

Technical Data Sheet Special products May 2008

DuoTop NEW **OIL-WATER-SYSTEM**

Complies with EU VOC Reg. 2010

NON-SLIP R 9

FOR HARDWOOD, SOFT WOOD, CORK AND BAMBOO FLOORS - 2 COATS IN COMPLIANCE WITH EUROPEAN VOC REGULATIONS VALID FROM 2010

PRODUCT CHARACTERISTICS:

Particularly beautiful, natural, wear resistant surface.

SAICOS DuoTop (Oil/water) is a new kind of wood finish, especially developed for wood, cork and bamboo flooring, but also recommended for other heavily used wood surfaces. It combines the advantages of an oil/waxed wood finish (enhancing the natural beauty of the wood surface) with an outstanding abrasion resistance and durability.

It is very easy to clean and to keep-up.
SAICOS DuoTop is environmentally friendly, allows the wood to breathe and reduces swelling and shrinking. SAICOS DuoTop has been developed to comply with the European VOC Regulations valid from 2010. It is highly slip resistant classified R 9 (in compliance with German DIN 51130/2004-06), and can easily be renovated - also in parts.

It is very economical because of the easy application and high yield.

SAICOS Floor Finish DuoTop is available in two versions:

1. For normal wear (private areas)

1 x SAICOS DuoTop Oil Ground coat, colourless or coloured, followed by:

1 x SAICOS DuoTop 1 K Aqua Finish, colourless (1 K Agua Finish can be repeated, if desired).

2. For heavy wear (public areas)

1 x SAICOS DuoTop Oil Ground Coat, colourless or coloured, followed by:

1 x SAICOS DuoTop 2 K Aqua Finish colourless, intermixed with DuoTop Hardener (10 parts Aqua Finish with 1 part Hardener).

(2 K Aqua Finish can be repeated for extremely hard wear).

SAICOS DuoTop articles:

3410 Oil Ground Coat colourless (primer)

Coloured Oil Ground Coat also obtainable (often used for levelling out unevenly coloured wood species).

9903 1 K Aqua Finish, colourless, satin matt.

9907 2 K Aqua Finish Combo Pack with Hardener,

colourless, satin matt,

9905 Hardener (included in combo pack 9907).

All wooden floors (solid wood or parquet) and other interior wooden surfaces made from hardwood, coniferous (soft) wood, cork and bamboo, also from other valuable wood species like Jatoba, Ipé, Kempas, Rosewood, Massaranduba, Merbau, Smoked Oak, Wengé and Thermowood (if in doubt, try out on sample). Also very well suited for use in rooms with a high moisture content

like bath or kitchen.

The DuoTop Wood Finishing System is also very well suited for the surface treatment of furniture, table, bar and other wooden work

APPLICATION PROCEDURE:

Preparation: Wood surface must be clean, dry and smooth (max. humidity 12 %). All remnants of paints or varnishes must be carefully removed. Sand surface well (final sanding grain at least 120), also sand corners. Remove sanding dust carefully with cloth or vacuum cleaner.

Wood tending to develop blue stain in rooms with high humidity (pine and other soft woods in kitchens and bathrooms) pretreat with SAICOS WOOD IMPREGNATION biocidefree (preventive protective against blue stain and mildew).

BEST WORKING TEMPERATURE:

15° - 25° C, minimum 8° C.

FIRST COAT:

OIL GROUND COAT (primer), colourless or coloured.

Stir well - do not thin.

Apply thinly with SAICOS DOUBLE SPATULA / SPRING SPATULA and spread evenly. Approx. 15 g/m2 depending on wood specie. Leave to soak in for approx. 20 min. Then equalize with one- or multi-disc machine (white pad) for a cloudless appearance.

Wooden floors with grooves equalize with one- or multi-disc brushing machine to remove surplus material from grooves.

Drying time: Approx. 8 - 10 hrs. (depending on temperature and air humidity).

After drying smooth surface with one- or multi-disc machine (green pad).

Then apply:

SECOND COAT:

1 K AQUA FINISH for normal wear (private areas)

1K Aqua Finish is ready to use, stir well with mechanical stirrer. Apply evenly and undiluted with SAICOS Aqua roller. Volume approx. 80 g/m².

Drying time: dust dry approx. 1 hr.,

usable approx. 2 - 3 hrs.

Final state of hardening and resistance approx. 8 days.

If desirable, the 1 K Aqua Finish application can be repeated after approx. 2 hrs drying time if a further resistance is desired. In this case, sand with grain 150 before repeating application.

<u>2K</u> AQUA FINISH

for extremely heavy wear (public areas)

Mix Hardener with 2 K Aqua Finish base material (1 part hardener to 10 parts 2 K Aqua Finish). Stir well with mechanical stirrer for about 2 min. Interrupt procedure for approx. 5 - 10 min. and stir again thoroughly for another 2 min. to ensure even and spekkless application

Apply undiluted with SAICOS Aqua roller, approx. 80 g/m2.

Potlife of mixture 2 - 3 hrs. (IMPORTANT - don't close can during

After approx. 3 - 4 hrs. drying time the application can be repeated if a further increase of resistance seems desirable. In this case the surface should be sanded (grain 150) before re-application.

Drying time: dust dry approx. 1 h.

Usable approx. 3 - 4 hrs.

Final hardening and utmost resistance approx. 8 days.

CLEANING OF WORKING UTENSILS:

DuoTop Aqua Finish: water.

DuoTop Oil Ground Coat (primer): SAICOS BRUSHCLEANER (benzolefree).

Note: All DuoTop products are sprayable

NUMBER OF APPLICATIONS:

Oil Ground Coat (primer): 1 1 K Aqua Finish: or 2 K Aqua Finish: 1 (-2).

