INFRALIT PE 8435-10 Weather & mechanical protection, Hygienic applications, Gloss Powder is suitable for applications where antimicrobial properties are needed. Fast availability: Stock item ID DA40022020	●	●			Polyester, smooth	Gloss	15 min/190°C	Fulfils the requirements of ISO 22196 for preventing the growth of certain microbes.

Design effect powder coatings: Snake skin & wrinkle finish

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PUR 8458-00 Snake skin effect, Design applications For special visual appearance, good weather resistance.	●	●			Polyurethane, snake skin	Full-matt	15 min/200°C, 25 min/190°C, 30 min/180°C	
INFRALIT PUR 8459-00 Wrinkle effect, Design applications For special visual appearance, good weather resistance.	●	●			Polyurethane, wrinkle	Matt	15 min/200°C, 25 min/190°C, 30 min/180°C	

Structured powder coatings: Hammer finish

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP 8022-00 Indoor, Industrial applications, Excellent chemical & mechanical protection Excellent anticorrosive properties.	●				Epoxy, structure	Structure	10 min/180°C	
INFRALIT EP/PE 8082-00 Indoor, Industrial applications, Good chemical & mechanical protection Hybrid chemistry combines good properties from epoxy & polyester for indoor applications.	●				Hybrid, structure	Structure	15 min/180°C	
INFRALIT PE 8312-00 Outdoor & Indoor, Industrial applications Good multi-use product for basic metal industry for structured finish.	●	●			Polyester, structure	Structure	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8312-09 Metallic shades, Outdoor & Indoor, Industrial applications Good multi-use product for basic metal industry for structured finish.	●	●			Polyester, structure	Structure	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles

Textured powder coatings: Sandpaper finish

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP 8021-00 Indoor, Industrial applications, Excellent chemical & mechanical protection Excellent anticorrosive properties. Recommended for indoors or to be top coated because of chalking in UV.	●				Epoxy, texture	Matt	10 min/180°C	
INFRALIT EP/PE 8081-00 Indoor, Industrial applications, Good chemical & mechanical protection Hybrid chemistry combines good properties of epoxy & polyester for indoor applications. Recommended for indoors or to be top coated because of chalking in UV.	●				Hybrid, texture	Matt	15 min/180°C	Group M1 Classification IMO FTPC part 5 and part 2
INFRALIT PE 8311-00 Outdoor & Indoor, Industrial applications Good multi-use product for basic metal industry for textured finish.	●	●			Polyester, texture	Matt	20 min/170°C, 10 min/180°C, 6 min/200°C	
INFRALIT PE 8921-00 Architectural & Facade applications, Textured Good colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	●	●	●		Polyester, texture	Matt 5-15	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 1
INFRALIT PE 8791-02 Architectural & Facade applications, Superior weather resistance, Textured Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects. Suitable for corona only.	○	○	●	●	Polyester, texture	Matt 3-10	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 2
INFRALIT PE 8791-07 Bonded metallic shade, Architectural & Facade applications, Superior weather resistance, Textured Superior colour stability, gloss retention and corrosion protection for architectural applications. Especially developed for aluminium objects.	○	○	●	●	Polyester, texture	Matt 3-10	15 - 25 min/180°C, 10 - 20 min/190°C, 8 - 12 min/200°C	Qualicoat class 2

● = Recommended use ○ = Suitable

Functional coatings: Anti-graffiti

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PUR 8455-00 Anti-graffiti, Excellent chemical resistance & good mechanical resistance, Gloss For objects where special resistance to chemical and washing is required, e.g. gasoline pumps, good weathering properties. Better resistance to chemicals than with traditional polyester and polyurethane powders.	●	●			Polyurethane, smooth	Gloss	15 min/200°C	
INFRALIT PUR 8455-07 Anti-graffiti, Bonded metallic shade, Excellent chemical resistance & good mechanical resistance, Gloss For objects where special resistance to chemical and washing is required, e.g. gasoline pumps, good weathering properties. Better resistance to chemicals than with traditional polyester and polyurethane powders.	●	●			Polyurethane, smooth	Gloss	15 min/200°C	
INFRALIT PUR 8456-00 Anti-graffiti, Excellent chemical resistance & good mechanical resistance, Semi-gloss For objects where special resistance to chemical and washing is required, e.g. gasoline pumps, good weathering properties. Better resistance to chemicals than with traditional polyester and polyurethane powders.	●	●			Polyurethane, smooth	Semi-gloss	15 min/200°C	
INFRALIT PUR 8457-00 Anti-graffiti, Excellent chemical resistance & good mechanical resistance, Matt For objects where special resistance to chemical and washing is required, e.g. gasoline pumps, good weathering properties. Better resistance to chemicals than traditional polyester and polyurethane powders.	●	●			Polyurethane, smooth	Matt	15 min/200°C	

