

Technical Information
and
Application-instructions
for
B r a n t h o - K o r r u x
"2K – Durasolid"

Brief description:

Two-component – Corrosion-Protection– Primer and top coat

universal suitable for steel, stainless steel, aluminium, GfK, plywood, zinc, concrete and other substrates.

Glossy appearance and hard laquer surface for underwater use.

Very good resistance against acids, alkalis, solvents, feces a.o.

Extremely high filling power. **Very low emission and odor during application**, therefore well suited for indoor use.

Proven for the prevention and repair of osmosis bubbles in GfK (above and under water areas).

Fields of application:

Mill wheels, pumps, pontoons, sheet piling, bollards, valves, gates, barriers,

Salt water load, waste water load, fresh water load, soil moisture,

Grids, tanks, agitators, scoops, boats, ships, pipes, mast feet,

tons, dredgers, water ski jumps, stone saws, solar panels,

Bathing, swimming and fountain pools (with chlorine and/or ozone additives in water), screens, working platforms, ladders, watercourses and slides, railings,

Stairs and much more.

Manufactured by:

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General information:

- min. 2-layer recommended, extremely low-odour application
- glossy, hard finish, possible vegetation on laquer surface can be easily removed
- does not replace Anti-Fouling, can be used without primer
- optimal underwater resistance, high layer thickness in one stage

Application-instructions:

Application

- **Stir thoroughly** before and after mixing the components.
 - Maintain exact mixing ratio (in parts by weight) (mix partial quantities if necessary).
 - Avoid air inclusions as far as possible (when stirring, rolling, brushing).
 - Minimum processing temperature: 15° C,
minimum drying temperature 10° C
20° C and a dry environment are ideal.
 - During application and drying, the relative humidity should be < 80 % rH, the surface temperature must be at least 3° C above the dew point.
 - The mixed quantity must be applicated within the pot life (temperature-dependent), after which it must not be processed further.
 - Recommended application quantity:
 - on steel: min. 500 g/m² (e.g. two layers of 150 µ each)
 - as renovation coat: min. 250 g/m²
 - on particularly rough concrete: up to 1 kg/m²
 - The application can be done by brushing and rolling (diluting **not required**) preferably with a foam roller, a short-piled mohair roller or brush; spraying with an airless device or large nozzle is also possible.
 - Brushing, rolling: after mixing, undiluted
 - Airless spraying: after mixing, add approx. 3-5% % „Kombi-Verdünnung“.
 - Air pressure spraying: after mixing, add approx. 5-10 %% „Kombi-Verdünnung“.
- Suitable thinner for spraying:** „Branth's Kombi-Verdünnung“;
Not recommended: Synthetic resin thinner, turpentine substitute, nitro thinner, white spirit.
- Contains epoxy constituents. Do not allow application by persons allergic to it.

Recoating

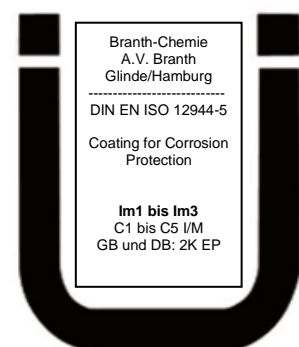
- Old paint finishes should be thoroughly dried before Durasolid is applied.
- Durasolid can be recoated within pot life. We do not recommend further recoating after it is dry to handle (appr. 2 days). From the 2nd to the 8th day Durasolid can be repainted without sanding. After that we recommend sanding the surface first.
- Other paints or fillers: With 1-component materials, recoat after 1-2 days at the earliest; with 2-component materials, recoat after 2-3 days at the earliest. If necessary, carry out own tests. Sand surface after more than 1 week.

Application errors, what to do?

- Incorrect mixing ratio: correct or dispose.
- Pot life exceeded: do not continue applicating, dispose.
- Drying temperature below predetermined value: warm up, wait
- Applicated after pot life exceeded: remove coating.
- Applicated with incorrect mixing ratio: remove coating.
- Interval of recoating exceeded: Grind surface
- The most common processing error is insufficient stirring = not stirring and distributing the hardener with sufficient care. Therefore please: stir really thoroughly.

Technical data:

- **Brief description:** glossy, high-build 2-component coating material with very high solid content (vhs = very high solid) for underwater use.
- **Viscosity:** thixotrope
- **Specific weight.:** appr. 1,6 kg/ltr.
- **Gloss:** appr. 85 % (according to NCS) = glossy
- **VOC-value:** 80 g/l (ready for application, depending on color shade)
- **Coverage:** approx. 4.2 m²/kg at 150 µm (theoretical)
- **Application temperature:** recommended: 18°-25° C, possible: 15°-30° C
- **Solid content:** 100 % (= master laquer component); appr. 96 % (= mixed ready for application)
- **Colors:** black9005, red-brown3009, blue5015 and cream white9001 from stock, other colors from 39 kg
- **Packaging size:** 5,5 kg master laquer + 2x0,5 kg hardener = 6,5 kg or
825 g master laquer + 150 g hardener = 975 g
on request: 11 kg master laquer + 4x0,5 kg hardener = 13 kg
Minimum production quantity for non-stock colors: 39 kg
(Filling as desired, usually 6,5 kg units)
- **Mixing ratio:** master laquer : hardener = 5,5 : 1 (weight), no pre-reaction time
- **Potlife:** 2-3 hours at 20° C, 3-4 hours at 15° C, 1-2 hours at 25° C
- **Drying:** (temperature related)
 - at 20° C and 65 % relative humidity
dust-dry: 24 hours, dry to touch: 48 hours, water resistant: from 72 hours
 - at 15° C and 65 % relative humidity
dust-dry: 36 hours, dry to touch: 72 hours, water-resistant: from 7 days
- **Occupational health and safety/Disposal:** Extensive information is available from the safety data sheet
- **Heat-forced drying:** is not possible. Temperatures above 40° C during drying result in sticky, less glossy coat surface for days
- **Temperature resistance:** dry: -20° C to +120° C wet: -20° C to +90° C
- **Classification:**
 - EU-directive 2000/53/EG (end-of-life vehicles): fulfilled
 - EU-directive 2002/95/EG (electrical equipment): fulfilled
 - DIN 4102-1: Baustoffklasse B2
 - DIN EN ISO 12944-5: suitable for all 3 corrosion categories: Im1 (fresh water), Im2 (sea- or brackish water), Im3 (soil);
Expected resistances: < 500 µ = L, M (up to 5, up to 15 years)
 > 500 µ = H (over 15 years)
 - ChemVOCFarbV: High-performance specialty coating (permissible VOC content: 500-840 g/l) VOC content: 80 g/l.
- **Storage stability:** master lacquer: 24 months, hardener: 12 months
The hardener is hygroscopic, i.e. it must be stored in a dry place (especially once opened). The hardener must be clear before mixing. Do not use cloudy hardener.
- **Beste before date:** The best before date on the cans of master laquer and hardener indicates the guaranteed minimum storage life of original sealed cans when stored in a cool and dry place. The best-before date is intended to help you to applicate older cans first. As long as paint is perfectly stirred and homogeneous, it can be applicated without any problems.



Further guidance:

Weather resistance

When exposed to UV weathering, this coating material chinks after a few years, i.e. the color tone becomes lighter. Weather resistance is achieved by overcoating with Branth's "2K Anti-Graffic Paint" or Brantho-Korrux "2-Kompo". 2 to 8 days after application of "2K-Durasolid", overpaint can be applied without sanding.

Observe occupational safety and environmental protection regulations

The master laquer component is solvent-free, the hardener contains less than 20 % solvent, the ready-to-use mixture thus only has approx. 4 % solvent (at 96 % solid content). Nevertheless, the liquid components present environmental and health hazards. Information on the labels and in the safety data sheet as well as general occupational safety regulations must be observed.

Interior applications

Brantho-Korrux "2K-Durasolid" is very suitable to be applied indoor (based on the scheme for health assessment of VOC and SVOC emissions from building products). (DEKRA test 09/10).

Slip resistance

The rough surface of Brantho-Korrux "2K-Durasolid" with the addition of Branth's Slide-Stop additive is slip-retardant (Material Prüfinstitut Hellberg, Adendorf 01/11).

Measurement results for "2K-Durasolid" according to DIN 51130/BGR181 (working rooms, working areas): R10

Saliva and perspiration fastness

Brantho-Korrux "2K-Durasolid" was successfully tested according to DIN 53160 (1 and 2) (IKS Dresden, 10/10)

After correct application and curing, the dried painting film offers:

- it is odorless and tasteless;
- resistant to saliva, sweat, urine, faeces, etc;
- harmless to plants, plant roots etc;
- non-toxic for fish and other animals;
- very resistant to hot and cold water (with or without industrial additives);
- very resistant to solvents;
- resistant to sand, clay, loam, topsoil - i.e. soil, whether wet, damp or dry, salty, acidic or alkaline;
- resistant and neutral to common food (FDA: "dry food at room temperature");
- the painting film is hard, smooth and firm - but permanent exposure to weather UV causes chalking of the surface;
- the long-term resistance is limited in the case of extreme exposure to acids and alkalis;
- not sufficiently resistant to continuous gasoline exposure (better: Brantho- Korrux "2-Kompo" plus 2K-Anti-Graffic).

We are convinced that the above information is correct, we decline any liability for it.

Valuable tips:

- We as manufacturer have no influence on the application and its conditions. Under no circumstances too much hardener should be added in order to ensure physiological safety.
- If physiological harmlessness is of particular importance:
Maintain mixing ratio exactly, mix carefully and thoroughly, stir for at least 3 minutes, repot preferably once and stir again if possible, cover can bottom and wall, observe application time / pot life, observe drying times and temperatures carefully.
- Before contact with food, it has proved to be best to wash the surface with 1 % acetic acid or citric acid.

This information sheet has been carefully prepared and is intended to provide advice to the best of our knowledge. The datas contain average values and are not legally binding.