

Linings solutions for North America

Secondary, primary, and specialty containment



Rich in history and experience, AkzoNobel's linings product range is world-renowned for its quality and reliability. Our linings are developed to maximize technical performance for nearly every lining application in the field.

Reliable solutions

Here in AkzoNobel's Protective Coatings business we're dedicated to developing market leading, sustainable lining solutions for steel and concrete, primary and secondary containment structures.

With more than 170 linings options available across the Enviroline®, Devoe® High Performance Coatings, Ceilcote®, Polibrid®, Interline® ranges we have a solution for virtually every linings project.

Our linings are backed by extensive internal and external third-party lab performance testing to validate superior performance in a variety of chemical and operating conditions.



Leaders in linings

With that kind of commitment to quality, it's no wonder that AkzoNobel's International® protective coatings lead the industry in linings technology.

Linings technology

Through our development of innovative technologies and performance improvements our linings products offer the following:

TECHNOLOGY IMPROVEMENT	BENEFIT
Higher solids products	Lower solvent emissions Less spark hazard High build single coat applications
Fast return to service	Less tank down-time More productivity
Linings application performance in a wide variety of temperature ranges	Less complexity and waste for operators Simple maintenance schemes Better chemical resistance Application in colder regions
Environmental sustainability	Lower VOC emissions No hazardous raw materials
Improved immersion service in severe chemical and temperature environments.	Longer linings service life Less contamination of cargo



We have over 170 high performance lining products

INTERLINE	DEVOE	ENVIROLINE	CEILCOTE
<p>Excellent chemical resistance lining for steel. Epoxy Novolac and Epoxy Phenolic thin and thick film linings including fiber glass reinforced coating technology which is resistant to a variety of hydrocarbons. NSF approved linings available.</p> <p>Markets: Oil and Gas, Water and Wastewater</p> <p>Applications: Refineries, terminals and tank internals</p>	<p>Devchem – Chemical resistant thin film linings for immersion service. Epoxy and Epoxy Novolac technology. NSF approved linings available.</p> <p>Markets: Oil and Gas, Water, Chemical, Food & Beverage</p> <p>Applications: High temp immersion solutions and oil processing</p> <p>Devmat – 100% solids Epoxy and Epoxy Novolac with thick film lining. Excellent for frac tank linings. NSF approved linings available.</p> <p>Markets: Oil and Gas, Water, Chemical</p> <p>Applications: Refineries, terminals and tank internals</p>	<p>High performance Epoxy and Epoxy Novolac lining technology, 30-60 mils in one coat, with rapid return to service, low temperature cure and high temperature resistance. NSF approved linings available.</p> <p>Markets: Oil and Gas, Chemical, Water and Wastewater</p> <p>Applications: Refineries, terminals, chemical plants, tank internals, tank trucks, water and wastewater plants, high temperature immersions solutions and oil processing</p>	<p>Superior chemical resistant lining for steel, concrete, and grouts for equipment foundations. Various resin formulations.</p> <p>Markets: Power, Chemical, Automotive, Oil and Gas, Mining</p> <p>Applications: Process areas and walls, concrete and steel surfaces, interior or exterior of tanks, trenches, metal finishing, primary and secondary containment areas, and flue gas desulfurization systems.</p>
Interline 399	Devchem 253	Enviroline 376-30	Ceilmote 140
Interline 850	Devchem 253S	Enviroline 376-60	Ceilmote 180
Interline 921	Devchem 256	Enviroline 125 Series	Ceilmote 222HT
Interline 983	Devchem 257	Enviroline 405HTR	Ceilmote 242
Interline 984	Devmat 100	Enviroline 2405	Ceilmote 242HB
Interline 975P	Devmat 101 & 101LTC	Enviroline 230	Ceilmote 2000 Series
Interline 994	Devmat 111	Enviroline 222	Ceilmote 6640 & 6650
	Devmat 142	23 other products	116 other products

Leaders in linings by markets

Oil and gas industry

Petroleum storage

Interline® 984

A premium 100% solids, solvent-free epoxy phenolic tank lining formulated to protect an extensive range of oils and fuels.

- Resistant to crude oil, unleaded gasoline blends, MTBE, alcohols, aviation fuels, and aromatic and aliphatic solvents
- Secondary containment applications
- Rapid return to service 24 hours @77°F (25°C)
- Excellent chemical resistance

Enviroline® 376F-60

A 100% solids, solvent-free, advanced epoxy novolac technology with glass flake and fiber reinforcement.

- Meets API 652
- Excellent chemical and solvent resistance
- Fast cure, single coat application

Devchem® 253

A high solids, chemical resistant lining system with exceptional resistance to a wide range of chemicals and solvents.

