

Oil and gas

Product reference guide
North America



Trusted coatings for the oil and gas industry

This overview presents paints designated for anti-corrosion protection, produced at our state of the art manufacturing sites, these products are widely available. To obtain detailed information, specifications and pricing for your project, please contact your local sales representative or local Hempel office.

We are a world-leading coatings supplier founded in 1915 by J.C. Hempel. Today, over a century later, the company has grown to become the largest independent supplier of coatings for the protective, marine, container, yacht and decorative market segments.

From wind turbines and bridges to civil buildings, airports, power plants, cranes and many other facilities, our protective coatings protect man-made structures from the corrosive forces of nature. At Hempel, we are focused on R&D, advanced production techniques and professional coating advice. We work around the globe to help keep our customers' investments safe and beautiful. Our working concept is simple: we are curious, creative and self-critical, and always aim to create extra value for our customers.

We provide a full range of high-performance protective coatings, backed up with a precise technical service. As a result, you get a coating solution for your specific needs which will keep your assets safe and reduce your maintenance costs.

To find out more visit us at north-america.hempel.com

Key



Roller



Brush



Airless spray



Conventional air spray



Plural component airless spray



Touch-ups only



Trowel

Primers and Intermediates

Product	Description	VS%	VOC	Rec DFT	Theoretical spreading rate	Components	Mixing ratio	Shelf life	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
Activated zinc rich epoxy primers											
Hempadur Avantguard® 550	A two-component, activated zinc epoxy primer in compliance with the requirements for Level 3, type II in SSPC Paint 20, 2002. Hempadur Avantguard 550 functions as a zinc-rich epoxy featuring a higher mechanical strength. Utilizes ASTM D520, type II zinc dust.	65%	318 g/L; 2.6 lbs/US gallon	2-4 mils; 50-100 microns	10.8 m ² /L - 60 microns 433.1 sq.ft/US gallon - 2.4 mils	2	4:1	Base = 1 year Cure = 3 years	3 hours	1.5 hours	
Hempadur Avantguard® 750	A two-component, activated zinc epoxy primer in compliance with the requirements for Level 2, type II in SSPC Paint 20, 2002. Hempadur Avantguard 750 functions as a zinc-rich epoxy featuring a higher mechanical strength. Utilizes ASTM D520, type II zinc dust. Hempadur Avantguard 750 is a versatile primer for long-term protection of steel in severely corrosive environments.	65%	315 g/L; 2.6 lbs/US gallon	2-4 mils; 50-100 microns	10.8 m ² /L - 60 microns 433.1 sq.ft/US gallon - 2.4 mils	2	4:1	Base = 1 year Cure = 3 years	4 hours	1.5 hours	
Hempadur Avantguard® 860	A two-component, activated zinc-rich epoxy primer in compliance with the requirements of Level 1, type II in SSPC Paint 20 2002 and ISO 12944 Part 5, 2007. Utilizes ASTM D520, type II zinc dust. Hempadur Avantguard 860 can be used for long-term protection of steel exposed to moderately to severely corrosive environments, (ISO 12944-6) in the oil and gas industry, power generation plants, and infrastructure, (buildings, bridges and general structural steel). Suitable for protection in offshore environments.	68%	302 g/L; 2.5 lbs/US gallon	2-4 mils; 50-100 microns	11.3 m ² /L - 60 microns 453.1 sq.ft/US gallon - 2.4 mils	2	8.5:1.5	Base = 1 year Cure = 3 years	6 hours	3 hours	
Zinc rich epoxy primers											
Hempel's Zinc Rich Epoxy Primer 178US	A three-component, zinc rich epoxy primer. It cures to a hard wearing and highly weather-resistant coating. Offers cathodic protection of local mechanical damage. In compliance with SSPC-Paint 20, Level 2, type II. Meets the requirements for ASTM A-490 Class 'B' for slip co-efficient and creep resistance.	67%	288 g/L; 2.4 lbs/US gallon	2-4 mils; 50-100 microns	8.9 m ² /L - 75 microns 358 sq.ft/US gallon - 3 mils	3	36.30: 36.70: 27.0	Base = 1 year Cure = 3 years	6 hours	3 hours	
Inorganic zincs											
Hempel's Galvosil 15700	A two-component, solvent-borne, self-curing, inorganic zinc silicate with outstanding resistance against weathering and abrasion. It has excellent chemical resistance within the pH range 6-9. Offers cathodic protection of local mechanical damage. Resistant to permanent (non-cyclic) dry temperatures as well as occasionally dry peak temperatures up to maximum 932°F/500°C. Resistant to cyclic dry temperatures up to 752°F/400°C.	64%	434 g/L; 3.6 lbs/US gallon	2-3 mils; 50-75 microns	12.8 m ² /L - 50 microns 513.3 sq.ft/US gallon - 2 mils	2	3.1:6.9 by weight	Base = 6 months Zinc = 3 years	4 hours	45 min	

