

**DESCRIPTION**

**Colour Flake®** make resinous flooring as beautiful as it is practical and cost effective. Colour Flake®, also commonly referred to as decorative vinyl chips or polymer flakes are specially formulated to enhance the aesthetic qualities of seamless, resin-based chip/flake flooring systems. This unique product is integrally pigmented, brilliantly coloured, random in shape and custom blended with infinite possibilities to achieve optimal appearance and texture qualities with a resinous flooring or wall coating system to match any décor.

**FEATURES & BENEFITS**

- Superior colourfastness/UV stability
- Extreme abrasion resistance
- Excellent chemical resistance
- Advanced colour-coatings chemistry
- Optimal shape and size uniformity
- Outstanding slip-resistant qualities
- Customisable to complement any décor and environment
- Perfect for heavy-duty environments
- Extraordinary resilience
- Easy to apply, clean & maintain

**RECOMMENDED USE**

- Bars, Pubs & Taverns
- Butcher Shops and Commercial Kitchens
- Food Processing Plants & Grocery Stores
- Schools, Stadiums & Hallways
- Showrooms, Garages and Workshops
- Lobbies, Lounges, Nightclubs & Foyers
- Salons, Retail Stores and Wineries
- Shopping Centres and Retail Flooring
- Museums, Office Buildings & Galleries
- Restaurants & Lunch Rooms
- Veterinary Clinics, Zoos & more...

**TECHNICAL DATA & CHARACTERISTICS**

APPEARANCE	Coloured Flake Chips / Paint Chips / Vinyl Flake Chips
COLOUR	Various
VOLUME SOLIDS	N/A
FINISH	N/A
COVERAGE <sup>1</sup>	12 – 15m <sup>2</sup> per 5kg for full coverage in epoxy flooring applications.
MIX RATIO	N/A
PACK SIZES	5kg
SPECIFIC GRAVITY	0.43 – 0.68 kg/L
POT LIFE <sup>2</sup>	N/A
DRYING TIME <sup>3</sup>	N/A
RECOAT TIME <sup>3</sup>	N/A
FULL CURE <sup>3</sup>	N/A
SHELF LIFE	72 months, if properly stored in original unopened containers at temperatures between 10°C and 30°C, away from direct sunlight.

<sup>1</sup> Coverage is dependent on porosity of surface, spread rate, and application methods.

<sup>2</sup> The pot life depends on climatic conditions and temperatures.

<sup>3</sup> Drying times generally depend on air circulation, air temperature, humidity, film thickness, substrate temperature, and application methods.

The figures given above and within this technical data sheet are typical with good ventilation, recommended film thickness and single coat application.

**SURFACE PREPARATION**

All surface preparations must be carried out to Australian Standards or International Standards. New concrete must be cured for a minimum of 28 days before coating.

A concrete moisture test should be carried out prior to coating application as per Standard ASTM4263 and/ or International Standards. The moisture content should be less than 4%.

The surface to be treated must be structurally sound and the substrate compressive strength should be at least 25MPa. The substrate tensile strength should be at least 1.5N/mm<sup>2</sup>. All non-structural cracks, holes and surface deformities should be repaired prior to coating.

In general, the surface to be treated **MUST** be clean and free of all traces of loose material, dirt, debris, mildew, oil, grease, old coatings, curing compounds, release agents, laitance, dust, and other contaminants.

All new or old concrete surfaces should be prepared by mechanical grinding, abrasive blasting, blast-tracking, or any other suitable preparation and cleaning methods. Surface profile should exceed CSP 3 after preparation.

Check if all traces of oil and other contaminations has been completely removed prior coating application. You can check that all traces of oil and other contaminants have been completely removed by sprinkling a few drops of water over the surface. If the water hydrates quickly into the substrate, the surface is sufficiently oil and grease-free.

For more detailed information, see following standard codes of practice, guides, and techniques:

ASTM D4258 Standard practice for surface cleaning concrete for coating

ASTM D4259 Practice for abrading concrete

ASTM D4260 Practice for liquid and gelled acid etching of concrete

ASTM D4262 Test method for pH of chemically cleaned or etched concrete surfaces

ASTM D4263 Test method indicating moisture in concrete by the plastic sheet method

ASTM D4285 Test method for indicating oil or water compresses air

**APPLICATION GUIDELINES****Mixing & Application - General Information**

Always prime the substrate before applying the base coat to prevent pinholing and minimise sink-back of the base coat when applied directly onto the substrate. Apply primer at a rate of 7–12 m<sup>2</sup>/L. After priming, check for pinholes and apply a second primer coat if necessary.

Apply the base coat at a rate of 6m<sup>2</sup>/L. The base coat holds the Colour Flake® in place and must not sink back into the surface. It needs to build up and form a proper film to ensure strong adhesion of the flakes to the base coat.

Check flake colour before application. Mix all flake boxes together to ensure colour consistency. The applicator/customer is responsible for applying the correct colour.

Wearing spiked shoes during application is strongly recommended. Apply the base coat from the far end of the room towards the exit.

Colour Flake® must be applied while the base coat is still wet to ensure proper adhesion. If the base coat dries too fast, the flakes will not adhere properly, leading to patchy and uneven coverage.

For large flooring projects, additional applicators are recommended to ensure the application is completed within the required timeframe. While the base coat is still wet, broadcast the Colour Flake® evenly across the surface until the desired coverage is achieved.

After 24 hours, once the base coat has fully cured, sweep the floor and set aside the leftover flakes collected during sweeping. Use a stand-up scraper at a shallow angle to lightly smooth the surface and carefully remove any protruding flakes. Caution: Excessive pressure or aggressive scraping may leave visible marks or affect the finish. Then, vacuum thoroughly to remove any remaining loose flakes.

