TECHNICAL DATA SHEET

EPOXY EP200®

DESCRIPTION

Epoxy EP200® is a high performance, 100% solid, solvent free, heavy-duty premium two-pack epoxy resin matrix of superior formulation, containing the latest technology, which is specifically formulated and designed as a stand-alone coat and as binder for non-skid surfaces. It is high gloss, self-levelling, and highly chemical resistant. This epoxy is designed for the use in a wide range of environments where a lasting solution to floor maintenance problems is required. The exceptional resistance to a wide variety of chemical spillage and fumes makes this product ideal for use in high traffic and commercial environments. The product is seamless, easy & fast to apply, easy to clean & maintain and has excellent adhesion, high durability and exceptional water & chemical resistance. If you require UV protection, we recommend DCC Urethanes and Polyaspartics for maximum performance.

FEATURES & BENEFITS

- High-performance Australian made epoxy
- Excellent adhesion/inter-coat adhesion
- Superior abrasion resistance
- High durability
- Excellent water & chemical resistance
- Retards growth of mould, fungus, mildew, and bacteria
- Perfect for heavy-duty environments
- Solvent free
- Summer and winter epoxy hardeners available
- Seamless finish
- Self-levelling and self-priming
- Easy to apply, clean & maintain

RECOMMENDED USE

- Bars, Pubs & Tavern
- Warehouses & Aircraft Hangars
- Butcher Shops and Commercial Kitchens
- Food processing Plants & Grocery Shops
- 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	Liquid
COLOUR	Available in various colours
VOLUME SOLIDS	100%
FINISH	Gloss
COVERAGE[1]	5 – 10m²
MIX RATIO	3:1 (3 Parts A to 1 Part B) by Volume
PACK SIZES	10L Kit & 20L Kit
SPECIFIC GRAVITY	Part A: 1.40 – 1.79 kg/L Part B: 0.99 – 1.09 kg/L
POT LIFE[2]	20 – 40 minutes
DRYING TIME[3]	2 – 4 hours @25°C
RECOAT TIME[3]	4 – 24 hours @25°C
FULL CURE[3]	7 days @25°C
SHELF LIFE	12 months, if properly stored in original unopened containers at temperatures between 10°C and 30°C, away from direct sunlight.

[1] Coverage is dependent on porosity of surface, spread rate, and application methods.
[2] The pot life depends on hardener selection, climatic conditions and temperatures. Refer to the table under 'Curing Times'.
[3] Drying times generally depend on hardener selection, air circulation, air temperature, humidity, film thickness, substrate temperature, and application methods. Refer to the table under 'Curing Times'.

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/mm². 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

Pre-Tinted Versions

Firstly, stir Epoxy EP200® Part A thoroughly before use to disperse the colour pigments consistently. Use a mechanical mixer to ensure thorough mixing and avoid aeration during the process. Always add Part B later and mix with Part A after Epoxy EP200® Part A has been thoroughly stirred and any aeration has disappeared. Mix thoroughly and check the colour and gloss levels before application. If your project requires multiple kits, you MUST box the kits together for colour consistency. The user is responsible for applying the correct colour and checking overall colour consistency.

Mixing & Application - General Information

The mix ratio is 3:1 by volume. Mix Epoxy EP200® (3 Parts A) with Epoxy EP200® Hardener (1 Part B). Always add Part B slowly into Part A while mixing. Once all of Part B has been combined with Part A, add thinner slowly while still mixing. Use a mechanical mixer to ensure thorough mixing and avoid aeration when mixing the product. Do NOT mix epoxy batch manually. Apply the product using a lint-free epoxy roller. Do NOT leave mixed epoxy batch in the bucket. Once thoroughly mixed and ready for application, promptly pour the entire mixture evenly onto the surface and begin rolling it out. If the mixed epoxy is left in a confined space (bucket) for too long, it will quickly generate heat and start curing, making it unusable. This exothermic reaction can also produce enough heat to cause smoking, melt plastic, burn skin, or ignite surrounding combustible materials when Part A and Part B are combined in a mass.

Mixing & Application - Prime Coat

Prime coat is Epoxy EP200® diluted with 25% solvent.

Always prime surface before applying the base coat to prevent pin holing and to minimise sink-back of material. Apply the prime coat at a rate of 7-10m²/L, depending on substrate porosity. For the prime coat, add 25% Solvent SLP100™ for dilution by volume per mixed litre of epoxy. Check for pinholes, and if needed, apply a second prime coat. Refer to the table below for examples of mixing ratios.

Prime Coat	1L	2L	3L	4L	5L	6L	7L	8L
3 Parts A	0.75L	1.5L	2.25L	3.0L	3.75L	4.5L	5.25L	6.0L
1 Part B	0.25L	0.5L	0.75L	1.0L	1.25L	1.5L	1.75L	2.0L
25% Solvent	0.25L	0.5L	0.75L	1.0L	1.25L	1.5L	1.75L	2.0L

Mixing & Application - Base Coat

Base coat is Epoxy EP200® diluted with 5-10% solvent.

Apply the base coat at a rate of 6m²/L. For the base coat, add 5% Solvent SLP100™ for dilution by volume per mixed litre of epoxy. Refer to the table below for examples of mixing ratios.

Base Coat	1L	2L	3L	4L	5L	6L	7L	8L
3 Parts A	0.75L	1.5L	2.25L	3.0L	3.75L	4.5L	5.25L	6.0L
1 Part B	0.25L	0.5L	0.75L	1.0L	1.25L	1.5L	1.75L	2.0L
5% Solvent	0.05L	0.1L	0.15L	0.2L	0.25L	0.3L	0.35L	0.4L

Please be careful with batch sizes to match pot life. Factors like air circulation, humidity, and temperatures affect pot life and working time. Larger mixes have shorter pot life and faster curing. It is the responsibility of the user to monitor environmental conditions, especially in hotter climates and tropical settings.

