



Product Code	10130DSC13X53
Product Name	GORI 53 2S FLOOR FINISH
Recommended for	Wooden floors and stairs

1 Product Description

- 1.1 **Product Type:** GORI 53 is a modern, 2-component, water based, polyurethane varnish for treating indoor wooden floors and stairs.
- 1.2 **Manufacturer:** Manufactured by PPG Poland. Distributed by: PPG Coatings Danmark A/S - Gladsaxevej 300 - 2860 Søborg - Denmark - Phone: +45 39 57 93 00 - www.gori.com
- 1.3 **Where to use:** Wooden floors, parquets, mosaics, industrial floors and planks.
- 1.4 **Special Qualities:** GORI 53 is characterised by very high mechanical resistance and ease of application. The varnish creates an aesthetic, non-yellowing coating, which is resistant to water and chemical agents such as alcohol and detergents.
- High resistance to wear and scratches
 - Elastic varnish coating
 - Does not contain NMP
 - High chemical resistance
 - Resistance to shoe marks (BHMR)
 - Long lasting decorative coating
 - DIN V18032-2
 - Fire reaction classification according to EN 13501-1:2007 class C_{fl} - s1
 - Meets the requirements of the PN-EN 14904 in terms of sliding susceptibility, mirror reflection and abrasion resistance
- 1.5 **Form supplied:** Ready to use. Use with GORI Hardener.
- 1.6 **Test reports / certificates:**
- Product holds the approval of the National Institute of Hygiene.
 - DIN V 18032-2 for sports surfaces
 - Fire reaction classification according EN 13501-1:2007
 - Declaration of Conformity PN-EN ISO/IEC 17050-1
 - Meets the requirements of the PN-EN 14904. Sports facilities floors – Commercial sports floors designed for multiple sports disciplines in terms of sliding susceptibility, mirror reflection and abrasion resistance

2 Composition

- 2.1 **Solvents:** Water

- 2.2 VOC-content: VOC limit according to Directive 2004/42/EC (Cat. A/j/FW): 140 g/l (2010). This product contains up to 140 g/l VOC:

3 Technical Data

- 3.1 Coverage 8-10 m² per litre (depending on the technology used). We recommend 2-3 coats (depending on the technology used).
- 3.2 Drying time: App. 1.5 hours.
- 3.3 Thinning: Water.
- 3.4 Storage: Store the product in tightly sealed containers (the product reacts with humidity in the air – applies to hardener, COMPONENT C). Store in tightly sealed containers in a cool and dry area in temperatures from 5 to 25°C.
- 3.5 Shelf life: 1 year in unopened container. Change of hardener colour over time does not affect its properties.

Technical Parameters	Standard/Guidelines	Value
Number of layers	-----	2-3
Application of the overcoat after [hours]	-----	4-8
Surface drying time [hours] up to	PN-EN ISO 1517	1.5
Density in 20±0,5°C, [g/cm ³] after combining components B and C.	PN-EN ISO 2811-1 p.6.1.1	1.025-1.050
Paint fluidity, rate, at least	PN-C-81507:1989	8
Mixture use by time [hours]	-----	1.5
Hardness [seconds]	PN-EN ISO 1522 Device 5.1.2	min. 170
Total curing time [days]	-----	7
Abrasion resistance [kg/μm]	PN-C-81516:1976 met. A	min. 0.9

4 Surface and preparation

- 4.1 In general: Surface should be clean and dry and without any remains of wax pastes and glazing agents. Old paint coatings must be removed. Scratches and cracks must be removed. Before applying the varnish the floor must be sanded and thoroughly cleaned of dust. Apply the GORI 59 Primer on the prepared surface. After the primer has dried apply GORI 53 2S Floor Finish.
- 4.2 Substrate: COMPONENT B and C should be allowed to cool down or heat up to ambient temperature. Air and surface temperatures should range from +15°C to +25°C. The varnish (component B) may only be used in conjunction with the hardener (component C). The product is designed for professional appli-

cations. The humidity of the varnished wood should range from 7% to 11%. The relative air humidity should range from 40% to 65%. Low temperature and high air humidity extend the coating drying time. It is advised to avoid drafts and local heating of the surface (by sunlight or heaters) during the application process. In order to preserve the longevity of the coating it is advised to maintain it using professional cleaning agents for varnished surfaces.

5 Treatment

- 5.1 Application method: Apply with brush, paint roller for water soluble parquet varnishes, or spreading spatula.
- 5.2 Treatment: Mix Component B (GORI 53 2S Floor Finish) carefully by vigorously shaking the closed container before use. The varnish is ready to use after mixing both components (B : GORI 53 2S Floor Finish and C: GORI Hardener) in the following volumetric proportions:
- | |
|--|
| 10 parts GORI 53 2S Floor Finish (Component B) |
| 1 part GORI Hardener (Component C) |
- After mixing in the hardener, mix the varnish thoroughly by shaking (for about 1 min.) and leave in an unsealed container for at least 10 minutes. Filter before use. The mixture is suitable for application during the following 1.5 hours. Consecutive coatings need to be applied in 4-8 hour intervals. In order to obtain an aesthetic final coat - or if the time between coats of 24 hours is exceeded - sand the surface using 180-220 mesh for a gloss finish and 120-150 for a semigloss finish.
- 5.4 Final curing: The varnished surface may be used after 3 days, however it will reach its full durability after 7 days. During this time the varnished floor should not be covered with painter's foil, carpet etc. as this may extend the curing time or reduce its mechanical parameters. Please also note that you should not do any cleaning involving water and/or detergents during the first 10 days after applying the varnish, as drips from the water/detergent can leave permanent marks on the newly varnished floor(s).
- 5.5 Cleaning of tools Soap and water.