Check also Clear coats on pages 20-21

Functional coatings: Antimicrobial

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP/PE 8235-30 Antimicrobial properties, for hygienic applications like hospitals, day cares, sheltered homes, e.g. beds, railings, door handles, Matt Good chemical & mechanical resistance. Recommended for indoors because of chalking in UV.	●				Hybrid, smooth	Matt	10 min/200°C	INFRALIT EP 8035 Epoxy Powder fulfils the requirements of ISO 22196 for preventing the growth of certain microbes.
INFRALIT EP/PE 8235-75 Antimicrobial properties, for hygienic applications like hospitals, daycares, sheltered homes, e.g. beds, railings, door handles etc, Semi-gloss Good chemical & mechanical resistance. Recommended indoor because of chalking in UV.	●				Hybrid, smooth	Semi-gloss	15 min/180°C	INFRALIT EP 8035 Epoxy Powder fulfils the requirements of ISO 22196 for preventing the growth of certain microbes.
INFRALIT EP/PE 8235-90 Antimicrobial properties, for hygienic applications like hospitals, daycares, sheltered homes, e.g. beds, railings, door handles etc, Gloss Good chemical & mechanical resistance. Recommended indoor because of chalking in UV.	●				Hybrid, smooth	Gloss	15 min/180°C	INFRALIT EP 8035 Epoxy Powder fulfils the requirements of ISO 22196 for preventing the growth of certain microbes.

Check also Clear coats on pages 20-21

Functional coatings: Conductive

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP/PE 8092-00 Semi-conductive, Electronic industry appliances (ESD) Recommended for indoors or to be top coated because of chalking in UV. Developed for areas within the electronics industry where electrostatic discharge is a problem.	●				Hybrid, smooth	Semi-gloss	15 min/180°C	
INFRALIT EP/PE 8093-04 Conductive, Electronic industry appliances (ESD), Textured Recommended for indoors or to be top coated because of chalking in UV. Developed for areas within the electronics industry where electrostatic discharge is a problem.	●				Hybrid, texture	Texture	15 min/180°C	

Functional coatings: Flexible

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT PE 8315-08 Flexible, Appliance for post-forming after application, Gloss Powder forms a paint film which has good flexibility for bending/forming.	●	●			Polyester, smooth	Gloss	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8316-08 Flexible, Appliance for post forming after application, Semi-gloss Powder forms a paint film which has good flexibility for bending/forming.	●	●			Polyester, smooth	Semi-gloss	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8317-08 Flexible, Appliance for post forming after application, Matt Powder forms a paint film which has good flexibility for bending/forming.	●	●			Polyester, smooth	Matt	20 min/170°C, 10 min/180°C, 6 min/200°C	EN45545: Fire protection on railway vehicles
INFRALIT PE 8540-41 Super-flexible, Appliance for post forming after application, Semi-gloss Powder forms a paint film which has good flexibility for bending/forming.	●	●			Polyester, smooth	Semi-gloss	10 min/180°C	

Functional coatings: Special powder coatings

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP 8024-00 Tanks & containers, immersion applications, industrial/heavy-duty applications, Excellent chemical & mechanical resistance Especially inside oil/gas tanks & containers etc., also for immersion applications. Recommended for indoors or to be top coated because of chalking in UV.	●	○			Epoxy, smooth	Glossy	10 min/180°C	
INFRALIT PE 8431-10 Camouflage appliance Requires primer according to camouflage coating system K122. Camouflage shades.	●	●			Polyester, smooth	Full-matt	15 min/210°C	The Finnish Defence Forces M064 version 2.0
INFRALIT SI 8009-02 Heat resistance, texture (sand paper) surface, indoor & outdoor Suitable for applications like heat covers, exhaust pipes, grills, ovens etc. For objects that must endure temperatures up to 600°C. Suitable for corona only.	●	●			Silicone, texture	Texture	30 min/200°C	

