

Product overview

Product description

ALKA TankLine Chem is a specialised lining selection for defined chemical storage and containment exposures. It is specified from a complete chemical schedule that includes mixtures, concentrations, temperature, cleaning and exposure duration. The exact product grade and resin system require confirmation before application.

Key advantages

- Chemical-service selection considers the full operating schedule.
- Continuous barrier can be detailed around tank and containment geometry.
- Substrate, repair and primer selection can be coordinated with the lining.
- An inspection plan can define acceptance before chemical service begins.

Recommended uses

- Approved chemical storage tanks.
- Bunded areas and process containment with defined exposure.
- Chemical-handling installations requiring a selected lining system.
- Compatible lining repairs after chemical history and substrate assessment.

Product and system selection

Use this overview with the technical data, preparation, application and limitations in the following pages. Confirm the complete build with ALKA for the actual substrate and service conditions.

Product & system selection

Two-component epoxy / novolac tank lining — proposed chemical-service grade

Internal protection of approved tanks or containment structures selected for the specified mixed chemical-service schedule.

Where this product fits

SYSTEM POSITION — CONCEPT ONLY	SELECTION / CONTROL
Chemical-contact lining	Approved formulation, complete thickness and cure
Stripe coats / pore treatment / primer	As required for the selected substrate
Prepared steel or concrete	Accepted cleanliness, profile, repairs and transitions

Specify the complete application

DECISION	SELECTION TO RECORD
Substrate	Exact substrate, condition, moisture and existing coating.
Duty	Traffic, weather, water, chemicals, temperature and cleaning as relevant.
Finish / interface	Required colour, sheen, texture and compatible adjacent layers.
Acceptance	Nominate the inspection, test method and release conditions before work.

Limits of use

No concentration, temperature, food-contact, potable-water or fuel certification is inferred from the name or competitor approvals.

Product selection

Two-component epoxy/novolac is a proposed product-family identity inferred from the named duty and comparable tank linings; confirm from formulation.

Technical data

Typical data and application conditions are listed below. Contact ALKA Technical Support for fields requiring confirmation before specification or use.

PROPERTY	VALUE / CONDITION
Development status	Proposed TDS content prepared for owner technical review; catalogue/system identity only
Component identity	See proposed description; confirm formulation and component labels
Appearance / pack	Confirm colour, sheen, component sizes and commercial supply
Solids / density	Product-specific laboratory or approved formulation data required
Mixing / working time	Confirm ratio and pot life where reactive; do not borrow benchmark values
Film build / coverage	Define nominal/minimum/maximum build and yield for the intended system
Application / recoat	Validate substrate, temperature, humidity and minimum/maximum windows
Service release	Define handling, traffic, water/chemical exposure and full cure separately
Storage / shelf life	Confirm against stability data and current label
Performance / SDS	Supply product-specific test reports and current SDS before publication

Interpreting the data

Values depend on the stated temperature, humidity, film build, test method and substrate. Typical laboratory figures are not automatic project acceptance criteria. Changes to colour, thinner, aggregate, mix proportion or layer build can change performance.

Units and test basis

Keep mass and volume mixing ratios distinct. State whether solids are by mass or volume and whether thickness is WFT (wet film), DFT (dry film) or total system build. Coverage is theoretical unless an actual site yield is stated.

Substrate & work preparation

PREPARATION STAGE	REQUIRED APPROACH
Define chemical service	List liquids, concentrations, temperature, dwell, cycling, cleaning and contaminants. Separate continuous immersion from splash/spill service and obtain a signed selection.
Steel substrate	Resolve weld defects, sharp edges, corrosion and soluble contamination. Abrasive-blast to the approved lining cleanliness/profile and inspect before coating.
Concrete substrate	Remove laitance and weak material, repair voids and assess moisture/vapour pressure. Use the approved pore-filling and priming system to avoid pinholes.
Joints and penetrations	Use engineered seals and transitions for movement, pipe entries, drains and flanges. Do not terminate the lining at an unsealed edge.
Inspection access	Plan lighting, ventilation, safe access and inspection points before work. Tank-entry and spray operations require the responsible contractor's site controls.

Establish the application release point

The applicator and responsible technical reviewer should accept the substrate, repairs, environmental conditions, material identity and system schedule before work starts. Record the moisture method and readings, substrate/air temperatures, humidity and condensation assessment where relevant.

Materials and equipment

Check labels, component pairing, batch numbers, expiry and storage history. Provide suitable mixing, application and inspection equipment, clean containers and calibrated measuring tools. Keep contaminated tools and residues away from fresh material.

Representative trial

Where condition or compatibility is uncertain, trial the complete proposed preparation and coating sequence. Agree the sample location, cure time, appearance and adhesion assessment before extending the work.