Primers and Intermediates

Product	Description	VS%	VOC	Rec DFT	Theoretical spreading rate	Components	Mixing ratio	Shelf life	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
Anti-corrosive epoxies and primers											
Hempaprime Multi 500	Hempaprime Multi 500 is a two-component, fast drying, high solids epoxy paint. It provides hard wearing and long lasting barrier protection in coating systems for severe corrosive environments. Hempaprime Multi 500 is recommended as a high-build, intermediate coat in high performance coating systems where fast handling and short over-coating times are required. Due to its fast drying, the product is excellent for projects where fast throughput is key. The product can also be used as a self-priming coat and a finishing coat in heavy-duty coating systems. Suited for application down to 50°F/10°C. Winter cure version is available.	85%	196 g/L; 1.6lb/US gallon	4-9 mils; 100-225 microns	5.7 m ² /L - 150 microns 228.6 sq.ft/US gallon - 6 mils	2	4:1	2 years	1 hour	4 hours	  
Hempadur Mastic 4588 Series	A two-component polyamide adduct cured, high solids, high-build epoxy paint. It forms a hard and tough coating and has good wetting properties. Hempadur 45880/1 is used as a self-primed, surface tolerant paint system or as an intermediate or finishing coat in heavy duty paint systems where low VOC and high film build are required.	80%	216 g/L; 1.8lb/US gallon	5 mils; 125 microns	6.4 m ² /L - 125 microns 256.6 sq.ft/US gallon - 5 mils	2	3:1	3 years	1 hour	4 hours	 
Hempadur Quattro XO 17820	A two-component, pure epoxy universal primer that cures to a hard and tough coating, with good resistance to abrasion and seawater. The product is available with different levels of Aluminium and Fibre pigmentation to deliver tailor-made, optimized performance properties for different harsh service conditions.	80%	190 g/L; 1.6 lbs/US gallon	5 mils; 125 microns	6.4 m ² /L - 125 microns 256.6 sq.ft/US gallon - 5 mils	2	4:1	3 years	1 hour	3 hours	  
Hempadur Quattro 17634	A two-component universal epoxy paint that cures to a hard and tough coating, with good resistance to abrasion, seawater and various oils. Hempadur Quattro 17634 is intended for all year application down to 15°F/-10°C and for in-shop applications where fast recoating and handling is required.	72%	277g/L; 2.3lb/US gallon	5 mils; 125 microns	5.8 m ² /L - 125 microns 232.6 sq.ft/US gallon - 5 mils	2	4:1	Base = 3 years Cure = 1 year	2 hours	4 hours	 
Hempadur Multi-strength GF Epoxy 3587A	An amine-adduct cured epoxy coating - the product is reinforced with glass flake. It is a hard, impact and abrasion resistant coating with good resistance to seawater and splashes from petroleum and related products. Suitable for early water exposure and will continue to cure under water.	87%	179 g/L; 1.5 lbs/US gallon	14 mils; 350 microns	2.5 m ² /L - 350 microns 100.2 sq.ft/US gallon - 14 mils	2	4:1	Base = 2 years Cure = 3 years	1 hour	6 hours	
Hempel's Epoxy 3548H	A two-component, rubber modified, high-solids epoxy specially formulated as a highly flexible epoxy coating. It forms a tough, abrasion-resistant coating with exceptional flexibility and chemical resistance. Hempel's Epoxy 3548H can be used for storage tank floating roofs where a self-priming, highly flexible coating system for atmospheric and intermittent immersion service is required.	61%	318 g/L; 2.5 lbs/US gallon	4-6 mils; 100-150 microns	4.1 m ² /L - 150 microns 163 sq.ft/US gallon - 6 mils	2	1:1	1 year	6 hours	4 hours	   
Shop primers											
Hempel's Shopprimer ZS 15890	A two-component, solvent-borne zinc ethyl silicate shopprimer, designed for automatic spray application. Especially suited where welding and gas-cutting properties are of importance.	28%	620 g/L; 5.2 lbs/US gallon	0.6 mils; 15 microns	18.7 m ² /L - 15 microns 749.9 sq.ft./US gallon - 0.6 mils	2	2:3	1 year	24 hours	Dry to handle 4-5 mins	  