- Exceptional resistance over a wide range of temperatures and pressures
- Does not require baking to cure
- High volume solids; Low VOC

Devmat® 101

Is a thick-film, 100% solids reinforced, proprietary formula epoxy-based internal lining

- Resistant to a variety of crude oil and refined petroleum products
- Flexible to reduce coating stress
- High-build, easy to install application process

Petrochemical storage

Enviroline® 405HTR

A next-generation reinforced epoxy novolac offers increased benefits with multiple performance improvements.

- High temperature water and crude oil
- Rapid cure and return to service 14 hours @77°F (25°C)
- Ideal for pipe exteriors and biofuel storage

Pipe coatings

Enviroline® 376F-60

A solvent-free, two component polyclamine-cured coating system utilizing advanced epoxy novolac technology with flake and fiber reinforcement.

- Excellent abrasion and impact resistance
- Single coat application up to 80 mils (2000 microns) DFT
- Rapid return to service in 14 hours @77°F (25°C)
- Excellent chemical and solvent resistance
- Low temperature capabilities down to 22°F (-5°C)





Power industry

Chemical resistant linings

Ceilmate® 6640AR Ceilmate

A trowel-applied vinyl ester lining designed specifically for the protection of steel and concrete against corrosive chemicals.

- The system includes a synthetic or fiberglass reinforcing layer
- Provides a seamless durable lining to tanks and trenches, chimneys, concrete pipes and scrubbers, where additional chemical resistance is required
- The lining's excellent chemical resistance makes it suitable for floor coating, secondary containment, equipment foundations and pump bases

Ceilmate® 140 Flakeline

A heavy duty, glass flake reinforced, chemical resistant vinyl ester lining for the protection of steel against aggressive chemicals in immersion service.

- Resistant to most acids, alkalis and solvents
- Performs well in high temperature service areas.

Ceilmate® 282 Flakeline

A flake-filled, corrosion resistant lining system specifically designed for flue gas desulphurization environments.

- Suitable for continuous immersion on steel seawater absorber towers
- An ideal membrane under inorganic linings and glass, brick or block tile linings.
- Typical applications include GGH units, absorber outlet ducts, steel stack/chimney flues and unscrubbed or raw gas duct streams.

Concrete surfaces

Polibrid® 705

A urethane elastomer coating with outstanding impact and abrasion resistance that can withstand a broad range of chemicals with fast setting properties.

- 100% solids and solventless, meets all VOC* regulations
- Protects against microbiologically-induced corrosion H_2SO_4
- Ideal for repair of severely degraded concrete and filling of surface imperfections

Corocrete® 400 MP

A fast setting cementitious repair mortar designed for use in repairing vertical surfaces. This mortar yields a long lasting, high strength concrete repair where prolonged down times cannot be tolerated.

- Non-shrinking with excellent workability
- High early compression strength
- Excellent bond to concrete surfaces

Secondary containment

Ceilmate® 242 Flakeline

Glass flake-filled vinyl ester high build lining for use on steel and concrete substrates. The lining has excellent resistance to organic and inorganic acid solutions and many aliphatic solvents.

- Flake-filled for excellent permeation resistance
- Ceilmate 242MR used in secondary containment
- Crack bridging capabilities



Rail cargo linings

Food grade linings

Interline® 994

An advanced two component, chemical resistant, phenolic epoxy novolac tank lining. FDA compliant for the inside of rail tank cars that will hold bulk foods and vegetable oils, including corn syrup and palm oils at temperatures up to 192°F (90°C).

- Excellent chemical resistance
- High temperature immersion resistance
- Easy-to-use, three coat thin film system

Interline® 925

A solvent free, heavy duty epoxy tank lining which provides corrosion protection to a variety of cargoes. U.S. FDA approved for various bulk dry foodstuffs storage and transport.

- High build, single coat application
- NSF/ANSI 61 approved for potable water
- Can be applied by standard airless

Crude oil and chemical linings

Enviroline® 2405

A technically advanced, ultra-high solids, two component polycyclamine cured epoxy lining system. Designed to deliver outstanding high temperature and abrasion resistance in a range of environments, with rapid curing properties enabling a fast return to service.

- Resists continuous immersion in a wide range of chemicals including crude oil up to 275°F (135°C)
- Single coat application at 16-30 mils (400-750 µm) DFT
- Applies at ambient temperature with standard airless spray equipment

Enviroline® 2900LV

An epoxy phenolic that combines excellent abrasion and impact resistance to provide long-term performance against a range of chemicals and acids. Excellent mechanical properties combined with resistance to high temperature crude and other aggressive chemicals.

- Rapid cure time and return to service within 8 hours
- Fast return to service minimizes process disruption and reduces overall installation costs
- Excellent abrasion and impact resistance makes it ideal for protecting against damage from in-service cleaning

Interplan Mobile

Effective maintenance planning and corrosion control all starts with an effective asset survey. Interplan™ is a fully-integrated, flexible coating survey and maintenance service package that helps to reduce maintenance costs and extend the lifecycle of your assets

Interplan Mobile has been designed to optimize this process, saving up to 40% of the time taken to carry out a paper based survey using the latest mobile tablet technology.