Mixing & application

STEP	PRODUCT-SPECIFIC PROCEDURE
01	Issue a service schedule covering substrate, stored liquid, concentration, temperature, continuous or intermittent contact, contamination, cleaning and planned shutdown cycles. Confirm suitability before specifying the lining.
02	Prepare steel or concrete to the approved lining specification. Repair weld defects or concrete voids, resolve sharp edges and detail penetrations, joints and terminations.
03	Mix the matched reactive components using the validated ratio, induction and pot-life instructions. Stripe difficult areas and apply the complete specified lining build without pinholes.
04	Inspect DFT and continuity using the approved method after sufficient cure. Complete repairs and final inspection before filling; establish the validated cure-to-immersion and first-fill procedure.

EDGE / WELD COVERAGE / CONCEPT SECTION

Prepared metal

Stripe difficult geometry before full coat



Specified profile + continuous build + accepted DFT; no dimensions implied

Concept drawing only; no dimensions, tested build, product compatibility or engineering approval are implied. Follow the approved project details.

Continuity and stopping points

Plan work to natural breaks and maintain a consistent application method. Do not stretch material beyond the approved coverage. Check intermediate surfaces before covering them; remove contamination and rectify defects using an approved repair procedure.

Out-of-window or interrupted work

When the permitted interval is exceeded, or rain, dust, condensation or site damage affects the surface, assess the condition before continuing. Use the validated cleaning, abrasion, re-priming or repair method; an apparently dry surface is not proof of intercoat adhesion.

Quantity, cure & sequencing

Set the accepted consumption and coat count before ordering. Measure actual area, include surface-profile demand, repairs and losses, and round reactive material to complete matched kits.

QUANTITY CONTROL	METHOD
Mass-rated product	Net kg = area (m ²) × kg/m ² per coat × number of coats. Add a documented allowance.
Volume-rated product	Net L = area (m ²) × L/m ² per coat × number of coats.
Film-forming coating	Theoretical m ² /L = 1,000 × volume-solids fraction / DFT (µm). Mass solids cannot replace volume solids.
Kits and losses	Order complete kits. State the basis of any waste allowance; profile, texture and application method affect practical yield.

Project quantities

A numerical ALKA ordering example has not been supplied where rate, density, solids or product identity is unresolved. Approve those inputs before finalising a project estimate.

Source timing / release references

STAGE	TIME / CONDITION
Application / recoat	Validate substrate, temperature, humidity and minimum/maximum windows
Service release	Define handling, traffic, water/chemical exposure and full cure separately

Plan around actual conditions

Temperature, humidity, ventilation, substrate absorption and thickness affect drying and cure. Pot life, open time, touch dry, overcoat time and service release describe different conditions. Record when reactive components are combined; do not extend working life with unapproved water or solvent.

Release to service

Use the technically approved schedule for the actual load or exposure. Chemical immersion, vehicle loading, water testing, stacking and washing may require different release points where those duties are specified. Do not infer readiness from surface appearance alone.

Inspection, safety & handover

HOLD POINT	RECORD / VERIFY
Before work	Accepted substrate and details; material/version; approved colour/build; environmental conditions and trial result.
During application	Component/tint batches; proportions; mixing and placement times; measured area, quantity and thickness; coat count and interruptions.
Before next layer	Surface condition; permitted interval; defects and repairs; primer/receiving-layer compatibility.
Before service	Cure conditions and elapsed time; final inspections; approved test results; repairs completed and rechecked.

Product-specific checks

- Map DFT readings and inspect complex geometry.
- Select continuity/holiday testing appropriate to substrate, coating and thickness; approve method and voltage.
- Release for filling only after cure, defects and repairs are accepted.

Investigate defects before covering them

Softness or delayed drying calls for a review of identity, proportioning, conditions and thickness. Bubbles or pinholes call for a review of moisture, porosity, air entrainment and application rate. Loss of adhesion requires locating the failure plane and correcting preparation or interface problems. Isolate affected areas; do not conceal uncured or unsound material.

Safe handling and cleaning

Read the current SDS for the actual product and every component, thinner and cleaner. Use the specified ventilation, personal protection and site controls. Spray, abrasive preparation and confined-space work need competent planning. Do not assume water-based, low odour, cured appearance or high solids means non-hazardous.

Use only the product-approved cleaner before material cures; keep cleaning solvent separate from coating thinner. Collect residues and protect drains. Cured material normally needs an appropriate mechanical removal method; avoid damaging the sound substrate.

Maintenance and handover

Inspect at planned shutdowns and after abnormal chemical or temperature exposure. Record blisters, cuts, corrosion and discolouration. Decontaminate and repair with a compatible lining procedure; repeat required inspections before refilling.

Retain the installed system, batch and application records, inspection results, repair details and agreed cleaning/reopening instructions. The approved TDS and current SDS should be available to the applicator and owner.