6 Varnishing techniques

For every system, if needed:

- Fill the scratches and cracks in the surface.
- Sanding between layers: 120-150 grit sanding mesh for semigloss and 180-220 grit for gloss finish. Clean the dust after sanding.

Standard System – 300 ml/m²

1. GORI 59 PRIMER, 1 layer using a paint roller or 2 layers using a spreading spatula.
2. GORI 53 2S Floor Finish, 3 layers using a paint roller, material consumption of 100-120 ml/m², after the 2nd layer sand the surface.

Professional System – medium traffic floors requiring highly aesthetic finish. – 250 ml/m²

1. GORI 59 PRIMER, 1 layer using a paint roller or 2 layers using a spreading spatula.
2. GORI 53 2S Floor Finish, 1 layer using a paint roller, material consumption of 100-120 ml/m².
3. Sanding between the layers.
4. Water soluble gel filler between the layers, 1 layer using a spreading spatula.
5. GORI 53 2S Floor Finish, 1 layer using a paint roller, material consumption of 150-180 ml/m².

Professional System – „quick varnishing” – medium traffic floors. – 250 ml/m²

1. GORI 53 Floor Finish, 1 layer using a paint roller, material consumption of 100-120 ml/m².
2. Sanding between the layers.
3. GORI 53 2S Floor Finish, 1 layer using a paint roller, material consumption of 150-180 ml/m².

Professional System – heavy traffic floors – 350 ml/m²

1. GORI 59 PRIMER, 1 layer using a paint roller or 2 layers using a spreading spatula.
2. GORI 53 2S Floor Finish, 2 layer using a paint roller, material consumption of 100-120 ml/m².
3. Sanding between the layers.
4. GORI 53 2S Floor Finish, 1 layer using a paint roller, material consumption of 150-180 ml/m².

Professional System – lines – heavy traffic floors – 330 ml/m²

1. GORI 59 PRIMER, 1 layer using a paint roller or 2 layers using a spreading spatula.
2. Acrylic Enamel from Dekoral Professional.
Before applying another layer of varnish, the enamel must be thoroughly dried – at least 24 hours are required. Check the dryness by lightly sanding a small section of the surface using 180-220 grit sandpaper. The coating should not stick or roll off.
3. GORI 53 2S FLOOR FINISH, 2 layers using a paint roller, material consumption of 100-120 ml/m².
4. Sanding between layers: 120-150 grit sanding mesh for semigloss, 180-220 grit for gloss finish.
5. GORI 53 2S FLOOR FINISH, 1 layer using a paint roller, material consumption of 100-120 ml/m².

Professional System – very heavy traffic floors – 300 ml/m²

1. Impregnating PU* primer: 60% volume Domalux Super Gold Varnish gloss and 40% volume Domalux Polyurethane Varnish Thinner, 1 layer using paint roller, material consumption of 120-150 ml/m².
2. Sanding between the layers.

Professional System – very heavy traffic floors – 300 ml/m²

1. Impregnating PU* primer: 60% varnish gloss and 40% volume Varnish Thinner, 1 layer using paint roller, material consumption of 120-150 ml/m².
2. Sanding between the layers.
3. GORI 53 2S Floor Finish, 1 layer using a paint roller, material consumption of 150-180 ml/m².
4. Sanding between the layers.
5. GORI 53 2S Floor Finish 2S, 1 layer using a paint roller, material consumption of 150-180 ml/m².

* application of PU primer may cause the wood to darken more. Application of a PU varnish improves the hardness of the varnish layers and does not cause raising of wood fibres which makes it easier to obtain a more aesthetic appearance than that obtained using a water soluble primer.

When renewing old layers of varnish it is best to make an adhesion test. Sand a small section, located in a less visible area using 120-150 grit sand paper. Varnish and leave for a few days to harden. Check the adhesion of varnish using a coin (rub the side of the coin against the varnish). If the adhesion is strong (e.g. the varnish layer does not come off and does not flake) sand the entire surface using 100-120 grit mesh (for semigloss), 150-180 grit (for gloss) and apply two layers of varnish.

The selection of a varnishing technique should take into account the experience and the equipment resources the painter has and the required finish standard.

7 Safety precautions

- 7.1 In general Common safety rules for work with paints and varnishes must be observed. Further information is available from our Material Safety Data Sheet.

8 Disposal

- 8.1 Disposal: Do not empty into drains or into the environment. Product waste must not be poured into the sewers, water reserves or soil. Left over product should be handed in at your local waste disposal. Empty can may be recycled (check with your local waste disposal site or your local authorities).

9 Additional Information

- 9.1 Wood Species Western Red Cedar, Alaska Yellow Cedar, Larch and similar types of wood contain tannin, which may repel coating and/or staining. Please make a test on a small area before treating, and check the final result.
- Please also note that all softwood may retract or swell up till 12 %. No film can adapt to this kind of movement and therefore a maximum of 18 % humidity is the limit for applying treatment.
- Iroko, Teak, Rubberwood and some other wood species contain "oil", which may delay drying and thereby give an uneven surface after application. You can try cleaning the surface with cellulose thinner and then sand with grit 220. Test a small area afterwards with application. However, we stress that there is no guarantee for a satisfactory result.
- Ipe turns grey after coating with decking oils, but by power washing after coating is worn out you may return to original colour.

The purpose of this Technical Data Sheet is to provide our clients with information about the properties and characteristics of the product. The information provided is based on tests conducted by us under usage conditions that comply with the prevailing standards. Our recommendations for use are for information only, and in no event shall they take precedence over any specific recommendation taking into account the nature and conditions of a particular site, nor shall they engage PPG's liability. before all applications of the product, clients should check that this document has not been amended by a more recent version, which takes into account new technical data. This version annuls and replaces all previous versions of Technical Data Sheets relating to this product.