Finishing coats

Product	Description	VS%	VOC	Rec DFT	Gloss	Theoretical spreading rate	Components	Mixing ratio	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
Finishing coats											
Hempaxane Light 55030	A two-component, high-solids, high-gloss, polysiloxane enamel with excellent gloss and color retention. As an isocyanate free glossy decorative and protective finishing coat for structures in severely corrosive atmospheric environment.	82%	209 g/L; 1.7 lbs/US gallon	3 mils; 75 microns	Glossy	10.9 m ² /L - 75 microns 437.1 sq.ft/US gallon - 3 mils	2	5.6:4.4	4 hours	6 hours	☞ ☞☐
Hempathane 55610 HS	A two-component, glossy acrylic polyurethane topcoat, cured with aliphatic isocyanate, with good gloss and color retention. Contains Zinc Phosphate.	67%	336 g/L; 2.8 lbs/US gallon	2-4 mils; 50-100 microns	Glossy	6.7 m ² /L - 100 microns 268.7 sq.ft/US gallon - 4 mils	2	7:1	2 hours	6-8 hours	☞ ☞☐ ☞☐
Hempathane 55210	A two-component, glossy acrylic polyurethane coating, cured with aliphatic isocyanate, with good gloss and color retention.	51%	442 g/L; 3.7 lbs/US gallon	2 mils; 50 microns	Glossy	10.2 m ² /L - 50 microns 409 sq.ft/US gallon - 2 mils	2	7:1	4 hours	8 hours	☞ ☞☐
Hempathane HS 5561B	A two-component polyurethane topcoat, cured with aliphatic isocyanate, with good gloss and color retention.	61%	362 g/L; 3.0 lbs/US gallon	2-4 mils; 50-100 microns	Glossy	8.1 m ² /L - 75 microns 324.8 sq.ft/US gallon - 3 mils	2	7:1	1 hour	2.5 hours	☞ ☞☐
Hempatex Hi-build 46410	A physically drying, high-build paint with good color retention as a flat finish. Based on acrylic resin and non-chlorinated plasticizer. Contains Zinc Phosphate. Resistant to salt water, splashes of aliphatic hydrocarbons, animal and vegetable oils.	42%	509 g/L; 4.2 lbs/US gallon	4 mils; 100 microns	Flat	4.2 m ² /L - 100 microns 168.4 sq.ft/US gallon - 4 mils	1	NA	NA	4 hours	☞ ☞☐ ☞☐
Hempatex Enamel 56360	A finishing coat for optimum gloss and color retention. Resistant to salt water, splashes of aliphatic hydrocarbons and animal and vegetable oils.	31%	606 g/L; 5 lbs/US gallon	1.4 mils; 35 microns	Semi-gloss	8.9 m ² /L - 35 microns 356.9 sq.ft/US gallon - 1.4 mils	1	NA	NA	3-4 hours	☞ ☞☐ ☞☐
Hempalin Enamel 52140	A glossy alkyd enamel that forms a weather resistant coating. It is flexible and resistant to salt water and spillage of mineral oil and other aliphatic hydrocarbons.	46%	425 g/L; 3.5 lbs/US gallon	1.2 mils; 30 microns	Glossy	15.3 m ² /L - 30 microns 613.5 sq.ft/US gallon - 1.2 mils	1	NA	NA	6-8 hours	☞ ☞☐ ☞☐