Apply the first urethane top coat over the flakes. If any patchy areas remain, sprinkle flakes from the swept leftover material onto those areas while the urethane coat is still wet to rectify the appearance. Once the first top coat has cured, apply a second urethane top coat. A minimum of two urethane top coats is recommended if using top coats with less than 90% solid content.

Use a lint-free epoxy roller to apply the top coat product. The second urethane coat must be applied within 24 hours of the first coat to ensure proper adhesion. If more than 24 hours have passed, the first coat must be sanded before applying the second coat to ensure sound adhesion. Refer to the TDS of the top coat used, as different top coats have varying recoat windows, ranging from 2 to 24 hours. If not followed correctly, delamination may occur, either as a single-layer failure or between coats.

Different finishes, including Gloss, Satin, or Matt, can be achieved with urethane top coats. Colour Flake® already creates a slightly textured finish, and additional anti-slip additives can be incorporated to further enhance slip resistance. However, adding anti-slip additives will result in a significantly rougher texture, similar to sandpaper, making the surface extremely difficult to clean, as traditional mopping and maintenance methods may not be effective.

Discard all leftover Colour Flake® material in accordance with local regulations.

**Curing Times**

The pot life can vary according to the products and coating system used, and environmental conditions including temperature. Drying times will depend on film thickness, ventilation, temperature, humidity, application methods. Generally, allow coating to cure for at least 24 hours before light pedestrian traffic and at least 7 days for full cure and vehicular traffic. However, general curing times mentioned in this TDS are based on temperatures of 25°C.

Lower temperatures will extend curing times significantly. If the temperature in your region is 12.5°C, all curing times will double e.g., full cure will be approximately 14 days. DCC does not recommend application when temperatures are below 10°C unless using a specialised product suitable for lower temperatures.

**Cleaning**

Clean all equipment immediately after use with water or solvents, depending on the product used. Refer to the product's TDS for specific instructions.

**Coating Maintenance**

In general dirt, dust, contaminants, and excessive wear and tear will shorten the life of coating. Keep these areas clean and free from such pollutants and avoid excessive wear and tear. Clean coating regular with warm mild detergent water up to 60°C and rinse with clean water. Do not use abrasive brushes, scouring pads or solvent to clean the coated surface. It is advisable if abnormal wear and tear will occur through moving furniture such as office chairs, keep these areas protected with a protective mat. Further to the above cleaning recommendations please ensure immediate cleaning of any spills. Refer to DCC Maintenance & Cleaning Guide for detailed information.

**Compatibility & Suitability**

Do NOT mix this product or use this product in combination with any other products or brands. Only products of the same brand and system should be used in combination as a system. Due to the differences in substrates, materials, site conditions and environmental surrounds, the user is responsible for checking the product's compatibility and suitability for its intended purpose prior to application.

**PRECAUTIONS**

For professional use only. Safety Data Sheet (SDS) and Technical Data Sheet (TDS) must be read before using and opening this product. Keep out of reach of children. Always wear personnel protective equipment (PPE) when handling this product. Keep away from heat and flame. No smoking. Provide adequate ventilation. For more details refer to SDS.

Do not apply if the air or surface temperature is below 10°C, or if the temperature is likely to drop below 10°C during applying, or after application, within the curing time, or if relative humidity is expected to become above 85%. Observe dew point.

Surface staining and discolouration may result from exposure to some aggressive chemicals. Staining and discolouration will not affect the performance of the coating.

If Colour Flake® has fully cured with the base coat but was later exposed to water or rain, ensure all moisture has evaporated before applying the topcoat. Residual moisture may cause curing failure, blistering, peeling, or delamination. It can also result in a cloudy, milky, or white appearance in the top coat, which cannot be removed and will require mechanical sanding or resurfacing for rectification.

Do not apply if the substrate is subject to hydrostatic pressure or rising dampness.

Do not apply if the surface temperature is over 30°C, or if the surface temperature is likely to rise above 30°C during application, or after application within the curing time, or if relative humidity is expected to become above 85%.

Do not apply if the substrate is subject to rain or moisture, and protect the surface for at least 24 hours against any water impact or moisture after application and within the curing time. Do not use any product past its pot life. Store in a locked up, cool, dry, well-ventilated place, away from sunlight, between 10°C and 30°C. Keep container tightly closed.

Maintain a continuous wet edge to prevent colour inconsistencies and roll marks. Avoid rolling back into a coat once it has started to tack or set.

Do not apply this product if there is uncertainty about its application or surface preparation.

**DISCLAIMER**

This Technical Data Sheet is to be used as a guide only and is NOT a substitute for a specification. Durable Concrete Coatings Pty Ltd has no control over on-site conditions, application methods, environmental temperatures, the use or storage of this product and does not accept liability in this regard. Any verbal advice provided by staff of Durable Concrete Coatings Pty Ltd should not be treated as authoritative information or instructions for use.

This information may be subject to change without notice to you, all users should ensure they have current information. This product is intended for use by skilled tradesman and where applicable, statutory licensed tradesmen experienced and trained in the use of this product.

Due to differences in substrates, application methods and local conditions purchasers of these products must ensure that it is suitable for their specific application before using these products. The information contained in the technical data sheets, safety data sheets, and technical notes is accurate to the best of our knowledge.

Durable Concrete Coatings Pty Ltd cannot guarantee that the information contained is wholly comprehensive. Subject to the provisions of the Competition and Consumer Act 2010, the company's liability in relation to defective products shall be limited to replacement of the product, if the product is proven to be defective. All Durable Concrete Coatings Pty Ltd terms and conditions apply.