



Professional tip

## **Spruce and Fir**

Treatment suggestions

### **For furniture:**

**Pre-sanding:** Gradually up to grain size 240  
If not sufficiently finely sanded, a yellowish green discoloration is possible after a saturated application.

**Treatment:** For matt to velvet-glossy, little used surfaces:  
GORMOS Wax Oil N° 267

For semi-glossy to glossy surfaces:  
ARDVOS Universal Wood Oil N° 266 or  
KUNOS Natural Oil Sealer N° 244-002 (Clear), each with 3 applications

Color preserving priming (UV protection) with KUNOS Natural Oil Sealer N° 244-204 (White).  
For obtaining the natural ageing tone, use KALDET Transparent Wood Stain N° 270-012 (Pine).  
Colored priming with KUNOS Natural Oil Sealer N° 244.

**Finish:** Depending on the mechanical stress:  
ARDVOS Universal Wood Oil N° 266  
KUNOS Natural Oil Sealer N° 244 (stronger mechanical stress)  
A finish with BIVOS Oil Wax N° 375 or ALISA Hard Wax N° 302 for homogeneous, velvet-glossy surfaces.

### **For floors:**

**Pre-sanding:** Gradually up to grain size 180

**Treatment:** For silky surfaces:  
Priming with KUNOS Natural Oil Sealer N° 244-204 (White).  
Finish with KUNOS Natural Oil Sealer N° 244-002 (Clear) or  
KUNOS Natural Floor Sealer N° 242, each with 2 applications.

**Colored treatment:** KOIMOS Floor Oil N° 208 or KUNOS Natural Oil Sealer N° 244 available in a large variety of colors.

### **Further indications:**

**Ageing tone:** Priming with colorless coatings cannot prevent the wooden surface from darkening. This so-called "ageing tone" is a result of the impact of daylight (UV radiation) on the wooden surface and can only be prevented with a pigmented primer. To maintain the original wood color shade, use KUNOS Natural Oil Sealer N° 244-204 (White). Areas with branches and whirls remain very neutral in color.

**"Mixed" wooden surfaces:** Matching the shade of cabinet interior parts made of spruce and outer casings made of beech and alder is possible with DARIX Furniture Stain N° 297-392 (Beech).

**General information:**

Wood type: General characteristics: Spruce can possess resin channels, fir can't. Both types of wood yellow less than pine.  
Both, pine and spruce, are subject to only little shrinkage, but are sensitive to weather conditions.

Firmness: Both types of wood have a good elasticity, but only a low firmness which depends a lot on the cut: Around 15% of the growth ring consist of late wood of high density ( $> 0.9 \text{ g / cm}^3$ ), firm qualities can be extracted in the radial section, which can also be used as flooring. However, the tangential cut leads to a proportional overweight of softwood with a density of only  $< 0.3 \text{ g / m}^3$ .

Use: Especially spruce is used as a building- and construction wood for plywood, chipboard, windows, floors, facades, doors and gates due to its higher availability.

Color/Structure: Both species are uniformly yellowish-white and have a brownish grain. Spruce and fir show no color difference between heartwood and sapwood and darken only slightly.

Please refer to the technical data sheets on our website: [www.livos.de](http://www.livos.de)

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