Linings

Product	Description	VS%	VOC	Rec DFT	Theoretical spreading rate	Components	Mixing ratio	Shelf life	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
Interior tank linings											
Hempaline Defend 400	A solvent free, high performance epoxy lining with very good chemical resistance. This material is designed to be a single coat application. Hempaline Defend 400 is available in Standard (Cure 72) and fast return to service (Cure 24) grades, that both offer the same high performance. May be used as part of a glass-reinforced system. For hand-lay laminate see separate application instruction.	100%	25 g/L; 0.2 lbs/US gallon	12-40 mils; 300-1,000 microns	2.0 m ² /L - 500 microns 80.2 sq.ft/US gallon - 20 mils	2	3:1	1.5 years	40 min	8 hours	
Hempaline Defend 630	A solvent free, high performance epoxy phenolic lining with excellent chemical resistance to a wide range of chemicals and solvents. Hempaline Defend 630 may be applied as a 1 or 2 coat scheme, and as part of a hand-lay or spray applied glass fiber reinforced system. Hempaline Defend 630 is available in standard (Cure 72) and fast return to service (Cure 24) grades, that both offer the same high performance.	100%	21 g/L; 0.2 lbs/US gallon	12-40 mils; 300-1,000 microns	2.0 m ² /L - 500 microns 80.2 sq.ft/US gallon - 20 mils	2	3:1	1.5 years	40 min	8 hours	
Hempaline Defend 640	A solvent free, high performance glass flake epoxy phenolic lining with excellent chemical resistance to a wide range of chemicals and solvents. This material is designed to be a single coat application. Hempaline Defend 640 is available in standard (Cure 72) and fast return to service (Cure 24) grades, which both offer the same high performance.	100%	24 g/L; 0.2 lbs/US gallon	12-40 mils; 300-1,000 microns	2.0 m ² /L - 500 microns 80.2 sq.ft/US gallon - 20 mils	2	3:1	1.5 years	40 min	8 hours	
Hempaline Defend 740	Two-component, sprayable high performance novolac glass flake vinyl ester tank lining. Hempaline Defend 740 has excellent resistance to organic and inorganic acid solutions, high temperatures and abrasion conditions.	100%	322 g/L; 2.7 lbs/US gallon	16-40 mils; 400-1,000 microns	1.8 m ² /L - 500 microns 72.2 sq.ft/US gallon - 20 mils	2	49:1	6 months	30-45 min	4 hours	
Hempaline Defend 690	A novolac epoxy coating used in secondary containment structures, concrete floors and other process applications which demand resistance to sulfuric acid and other harsh chemicals where good durability is needed.	100%	49 g/L; 0.4 lbs/US gallon	35-75 mils; 875-1,875 microns	1.0 m ² /L - 1,000 microns 41 sq.ft/US gallon - 40 mils	2	4:1	1 year	30 min	7 hours	
Hempaline Defend 660	A sprayable flexible epoxy lining system with good resistance to water and a range of acid solutions. It is an abrasion resistant coating with good thermal shock capabilities, impact resistance and excellent crack bridging properties. Chemical and water resistant coatings and linings for concrete floors, cooling tower basins and other applications that demand flexibility. Well suited for bridging moving joints and cracks. Also suited to be used with fabric reinforcement.	100%	59 g/L; 0.5 lbs/US gallon	20-70 mils; 500-1,750 microns	0.8 m ² /L - 1,250 microns 32.5 sq.ft/US gallon - 50 mils	2	3:1	1 year	30 min	5 hours	
Hempadur 85671	A two-component, amine adduct cured phenolic epoxy (novolac) coating with very good adhesion and high temperature, water and chemical resistance. Hempadur 85671 can be used as an interior lining in tanks, pipelines railcars, etc. for hot water, brine, crude oil, vegetable oils, molten sulphur and other chemicals.	68%	317 g/L; 2.6 lbs/US gallon	4-6.4 mils; 100-160 microns	6.8 m ² /L - 100 microns 272.7 sq.ft/US gallon - 4 mils	2	8.8:1.2	1 year	3 hours	6.5 hours	
Hempadur Multi Strength 35530	A solvent free, two-component, high-build, polyamine cured epoxy paint, that cures to a coating with good resistance to fresh water, seawater, crude oil, and to abrasion. Certified by NSF International to NSF/ANSI standard 61.	100%	9 g/L; 0.1 lbs/US gallon	8-12 mils; 200-300 microns	3.3 m ² /L - 300 microns 132.3 sq.ft/US gallon - 12 mils	2	3:1	1 year	1 hour	6 hours	

Specialty coatings

Product	Description	VS%	VOC	Rec DFT	Theoretical spreading rate	Components	Mixing ratio	Shelf life	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
High-heat											
Versiline CUI 56990	A MIO pigmented single component inorganic copolymer coating that cures to form an inert polymer matrix, able to resist temperatures up to 1202°F/650°C and thermal shock/cycling in dry or dry/wet service. For long-term protection of hot pipework, equipment and other hot surfaces. Applied directly onto the steel substrate. Specially developed to prevent corrosion under insulation (CUI).	74%	391 g/L; 3.3 lbs/US gallon	Insulated: 2 coats at 5-7 mils (125-175 microns) per coat Uninsulated: 2 coats at 8-10 mils (200-250 microns) per coat	5.0 m ² /L - 150 microns 203.7 sq.ft/US gallon - 6 mils	1	N/A	1 year	N/A	30 min	
Hempel's Silicone Acrylic 56940	For long-term protection of hot pipelines, exhaust pipes, smoke stacks and other hot surfaces up to 390°F/200°C, resists short time exposure up to 572°F/300°C. When heated to above 390°F/200°C for longer periods of time a certain discoloration may occur, which does not affect the protective properties of the product. Can also be used as a finish coat over Versiline 56990.	43%	402 g/L; 3.3 lbs/US gallon	1 mil; 25 microns	21.6 m ² /L - 25 microns 866.2 sq.ft/US gallon - 1 mil	1	N/A	1 year	N/A	15 min	
Hempel's Silicone Aluminum 56913	A heat resistant, aluminium pigmented polysiloxane paint. For long-term protection of hot pipelines, exhaust pipes, smoke stacks and other hot surfaces up to 1,112°F/600°C.	49%	406 g/L; 3.4 lbs/US gallon	1 mil; 25 microns	19.6 m ² /L - 25 microns 786 sq.ft/US gallon - 1 mil	1	N/A	6 months	N/A	2 hours	



