



T35, VENTILATION DUCT INSULATION SYSTEMS



water-based, sprayable thermal coating

Decicoat™ T35 is a water-based spray-on thermal insulation coating specially formulated with anti-condensation and corrosion protection properties. It has been developed to meet market requirements in the rail, off-shore, marine, chemical, petroleum, automotive and construction industries.

Unlike traditional insulation materials like glass wool or mineral fibre, Decicoat T35, being sprayable, provides a seamless application with 100% coverage. This means Decicoat T35 successfully prevents thermal bridging. With excellent adhesion to most metals, Decicoat T35 bonds flush with substrates even around uneven surfaces. Depending on the application requirement, it can be used as an independent solution, or to complement other insulation

materials, when added protection from condensation and corrosion are required for overall thermal performance. Condensation is associated with relative humidity, air pressure, and occurs when temperature differentials between two areas pass over the 'dew point' threshold. With the right coating thickness, Decicoat™ T35 regulates surface temperatures of the component by inhibiting thermal transfer to effectively control the onset of condensation.

NOTES : Suitable for indoor ventilation ducts.

A primer is required prior to application of T35.

Recommended primers :

- Akzonobel Intergard 264
- Akzonobel Intershield 300HS
- Akzonobel Interbond 808
- Akzonobel Intershield 300
- Akzonobel Intergard 5000
- Jotun Jotunmastic 871
- Jotun Penguard EXA II
- Jotun Jotunmastic 90

Or a different brand and product with the **same technical specifications.**

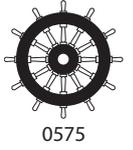
You will find the necessary technical data and application procedure in the following document.

DECICOAT T35 is a proprietary product of the Pyrotek company. The right to provide sales, price policy and after-sales technical service of the product Vizyon Inovatif Yalitim Ltd. Sti. what belongs.



The application is made in the field of" Vizyon Innovative Ltd." application. If desired, an on-site application is also carried out.

DECICOAT™ T35



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Near odourless, it complies with international fire codes for rail and marine applications, exhibiting a low spread of flame, low heat release, low toxicity and low smoke release during combustion.



applications

- Marine vessels: interiors of superstructures and hulls in workboats, luxury yachts and super-liners.
- Rail applications: carriage ceiling and walls
- Industrial: on the underside of metal deck roofing, metal wall cladding or shipping containers
- Applications exposed to high humidity and temperature fluctuations
- Oil & gas/offshore: interior structures of habitable areas and LNG pipelines
- Automotive: heavy vehicles, buses, trailers, tractors
- Applied in conjunction with traditional fibrous or foam insulation to improve overall thermal insulation systems
- Domestic: pipes, walls, interiors

features

- Thermal insulation, excellent anti-condensation and corrosion protection
- Eliminate thermal bridging
- Complies to international standards - low spread of flame, smoke and toxicity
- Manufactured under ISO 9001 Quality Systems
- Use in conjunction with other insulation materials
- Decrease interior sound levels by damping panel resonance
- Lightweight, non-sag formulation with excellent adhesion to various metal substrates
- Long-lasting, cures to a hard chip, UV and moisture-resistant finish
- Water-based compound – no volatile solvents or thinners required for cleaning - low odour environment
- No primer required - easy, fast and seamless application
- Sprayable - air gun or airless spray system

SPECIFICATIONS

Colour	White
Available	Pail: 19 L, 5 gal
	Drum: 200 L




PRODUCT SPECIFICATIONS

Colour	UOM	Weight	Consumption for 1 mm (0.04 in) DFT. Includes allowance for up to 10% material shrinkage	Service temp range (max short term)	Application guidance
White	19 L (5 gal) pail	0.39 kg/m ² /mm DFT (0.08 lb/ft ² /mm DFT)	1.1 L/m ² (0.027 gal/ft ²)	-40 °C to 120 °C (-40 °F to -248 °F)	Minimum recommended application: 0.5 mm DFT General purpose installation: 2 mm DFT Other thicknesses as per specification or requirement
	200 L drum				

To achieve a desired dry film thickness, provision for material shrinkage of up to 10% on average should be included when applying a wet coating.

Storage: Store between 10 °C to 45 °C (50 °F to 113 °F).

Shelf Life: 24 months from receiving goods (stored under recommended conditions).