Pipeline coatings

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT 8024-10 Corrosion protection of pipeline internal surfaces Good abrasion resistance, impact resistance and elasticity, high scratch resistance	●	●			FBE			
INFRALIT EP 8054 For external protections, used as a primer in a 3-layer system with polyolefins, suitable for pipelines operating in temperatures up to +90 °C Excellent mechanical properties, high scratch resistance, meets the key requirements of FBE coating specifications, adjustable application window	●	●			FBE	Semi-gloss	Special curing. Check TDS for more information.	Approved by BashNIPneft Institute and Gubkin University
INFRALIT EP 8064 Corrosion protection of pipeline external surfaces Used together with reactive polyolefins when coating steel pipes. Coatings applied with a Wehocoat device are extremely hard-wearing and as durable as a factory-applied pipe coating. Field-applied coating fulfils the same ISO 21809 demands as factory-applied.	●	●			FBE			
INFRALIT EP 8074 For internal and external protection, suitable for pipelines operating in high temperatures, working area up to +150 °C High scratch resistance, high chemical resistance, glass transition temperature Tg +130 - +160 °C, depending on formulation	●	●			FBE	Gloss	Special curing. Check TDS for more information.	Approved by TatNIPneft Institute

Low temperature curing powder coatings

Description	Durability				Type	Gloss	Curing time / substrate temperature	Approvals, check TDS for details
	Indoor	Industrial outdoor	Excellent outdoor	Superior outdoor				
INFRALIT EP 8024-21 Low curing 140°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, excellent chemical & mechanical resistance. High production capacity and energy conservation due to fast curing. Recommended for indoors because of chalking in UV.	●	○			Epoxy, smooth	Glossy	15 min/140°C	
INFRALIT EP 8024-23 Low curing 130°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, excellent chemical & mechanical resistance. High production capacity and energy conservation due to fast curing. Recommended for indoors because of chalking in UV.	●	○			Epoxy, smooth	Glossy	15 min/130°C	
INFRALIT EP/PE 8241-00 Textured finish, low curing 130°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, very good chemical & mechanical resistance. High production capacity and energy conservation due to fast curing. Recommended for indoors because of chalking in UV.	●				Hybrid, fine texture	Texture	20 min/130°C, 10 min/145°C, 5 min/165°C	
INFRALIT PE 8640-00 Low curing 160°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, good chemical & mechanical resistance. High production capacity and energy conservation due to fast curing.	●	●			Polyester, smooth	Glossy/Semi-gloss	10 min/160°C, 9 min/170°C, 6 min/180°C, 3 min/200°C	
INFRALIT PE 8641-00 Textured finish, low curing 160°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, good chemical & mechanical resistance. High production capacity and energy conservation due to fast curing.	●	●			Polyester, fine texture	Texture	10 min/160°C, 6 min/180°C, 3 min/200°C	
INFRALIT PE 8642-00 Structured finish, low curing 160°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, good chemical & mechanical resistance. High production capacity and energy conservation due to fast curing.	●	●			Polyester, structure	Structure	10 min/160°C, 6 min/180°C	
INFRALIT PE 8643-00 Matt, low curing 160°C, for heavy & heat sensitive objects and for lower energy consumption Industrial applications, good chemical & mechanical resistance. High production capacity and energy conservation due to fast curing.	●	●			Polyester, smooth	Matt	15 min/160°C, 10 min/170°C, 7 min/180°C, 5 min/190°C	

Cleaning powder

Description	Type
INFRALIT EP/PE 8081-98 Cleaning powder, for recycling in the system before challenging colour changes Based on a mixture of solid epoxy and polyester binders, designed only for cleaning of powder coating painting lines. Powder is blown through hoses, venturis, painting booths, cyclones and other parts of painting lines. When the cleaning powder goes through the system it releases and gathers excess powder coating and other impurities. Fast availability: Stock item ID BE40400020 (Cleaning powder)	Hybrid

PACKAGE SIZE

Standard package size/filling for all INFRALIT-powder coatings is 20 kg. Exceptions are metallic shades and clear coats which are packed in same size of boxes but with 15kg filling. Larger package sizes by agreement.



STORAGE AND HANDLING INSTRUCTIONS

for INFRALIT powder coatings

STORING AND TRANSPORTATION

- Powders should be stored in cool and dry environment, max 25 °C. Take special care during high temperature seasons. Avoid storing close to heat sources i.e. heaters in trucks and storages. Do not store in direct sunlight.
- Take special care with low cure powders (highly reactive products) to be stored in a cool environment.
- Excess heat can cause sintering in the powder, leading to spraying problems and surface defects on the final coating. Do not load or store big product bags on top of each other.