Specialty coatings

Product	Description	VS%	VOC	Rec DFT	Theoretical spreading rate	Components	Mixing ratio	Shelf life	Pot life @ 68°F/20°C	Dry-to-touch @ 68°F/20°C	Application method
Pipe coatings											
Hempel's HS Gas Pipe Coating 87831	A two-component epoxy polyamine cured coating. Formulated according to the requirements in American Petroleum Institute's Standard RP 5L2. Hempel's HS Gas Pipe Coating 87831 can be applied as a one-coat system for internal coating of gas pipes designed to carry dry, sweet gas. The coating is designed to reduce the drag resistance in the pipeline by making the pipe walls smoother.	82%	155 g/L; 1.3 lbs/US gallon	2-4 mils; 50-100 microns	11.7 m ² /L - 70 microns 469.2 sq.ft/US gallon - 2.8 mils	2	4:1	Base = 1 year Cure = 3 years	1 hour	4.5 hours	
Hempadur 85531	An amine-adduct cured epoxy coating. It is a hard, impact and abrasion resistant coating for exterior pipelines. The material has excellent properties in respect of temperature resistance, mechanical and chemical resistance and cathodic disbondment resistance.	84%	167 g/L; 1.4 lbs/US gallon	14 mils; 350 microns	2.4 m ² /L - 350 microns 96.2 sq.ft/US gallon - 14 mils	2	4:1	Base = 1 year Cure = 3 years	1 hour	6 hours	
Heavy duty areas											
Hempadur Multi Strength GF 3587A	An amine-adduct cured epoxy coating that uses glass flake for reinforcement. It is a hard, impact and abrasion resistant coating with good resistance to seawater, mineral oils, aliphatic hydrocarbons and splashes from petroleum and related products. Suitable for early water exposure and will continue to cure under water for areas subject to abrasion and/or to a highly corrosive environment e.g. splash zones, jetty pilings and working decks.	87%	179 g/L; 1.5 lbs/US gallon	14-20 mils; 350-500 microns	2.5 m ² /L - 350 microns 100 sq.ft/US gallon - 14 mils	2	4:1	3 years	1 hour	6 hours	
Hempadur Spray-Guard 35490	A solvent free, two-component, epoxy coating containing heavy duty antiskid aggregate. It cures to a hard, tough and well adhering protective coating. It can be applied in one coat at minimum film thickness of 2.5 mm (100 mils). As a heavy duty coating on steel and concrete exposed to severe corrosive conditions and/or impact such as splash zones and decks. Color retention should be of minor importance. Hempadur Spray-Guard 35490 is suited for application at temperatures above 68°F/20°C.	100%	0 g/L; 0.0 lbs/US gallon	100 mils; 2500 microns	0.4 m ² /L - 2,500 microns 16 sq.ft/US gallon - 100 mils	2	5.7:1	3 years	1 hour	8 hours	

As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the decorative, marine, infrastructure and energy industries. Hempel factories, R&D centers and stock points are established in every region.

Across the globe, Hempel's coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colorful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

North America Corporate Office

600 Conroe Park North Dr.
Conroe, TX 77303
United States
Toll Free: 1-833-4HEMPEL
Email: hempel.us@hempel.com

Hempel (Canada) Inc

111 - 19097 26th Avenue
Surrey, BC V3Z 3V7
Canada
Toll Free: +1 800 661 3201
Email: hempel.ca@hempel.com

Pinturas Hempel de México S.A. de C.V.

Dr. Antonio Vera #2 Col. San Jeronimo
Torre Levita Piso 10
Monterrey, Nuevo Leon, 64640
México
Tel: +52 814 161 7400
Email: sales.mx@hempel.com