MATERIAL PROPERTIES

Test method	Property	Report	Results
IMO FTP Part 5	Surface flammability	376675	Complies for Bulkhead, walls and ceiling linings up to 2.5 mm thickness on metallic substrate. USCG Type approval granted.
IMO FTP Annex 2	Smoke and toxicity	376675	
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	164.112/112/EWC MED0384TE	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD00000UK MEDD00000R4 MEDD00001HN	
DNV Type approval	Type approval certification	F-21139	Complies to DNV GL Offshore Standards, SOLAS & recognised as suitable for use by Transport Canada.
EN 45545-2 (ISO 5658-2)	Spread of flame	376677	R1, R7, R8, HL3
EN 45545-2 (ISO 5660-1 : 50kWm-2)	Heat release rate by cone calorimeter	376679	
EN 45545-2 (ISO 5659-2 : 50kWm-2)	Smoke generation (optical density)	376678	
RISSB AS 7529	Material fire performance	376677, 376678, 376679	Complies with requirements for combustible component material in Locomotive and Passenger rolling stock.
ASTM E 162	Surface flammability	101731845MID-001c	Complies for US (FRA) Federal railroad administration requirements and requirements of NFPA 130 - Complies for US (DOT) Department of transportation requirements for acoustic insulation of transit bus and vans (Docket 90A).
ASTM E 662	Optical Density of Smoke Generated	101731845MID-002c	
ASTM E 800 (SMP-800C)	Gases Present or Generated During Fires	101731845MID-003c	
FMVSS 302	Flammability of interior materials	20713JY	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles.



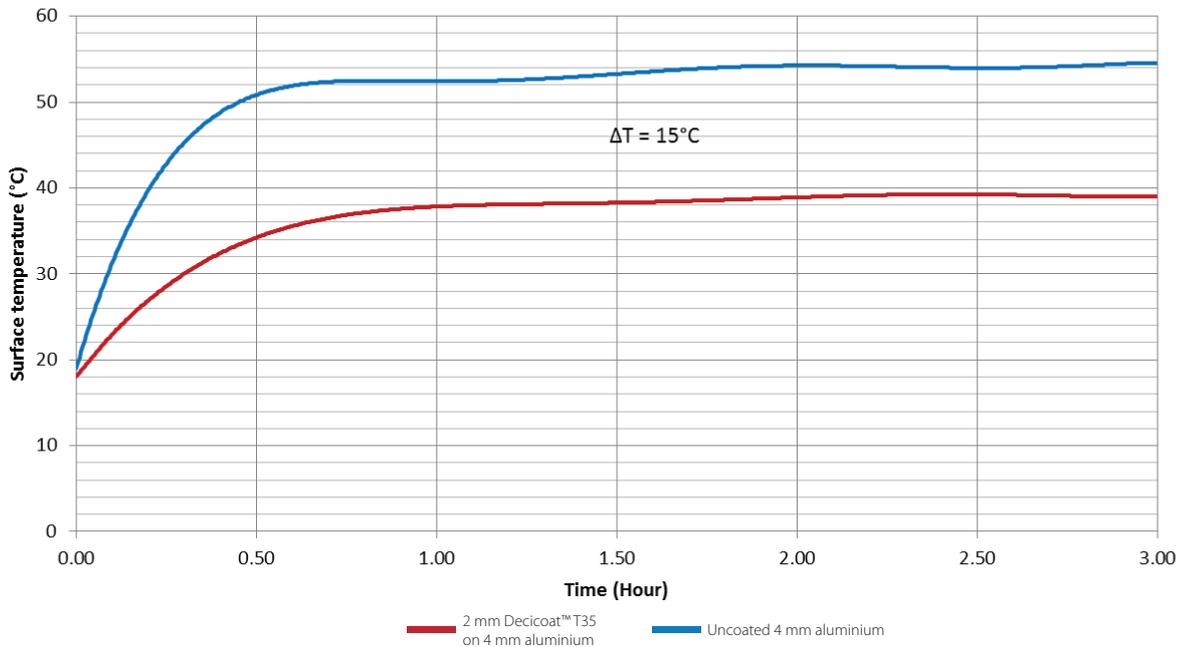
CHEMICAL RESISTANCE

UV	Water	Petrol	Diesel	10% HCl solution	10% NaOH solution	Permeability (ASTM1653) (Report no. 19013BD1)
2000+ hours	Excellent	Good	Good	Good	Good	< 3 metric perms

THERMAL PERFORMANCE

Thermal conductivity (ISO 8302) (Report no. 332/13)
0.07 Wm ⁻¹ K ⁻¹

Surface temperature comparison with radiated heat



Report no.20613BD1



DECICOAT™ T35

This installation guide provides recommendations to maximise the service life in various applications. Decicoat™ T35 is a water-based thermal insulation compound that is simple to apply using a range of spray systems.