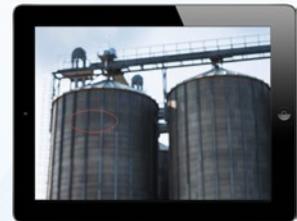
Available worldwide, the Interplan Mobile system provides a mechanism for “Risk Based Inspections” helping to highlight priorities for maintenance.

Backed up by an extensive support network and a wide range of maintenance and repair products.

Benefits

The Interplan system offers a range of benefits designed to give you peace of mind and:

- Better control of maintenance coating budgets
- Extended life cycles and protection of assets through standard systems and practices
- Longer term, high technology coating systems
- A managed yet flexible maintenance coating program
- A reduction in overall coating spend
- A safer environment for employees and visitors



Tank linings guide

PRODUCT	VOC	VOLUME SOLIDS	MIXING RATIO (on volume)	APPLICATION METHOD	MINIMUM APPLICATION TEMPERATURE	NUMBER OF COATS	RECOMMENDED DFT
Interline 984	0.58 lb/gal (70 g/lit)	100%	2 Part A: 1 (Part B)	Airless spray, air spray brush, roller	6 hours at 77°F (25°C)	One coat	12-24 mils (300-600 microns) DFT
Enviroline 376F-60	0.36 lb/gal (44g/lit)	100%	2 Part A:1 (Part B)	Heated plural, heated airless for small jobs	2.5 hours at 77°F (25°C)	One coat	20-40 mils (500-1000 micron) DFT
Devchem 253	1.77 lb/gal (213 g/lit)	72± 2%	4 Part A: 1 (Part B)	Airless spray, air spray, brush roller	16 hours at 77°F (25°C)	Two coats	4-6 mils (100-150 microns) DFT
Devmat 101	0.08 lb/gal (10 g/lit)	100%	2 Part A:1 (Part B)	Airless spray	10 hours t 77°F (25°C)	One coat	15-40 mils (375-1000 microns)DFT
Enviroline 405HTR	0.20 lb/gal (24 g/lit)	98% ± 2%	2 Part A:1 (Part B)	Heated plural, heated airless for small jobs	6.5 hours at 77°F (25°C)	One coat	20-60 mils (500-1500 microns) DFT
Ceilmate 140 Flakeline	2.18 lb/gal (262 g/lit)	100%	1 Gallon Part A: 2-1/2 oz (Part B)	Trowel, roller	4 hours at 77°F (25°C)	Three coat	30-60 mils (750-1500 microns) DFT
Polibrid 705	0.00 lb/gal	100%	2 Part A: 1 (Part B)	Plural spray	1 hour at 77°F (25°C)	One coat	28-200 mils (700-5000 microns) DFT
Ceilmate 242 Flakeline	2.61 lb/gal (313 g/lit)	100%	1 Gallon Part A: 2-1/2 oz (Part B)	Airless spray, roller, brush	4 hours at 77°F (25°C)	Two coats	15-25 mils (375-625 microns) DFT
Interline 975P	None	100%	2 (Part A): 1 (Part B)	Airless spray, brush, roller	16 hours at 77°F (25°C)	One coat	12-24 mils (300-600 microns) DFT
Enviroline 2405	0.37 lb/gal (45 g/lit)	96%± 2%	2 Part A: 1 (Part B)	Airless spray, air spray	6 hours at 77°F (25°C)	One coat	16-30 mils (400-750 microns) DFT
Enviroline 2900LV	0.28 lb/gal (34 g/lit)	98% ± 2%	2 Part A: 1 (Part B)	Heated plural, heated airless for small jobs	4 hours at 77°F (25°C)	One coat	12-20 mils (300-500 micons) DFT



A linings supplier that delivers more than great products

We've listened carefully and heard your need for a single-source linings supplier who can deliver confidence and peace of mind with high quality products.

A robust portfolio of linings solutions have been specially developed across our trusted brands and product lines to meet virtually all of your linings requirements—from light duty applications, to extreme chemical abrasion resistance, and specialized products that offer high temperature protection and fast return to service options in as little as 14 hours. But that's just the beginning.

As a leading coatings company and supplier of specialty chemicals, here at AkzoNobel, we are consistently ranked number one in our area on the prestigious Dow Jones Sustainability Index. Therefore, you can have confidence that we are wholly committed to reinforcing your health, safety and environmental (HSE) policies, as well as our own.

We are a linings supplier that will give you inner confidence, along with confidence in testing beyond compliance, NACE qualified technical service representatives and extensive linings track records.

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