After the application, dispose of any remaining material. Do NOT pour any leftover mixed material back into the original container as this can cause all the material to react and harden inside the drum. Once Part A and Part B are mixed, the product will begin to react and cannot be used beyond its pot life. It is recommended to apply at least two coats: one prime coat and one base coat, following the minimum spread rate outlined in the technical data sheet.

Generally, the second and any subsequent coats must be applied within 24 hours of the application of the previous coat to ensure chemical intercoat adhesion. If 24 hours has been exceeded, the first coat must be sanded prior to the application of the second coat to assure a sound adhesion between coats.

The noted recommended recoat times, pot life and working times are an indication only. The product mix will cure significantly faster if any of the following are present: high starting point product temperature, high humidity, high room temperature, high airflow, lower solvent volume in either or both prime and base coats, and prolonged mixing time. Another important consideration is the type of hardener used. Refer to the tables below for examples. For UV protection, use DCC Urethane or Polyaspartic which can also achieve different finishes like Gloss, Satin, or Matte.

Curing Times

The pot life can vary according to environmental conditions including temperature. Drying times will depend on film thickness, ventilation, temperature, humidity, application methods and hardener used. 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. Refer to the tables below for examples. Tables are to be used as a guide only.

Lower temperatures will extend curing times significantly depending on the type of hardener used. 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 epoxy application when temperatures are below 10°C as the epoxy goes into B-staging (the epoxy stops curing). This applies to all hardeners except for the winter hardener, see tables below.

Winter Hardener Guide

Temperature	Humidity	Pot Life	Touch Dry	Light Traffic	Full Cure	Recoat min	Recoat max	Suitability
5°C	<70%	50-70 min	11-13 hours	48 hours	12 days	24 hours	48 hours	***
10°C	<70%	40-50 min	4-6 hours	28 hours	8 days	18 hours	36 hours	*****
15°C	<72%	25-35 min	3-5 hours	24 hours	7 days	15 hours	30 hours	****
20°C	<73%	15-25 min	2-4 hours	19 hours	6 days	12 hours	24 hours	**

Standard Hardener Guide

Temperature	Humidity	Pot Life	Touch Dry	Light Traffic	Full Cure	Recoat min	Recoat max	Suitability
5°C	<70%	80-100 mins	15-22 hours	4 Days	24 Days	30 hours	90 hours	———
10°C	<70%	50-70 mins	12-15 hours	3 Days	18 Days	24 hours	72 hours	***
15°C	<72%	40-50 mins	8-12 hours	48 hours	12 Days	21 hours	64 hours	*****
20°C	<73%	30-40 mins	5-8 hours	28 hours	8 Days	18 hours	48 hours	*****
25°C	<75%	20-30 mins	4-5 hours	24 hours	7 Days	14 hours	40 hours	*****
30°C	<80%	15-25 mins	3-4 hours	18 hours	5 Days	12 hours	35 hours	**

Medium Hardener Guide

Temperature	Humidity	Pot Life	Touch Dry	Light Traffic	Full Cure	Recoat min	Recoat max	Suitability
5°C	<70%	99-130 mins	21-27 hours	6 Days	34 Days	36 hours	108 hours	———
10°C	<70%	80-96 mins	14-18 hours	4 Days	26 Days	24 hours	72 hours	*
15°C	<72%	65-75 mins	10-14 hours	72 hours	17 Days	21 hours	64 hours	****
20°C	<73%	40-50 mins	6-9 hours	48 hours	12 Days	18 hours	48 hours	*****
25°C	<75%	35-45 mins	5-6 hours	28 hours	8 Days	14 hours	40 hours	*****
30°C	<80%	25-35 mins	4-5 hours	24 hours	7 Days	12 hours	35 hours	*****
35°C	<80%	15-25 mins	3-4 hours	18 hours	5 Days	10 hours	30 hours	**

Summer Hardener Guide

Temperature	Humidity	Pot Life	Touch Dry	Light Traffic	Full Cure	Recoat min	Recoat max	Suitability
10°C	<70%	95-120 min	30-36 hours	5 Days	32 days	48 hours	144 hours	———
15°C	<72%	75-95 min	25-30 hours	72 hours	24 days	42 hours	108 hours	**
20°C	<73%	50-70 min	15-20 hours	56 hours	16 days	36 hours	72 hours	***
25°C	<75%	40-60 min	5-10 hours	48 hours	12 days	28 hours	54 hours	****
30°C	<80%	30-40 min	5-8 hours	28 hours	8 days	21 hours	45 hours	*****
35°C	<80%	20-30 min	1-5 hours	24 hours	7 days	14 hours	36 hours	*****

***** Highly Suitable
**** Suitable
*** Moderately Suitable
** Somewhat Suitable
* Low Suitability
——— Unsuitable, do not use in these conditions

Cleaning
Clean all equipment immediately after use with Solvent SLP100™.

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 Regular, Medium or Summer Hardener 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.

Do not apply Winter Hardener if the air or surface temperature is below 5°C, or if the temperature is likely to drop below 5°C during applying, or after application, within the curing time. Do not apply if relative humidity is above 85%, or when the surface and/or ambient temperature is <3°C above the dewpoint.

Product will discolour on exterior exposure. Though UV radiation can lead to surface discolouration and chalking, this will not affect coating performance. To prevent discolouration, it is recommended to apply a UV-stable and protective top coat such as Urethane 2Pack®, Durathane SP40®, Durathane SP100®, Polyaspartic PS60®, Polyaspartic PS90®, or Aqua Urethane 2Pack®.

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

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.