WORK HEALTH AND SAFETY

Gloves, protective goggles, respiratory protective equipment, protective clothing and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by the applicator.

KEY INSTALLATION REQUIREMENTS

Surface Preparation

This product is specially formulated to provide high adhesion to difficult substrates such as uncoated aluminium, however adequate surface preparation is essential.

- Remove any dust, dirt, oil, grease, rust, mould-release agent, etc. from the surface using a suitable solvent.
- Abrading the surface by wire brushing, sandblasting or abrasive paper is recommended for highly polished surfaces.
- On steel substrates, surface priming is recommended to prevent flash rusting.

METHODS OF APPLICATION

Decicoat T35 can be applied using the following methods:

- **Trowel:** Simply apply and smooth as required.
- **Brush:** For brush applications, we recommend adding 0.3% of water by weight per kg of product. This will assist in easier and smoother application. Use a wide 100 mm (3.9 in) thick nylon bristle brush. Keep brush well loaded with Decicoat T35 and use short strokes, applying a thick coat of approximately 2 mm (0.08 in). Avoid "painting" back and forth as this will cause the coat to become too thin.
- **Air-assisted and airless spray systems:** Please see page 3 for the recommended spray system for the application of Decicoat T35 range.

Trowel



Brush



Spray



Decicoat T35 is a water-based spray-on thermal coating specially formulated to provide an anti-condensation solution.

The product is designed to be installed in industries such as rail, offshore, marine, and automotive.

applications

- Rail: locomotive and passenger rolling stock (interiors, floors, cabin)
- Industrial: underside of metal deck roofing and metal wall cladding
- Offshore platforms: interior structures of habitable areas
- Automotive: heavy vehicles, buses, trailers, and tractors
- In conjunction with traditional fibrous insulation



Ensure proper preparation, mixing and application for best results. Decicoat T35 range should always be applied to surfaces that are clean, dry and free of contaminants.

MIXING & APPLICATION

- Mix thoroughly before application using a ribbon or paddle mixer as shown. The product should be mixed until it is a smooth, creamy consistency.
- The pail can be placed upside down for 24 hours before use or opening to make mixing easier.
- Apply above ambient temperatures of 10 °C (50 °F).
- If required, the viscosity of the product can be altered by a maximum of 2% addition of water. Application testing performed under end-use conditions is required for water additions greater than 2%.

APPLICATION RATE & COVERAGE

- The minimum dry film thickness (DFT) should be 0.5 mm (0.02 in).
- A DFT of 2 mm (0.08 in) is recommended when applied to a system.
- Each coating should be 0.5 mm (0.02 in) to 1 mm (0.04 in) thick.
- Installation on maritime vessel to be done at recommended nominal thickness of 2.5 mm (0.1 in) DFT. Approved for use as paint systems on a metallic substrate with thickness of at least 2.25 mm (0.09 in).
- Additional thickness can be applied to achieve the desired result. The final thickness of the application will vary based on your requirement.
- When applied, thicker applications (as a single coat) are possible but will require longer drying time.
- To achieve the desired dry film thickness, provision for material shrinkage of up to 10% on average should be included when applying the wet coating.
- Use of a tack coat is recommended for the first 0.5 mm (0.02 in) coating.
- It is important to apply evenly to ensure proper curing and to reduce waste.
- Use of thermometer, hygrometer or humidity meter is recommended for monitoring application conditions. High-temperature or low humidity conditions may lead to crack formation.
- Surface defects can be avoided by reducing applied wet film thickness (WFT) to accommodate poor application conditions.
- A cracked coating can be remedied by application of an additional coat applied to the affected area.
- Excessively cold or high humidity conditions may lead to sagging. Assisted drying may be required.
- Ensure application is adequately dry before any additional coating is added.
- Lower WFT application will have a faster drying time and will allow for a quicker recoat time.