DRYING TIMES:

Oil Ground Coat (primer): approx. 8 - 10 hrs. 1 K Aqua Finish: dust dry approx. 1 h.,

usable approx. 2 - 3 hrs.

(a second coat can be applied after approx. 2 hrs. after previous

sanding).

2 K Aqua Finish: dust dry approx. 1 h.,

usable approx. 4 - 5 hrs.

(a second coat can be applied after approx. 3 - 4 hrs. after previous

Ultimate hardening and resistance achieved after approx. 8 days.

EASY CLEANING, CARE AND MAINTENANCE: Dry cleaning: With broom, cloth, duster or vacuum cleaner.

Moist cleaning: Add some SAICOS WASH CARE additive to cleaning water. Wring cloth out before using.

Heavier stains (f. i. from rubber soles) remove with SAICOS CLEA-NING SPRAY and cloth, SAICOS POLISH PAD or Scotch Pad.

Occasional Freshening up: To retain fresh and new appearance treat with SAICOS DuoTop REFRESHENER (water dilutable approx. 1 part REFRESHENER to 10 parts of water)

approx. every 3 - 6 months or when desirable.

Partial renovation: Worn parts sand lightly and apply new coat of SAICOS DuoTop 1 K or 2 K Aqua Finish (with hardener), as chosen. Both 1 K and 2 K Aqua Finish can be applied on surfaces originally treated with either, after sanding area with sandpaper, grade 150.

Renovation: In case complete renovation is desired, it is not necessary to sand off the complete old coat if a new coat of 1 K or 2 K is to be applied (except when a coloured ground coat is wanted instead of the old colourless one. If the floor has previously been finished with another product this must however be completely removed before applying DuoTop (s. "preparation").

INGREDIENTS Oil Ground Coat (primer)High Solid:

High solid product = more than 75 % solids content remaining on the wood

Natural vegetable base:

Sunflower, soybean and thistle oils.

Zink-Zirconium-Cobalt-Octoates (drying agents Additives:

from leadfree minerals),

2-Butanonoxim (prevents forming of skin).

Volatile ingredients (solvents):

Aliphatic hydrocarbons (disaromatized white spirit, benzolefree) complying with the purity demands of the European Pharmacopoeia.

EU limiting value for DuoTop OIL GROUND COAT (cat. A/i): 600 g/l (2007) / 500 g/l (2010). DuoTop OIL GROUND COAT contains maximum 290 g/l VOC.

INGREDIENTS 1 K Aqua Finish:

water-soluble polymere-dispersion Rinder:

Polysiloxanes Additives: Volatile ingredients: solvent water.

INGREDIENTS 2 K Aqua Finish base material:

water-soluble polymere-dispersion

Volatile ingredient: solvent water, mixture of glycol-ethers.

INGREDIENTS of Hardener for 2 K Aqua Finish:

mixture of aliphatic isocyanates based on Hexamethylen-diisocyanates 85 % in mixing esters.

PYSICAL PROPERTIES Oil Ground Coat (primer):

Specific gravity: 0.94-0.96 g/cm³

Viscosity: slightly thixotropic, creamy.

mild/weak (of natural vegetable oils and waxes), Odour. odourless when completely dry.
over 61° C according to DIN 53213 (EURO-Flashpoint:

Norm identification not required).

PYSICAL PROPERTIES

1 K Aqua Finish and 2 K Aqua Finish base material:

Viscosity: 22 ± 2 Sek. 4 mm DIN cup

Density: 1,02 g/cm3

typical, odourless when completely dry Odour:

over 100° C according to DIN 53213, inflam-Flashpoint:

SAFETY ADVICE

Oil Ground Coat,

1 K Aqua Finish and 2 K Aqua Finish base material:

Keep out of the reach of children. Do not fill into containers normally used for food and drink. Do not bring into contact with victuals and animal food. In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

Oil Ground Coat: Do not apply in the presence of naked flames. Wash out any used cloth immediately or store in airtight container (danger of combustion). - Dried coat normally inflammable (EURO-Norm EN 13501 - DIN 4102)

Hardener for base material 2 K Aqua Finish:

Harmful by inhalation. R 20

R 36/37/38 Irritating to eyes, respiratory system and skin. R 43 May cause sensitisation by skin contact. S 7/8 Keep container tightly closed and dry. S 24/25 Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately S 26 with plenty of water and seek medical advice.

Wear suitable gloves.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

STORAGE PROPERTIES:

Oil Ground Coat: at least 5 years, in closed container.

1 K and 2 K Aqua Finish: at least 2 years, in closed container. Transportation and storage frostfree (minimum temperature 5 °C).

CAN SIZES AND COVERAGE CAPACITIES:

Oil Ground Coat:

0,375 | = approx. 25 m² 1 coat (spatula), 0,75 | = approx. 50 m² 1 coat (spatula), 2,5 | = approx. 160 m² 1 coat (spatula),

(dependent on wood species and surface -

rough or stratiated wood respectively less).

1 K Aqua Finish:

I = approx. 30 m² 1 application, I = approx. 120 m² 1 application. 2,5 10,0 (2nd application same coverage).

2 K Aqua Finish:

10,0 l base material, Hardener 1,0 l, mixture 11 l = approx. 130 m^2 1 application (2nd application same coverage).

HEALTH AND ENVIRONMENT:

The SAICOS DuoTop system contains no biocides. The dried finish complies with German DIN 53160 T. 1+2 (fast to perspiration and saliva) and the EURO-Norm EN 71 T. 3 (assessment of migration behaviour) = suitable for children's toys.

The above information is given to the best of our knowledge but witout liability.