

DECIDAMP® SP RANGE

Decidamp® SP range is a high-performance, fast drying, water-based, viscoelastic vibration damping compound specially formulated for easy application and maximum performance.

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

Decidamp® SP range 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 Decidamp 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.
- **Roller:** Used where high film build is not required, or for levelling and finishing an installation. Can be used to apply a final coat over surface defects. For roller applications, we recommend adding 1% of water by weight per kg of product. This will aid in an easier and smoother application. Using a short nap cloth roller, roll with short strokes, and try to avoid rolling back and forth, as this might cause the coat to become too thin. Use a light brush to "tip-off" the stipples if desired.
- **Air-assisted and Airless spray systems:** Please see page 3 for the recommended spray system for the application of Decidamp® SP range.



These advanced formulas were developed for acoustic improvement of structures that are exposed to vibration and impact.

The Decidamp SP range consists of highly-effective damping compounds that reduce vibration and minimise radiated structure-borne noise.

applications

- Marine: hulls, decks, deckheads and bulkheads
- Machinery and industrial equipment enclosures
- HVAC, plant rooms, substations
- Exit ways, smoking areas, stairwells
- Rail: locomotives, carriages, high-speed trains
- Automotive, trucks and bus underbodies
- Heavy earthmoving equipment
- Stainless steel applications (sinks, bowls)
- Hospital equipment
- Whitegoods and dishwashers
- Metal floors, deck roofing, wall cladding
- Garbage chutes

Trowel



Brush



Roller



Spray



Ensure proper preparation, mixing and application for best results. Decidamp® SP 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.
- If required, the viscosity of the product can be altered by the addition of 0.3% of water by weight per kg of product.
- Apply above ambient temperatures of 10 °C (50 °F).

APPLICATION RATE & COVERAGE

- Apply as a 2 mm (0.08 in) wet film thickness (WFT).
- Use of a tack coat is recommended: 0.5 mm (0.02 in) first coat.
- Decidamp SP150: Installation on maritime vessel to be done at maximum nominal thickness of 10 mm (0.4 in) DFT. Approved for use as paint systems on a metallic substrate with thickness of at least 3 mm (0.12 in).
- It is important to apply evenly to ensure proper curing and 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 to accommodate poor application conditions.
- 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 additional coating is added.
- Lower WFT application will have a faster drying time and will allow for a quicker re-coat time.
- The final thickness of the application will vary based on your requirement.

When the thickness requirement is unknown or not specified, the following is provided as a general guide:

- Dry coating thickness steel: >1.0 x substrate thickness.
- Dry coating thickness aluminium: >0.5 x substrate thickness.
- Dry coating thickness FRP: >0.3 x substrate thickness.

To achieve a desired dry film thickness, provision for material shrinkage of up to 15% on average should be included when applying wet coating.

Resistant to water spray or immersion up to 12 hours, however, if this is anticipated, Decidamp® SP range should always be sealed with a suitable commercial waterproof sealant/coating, applied well after complete curing of the material.



DRYING AND CURING

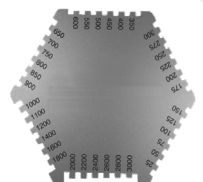
- For best results, allow the compound to dry naturally. Forced drying may result in cracking of the coat.
- In cold conditions, the substrate can be warmed to aid drying.
- Forced ventilation can be used to help coating dry. Air movement should be both in/out during drying process.
- It is recommended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

The cure time of 2 mm Decidamp® SP80, SP150, SP450, SP500			
Temperature	Humidity	Dry to Touch	Fully Cured
20 - 25 °C (70 - 75 °F)	30 - 45%	2 to 3 hours	14 to 24 hours
26 - 30 °C (80 - 85 °F)	30 - 45%	1 to 2 hours	12 to 24 hours
31 - 36 °C (90 - 95 °F)	30 - 45%	1 to 2 hours	12 to 20 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 207 bar (3000 psi) for ¾" hose with up to 3.5m³/min airflow. Higher pressure required for longer hose lengths.	Up to 230 bar (3335 psi)	24 to 30 bar (350 to 440 psi)	2 to 4 bar (30 to 60 psi)
Length of hose from pump to gun	SP150, SP450 & SP500: Up to 30 m (98.4 ft) SP80 only: Up to 15 m (49.2 ft)	15m (50 ft)	Up to 30 m (98.4 ft)	5 to 20 m (16.4 to 65.6 ft)
Diameter of hose	9.5mm (3/8") ID	12.5 mm ID (1/2" ID)	19 mm ID (3/4" ID)	19 mm ID (3/4" ID)
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	Reversible tips: 0.5 to 0.6 mm (0.02 to 0.02 in) (Reversible tips 519 to 523)	Reversible tip: 0.43 to 0.74 mm (0.017 to 0.029 in.)	2 to 6 mm (0.08 to 0.24 in)	2 to 6 mm (0.08 to 0.24 in)
Pump type	Ratio 70:1 piston pump	2.68 kW rated brushless DC motor	Ratio: 4:1 or greater Flow: 3 L/min 2-ball piston pump	20 litre (5 US gal) bottom entry pressure pot
Air pressure requirement	Approx. 3 bar (32 to 45 psi)	Site-air not required	Up to 7 bar (100 psi)	Pressure in gun: up to 6 bar (85 psi) Pressure in pot: 2 to 4 bar (30 to 60 psi)

PRODUCT INFORMATION

Product	Decidamp® SP80	Decidamp® SP150	Decidamp® SP450	Decidamp® SP500
Volume solids	70 - 75%	70 - 75%	70 - 75%	70 - 75%
Weight kg/m²/mm	1.8 kg/m²/mm DFT	1.6 kg/m²/mm DFT	1.5 kg/m²/mm DFT (1.6 g/ml wet)	1.3 kg/m²/mm DFT
Consumption for 1 mm DFT <i>Includes allowance for up to 15% material shrinkage</i>	2.1 kg/m²	1.85 kg/m²	1.9 kg/m²	1.5 kg/m²
1 mm DFT (dry film thickness) coverage using 20kg pail	9.5 m²	10.5 m²	10.5 m²	13 m²

Substrates: Can be used on steel, aluminium, GRP/FRP laminate, GRP/FRP.

Water-resistant: Decidamp® SP range varieties are water-resistant, however, where regular exposure is expected, Decidamp® SP range should always be sealed with a suitable commercial waterproofing sealant/coating, applied well after complete curing of the material.

Shelf life and Storage:

- 36 months from date of manufacture under recommended storage conditions.
- Product to be stored and transported between 10 to 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



For further information and contact details, please visit our website pyroteknc.com

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.
DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