DRYING AND CURING

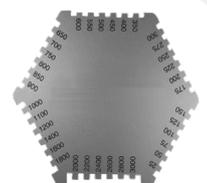
- For best results, allow the compound to dry naturally. Forced drying may result in cracking of the coat.
- In cold conditions, the substrate can be warmed to aid drying.
- Forced ventilation can be used to help coating dry. Air movement should be both in/out during drying process.
- It is recommended before install that a small section of the area is applied with the product to test and determine the adequacy of drying conditions.

Drying time	
Initial drying 1 mm	1 hour
Initial drying 2 mm	4 to 6 hours
Completely dry	24 to 72 hours

Please note: drying and curing times are only general guides. Testing should be performed by the end user, as end-use conditions (thickness of application, substrate type, temperature and humidity) will affect drying times.

WET GAUGE FILM THICKNESS CHECK

To ensure the correct film build is achieved, a wet film gauge can be used (as shown on the right).



RECOMMENDED SPRAYING SETUPS

Below displays typical configurations - other configurations and settings can also be suitable

	Airless Spray System		Air-Assisted Spray System	
	Graco Xtreme 70:1 pneumatic pump	Wagner ProSpray 3.39	Pneumatic piston pump	Bottom entry pressure pot
Gun type	XTR-7 airless spray guns	Wagner Vector Pro or Grip airless gun	GNG/T3005 texture gun, bottom entry	GNG/T3005 texture gun, bottom entry
Operating line pressure <i>"Hose pressure rating to match requirement of pump"</i>	Typically 138 to 207 bar (2000 to 3000 psi). Higher pressure required for longer hose lengths	Up to 230 bar (3335 psi)	Max. 30 bar (440 psi)	Max. 4 bar (60 psi)
Length of hose from pump to gun	30 m (98.4 ft)	15m (50 ft)	Up to 30 m (98.4 ft)	5 to 20 m (16.4 to 65.6 ft)
Diameter of hose	9.5 mm ID (3/8 in)	12.5mm (½ in)	19 mm ID (3/4 in)	19 mm ID (3/4 in)
Whip	0.5 m (1.6 ft) whip 6 mm (0.24 in) hose <i>Higher pressure required when whip used</i>	1 m x 9.5 mm (3.3 ft x 3/8 in.)	-	-
Diameter of nozzle	0.5 to 0.7 mm (0.019 to 0.029 in) (Reversible tip 419 to 429)	Reversible tip: 0.43 to 0.74 mm (0.017 to 0.029 in.)	2 mm (0.08 in)	2 mm (0.08 in)
Pump type	Ratio 70:1 piston pump	2.68 kW rated brushless DC motor	Ratio: 4:1 or greater Flow: 3 L/min (0.8 gal/min) 2-ball piston pump	20 litre (5.3 gal) bottom entry pressure pot
Air pressure requirement	2 to 5 bar (30 to 70 psi)	Site-air not required	Up to 7 bar (100 psi)	Pressure in gun: up to 6 bar (85 psi) Pressure in pot: max 4 bar (60 psi)

PRODUCT INFORMATION

Product	Decicoat T35
Weight	0.39 kg/m ² /mm DFT
Consumption for 1 mm (0.04 in) DFT <i>Includes allowance for up to 10% material shrinkage</i>	1.1 L/m ²

Substrates: Can be used on steel and aluminium.

Shelf life and Storage:

- 24 months from receiving goods (when stored under recommended conditions).
- Product to be stored and transported between 10 and 45 °C (50 to 113 °F).

Do not allow to freeze.

- Partially used pails of the product can be reused if sealed firmly after first use.
- The opened product should be resealed and used within 2 months. Frequent opening of the seal must be avoided.

Clean up and Safety:

- Equipment easily cleaned with water
- Personal Protection Equipment (PPE) including eye protection, gloves and safety clothing are highly recommended.

Please contact Pyrotek® for further information or detailed advice on your specific application.

GRACO XTREME 70:1 PNEUMATIC PUMP



XTR-7 Airless Spray Gun



GNG/T3005 Texture Gun Bottom Entry



Bottom Entry Pressure Pot



ProSpray 3.39



TÜRKİYE DİSTRİBÜTÖRÜ
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Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights.
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