HANDLING

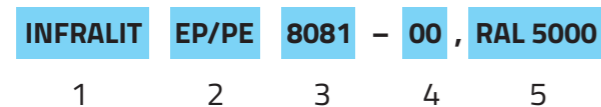
- The recommended (air) humidity during storage and handling of powder coatings is 40-60%.
- The maximum recommended amount of recycled non-metallic powder coating to be mixed with fresh powder is 50%. If the spraying result seems inadequate, more fresh powder should be added. The optimum amount depends on used equipment and powder.
- Be careful when handling powders. The powder dust shouldn't contaminate production and the powder itself should not be contaminated by foreign materials or other powders. Close the container/bag between uses to ensure this.
- Use personal protection, notice the labelling and follow the safe use instructions mentioned in the SDS.
- Powder that has been stored for a long time will be more packed compared to fresh powder because air between the powder particles escapes. Either use a fluidisation vessel to incorporate air into the powder or mix the bag manually to ensure nice fluidisation.
- Observe and follow the best before date on the label. The quality of the powder cannot be guaranteed if it is used after the best before date.

CLEANING OF SPRAYING EQUIPMENT

- Cleaning the spraying booth is recommended at least once during a work shift, depending on the temperature and humidity to avoid the moistened powder in the booth walls dropping on its own and causing lumps in the recycled and fresh materials mixing.
- Teknos product BE40400020 INFRALIT EP/PE 8081-98 CLEANING POWDER can be used for cleaning spraying guns and recycling equipment.

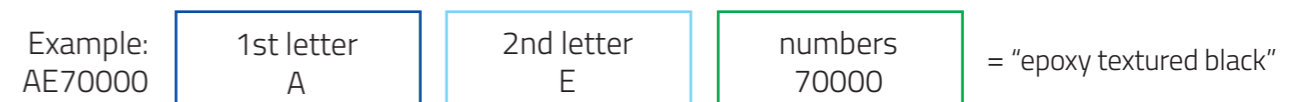
INFRALIT POWDER COATINGS NAMING

The INFRALIT powder coating name is composed of the following:



1. INFRALIT = brand name for Teknos powder coating
2. Resin type; EP = epoxy, EP/PE = epoxy-polyester, PE = polyester, JR = polyurethane, SI = silicone
3. A four-digit number, which together with the variant number forms the complete number series for the product
4. A two-digit variant number
5. Colour; either a code from a standard colour card, a customer's own code, or text information.

INFRALIT POWDER COATINGS KEY TO ITEM NUMBERS



1st letter	Binder
A	epoxy
E	low temperature curing epoxy
B	epoxy polyester
F	low temperature curing epoxy polyester
D	polyester, industrial
Q	polyester, industrial, GSB/Qualicoat quality
S	polyester, industrial, superdurable
T	silicone
U	polyurethane

2st letter	Meaning	Products in which used
A	gloss, tribo	B, F, C, G, D, Q, U, S
B	special version	A-D, Q
C	conductive	B, D
E	textured surface	A-D, E-F, Q, S
G	gloss, corona	A-F, Q, S
H	structured	A-F
K	test version, customer version	all
L	snake skin	U
M	matt, corona	A-D, Q, S
N	matt, tribo	B-D, Q, S
R	chemical-resistant	A
S	semigloss, corona	A-D, Q, S, U
Z	semi-gloss	B-D, Q, S, U
W	wrinkle	U

Numbers	Colour range
00001-09999	white
10000-19999	yellow
20000-29999	green
30000-39999	blue
40000-40999	clear coat, transparent shades
41000-49999	aluminium, silver, copper, gold, other metallic and pearlescent shades
50000-59999	red
60000-69999	orange
70000-79999	black
80000-89999	grey
90000-93999	beige
94000-99999	brown

NB! Key to item numbers is only indicative, exceptions are possible.

WE MAKE THE WORLD LAST LONGER

Teknos is a global coatings company with operations in more than 20 countries in Europe, Asia, and the USA. Teknos is one of the leading suppliers of industrial coatings with a strong position in retail and architectural coatings.

Teknos wants to make the world last longer by providing smart, technically advanced paint and coating solutions to protect and prolong. Teknos always works in close cooperation with its customers.

The company was established in 1948, and is one of Finland's largest family-owned businesses. For further information, visit www.teknos.com