



# TDS

## TECHNICAL DATA SHEET

## ARMOURFLEX HARDWAX OIL



### DESCRIPTION

Armourflex Hardwax Oil is a versatile wood treatment based upon sustainable raw materials such as natural oils and waxes, formulated to protect, and enhance the appearance and durability of all interior wood surfaces including hardwood, softwood, parquet, and veneer.

Available in satin and matt options, Armourflex Hardwax Oil provides a resilient, water repellent, and stain resistant finish to all types of wood.

### AREA OF USE

Suitable for use on all interior wood surfaces, including hardwoods, softwoods, and wood veneer. It can be used on a variety of wood structures, including floors, doors, window frames, furniture, wood turnings, railings, kitchen worktops and chopping boards. Certified Food & Toy safe when dry to EN 1186:2002 & EN71:3. Accredited with Abrasion resistance (ISO 7786) and the Liquid resistance (ISO 2812-1)

### STORAGE

Store between 5-30°C, out of direct sunlight and protect from frost. Once opened, close lid tightly between uses. Once opened the product may form a skin – this can be discarded, and the remaining oil will be useable, unless it has fully gelled. If a settlement forms stir thoroughly until redistributed.

### PREPARATION

**Before using, test a small inconspicuous area with all products to be applied to ensure a satisfactory final finish and compatibility.**

- For freshly laid wood, allow to acclimatise in the room for several days before treating. Moisture content should be below 15%.
- Previous coatings must be fully sanded back before application.
- Resinous deposits should be removed with a scraper and the surface degreased, with methylated spirits
- Repair cracks or open joints with a suitable wood filler
- For the best finish, sand first with a coarse (60-80) grit sandpaper moving to a finer (150-180) grit sandpaper to achieve a smooth but not overly polished surface on the wood.
- Remove any sanding dust thoroughly before application.
- If required, apply wood dye
- IMPORTANT! Test the colour and compatibility with any wood fillers or dyes on a scrap piece of wood before use.

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Not suitable for use over barrier coatings, such as paints, varnishes, or lacquer. These must be removed completely either by sanding, heat gun or paint stripping. If choosing to use paint stripper, either Barrettine Paint Panther® or Peelaway® may be suitable.

## HEALTH & SAFETY

Wear appropriate personal protective equipment (PPE) such as chemical resistant gloves, overalls, and eye/face protection to protect against splashes. If in doubt speak, to your PPE supplier and show them the product label/Safety Data Sheet or call us for further advice.

Precaution: cloths used for oiling could, under certain conditions, spontaneously combust. Immediately after use, soak them in soapy water then lay them flat outside on a non-combustible surface to dry.

## APPLICATION

- Ensure good ventilation is maintained during application and throughout the drying process.
- Ready to use, do not thin.
- **Stir thoroughly before use.**
- Apply in **thin** coats using either a short pile roller, good quality brush or lint free cloth. Over-application can reduce the finish quality and prolong drying time.
- On previously treated timber 1 coat is normally sufficient, maximum of 2 coats may be required if applying to fresh or previously untreated timber.
- Drying time approximately 4 hours under average climatic conditions (23°C, 50% humidity). Preferably allow to dry overnight. Variations in ambient conditions and substrate can affect drying times.
- On floors, suitable for light foot traffic approximately 16 hours after final coat.
- Avoid covering with rugs/carpets for approximately 10-14 days to allow curing process to fully complete.

## COVERAGE

Approximately 24-28 m<sup>2</sup>/l (One Coat), 12-16 m<sup>2</sup>/l (Two Coats), depending on substrate absorbency and surface condition (rough/smooth).

## EQUIPMENT CLEANING

- Clean brushes / rollers with Barrettine White Spirit immediately after use.
- If spilled, wipe off immediately with a cloth dampened with Barrettine White Spirit.

## AFTERCARE AND MAINTENANCE

Marks and scratches can be touched up without the requirement for sanding. Ensure areas to be repaired are clean and dry. To renovate large areas lightly sand with 120-150 grit sandpaper, remove dust and then apply a single, thin coat.

Armourflex Hardwax Oil imparts a tough, resilient surface to the wood that resists typical daily knocks and scratches. To help retain the best appearance a good level of general care is advised e.g., felt pads on the bottom of furniture, pet claws regularly clipped.

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## FAQs

### 1. Q - Why is the drying is taking longer than the time stated on the can?

A - The drying time is affected by a number of factors including temperature, humidity, substrate type and the thickness of product applied.

The stated drying time is based upon a thinly applied coat onto medium-high density timber such as Oak, in typical interior climatic conditions (23°C, 50% Relative Humidity). It may be that the conditions are not optimal for drying e.g., when the humidity is high, or ambient temperature is low. In this case, it is worth waiting a little longer for the product to fully dry before applying a second coat or subjecting the area to light traffic use.

Very absorbent surfaces can take longer to dry, this is because the drying process relies on oxygen from the air which becomes restricted when the product has been absorbed into the substrate. Often, once the first coat is fully dry a second coat will dry in a shorter time period.

Hardwax Oil has been optimised to be applied thinly so the wood appearance is not significantly changed once coated. If it is applied too thickly the drying time can be greatly extended and in the worst case, the film could remain soft or squishy. Applying too much in a single application can also cause other issues such as uneven finish/appearance or preventing full hardness from developing and the surface becoming susceptible to marks and scratches.

Should the product be over applied, any severe excess should be removed with a scraper or wire wool soaked in white spirit. The surface should then be wiped down with white spirit and allowed to dry for 24 hours. Following this, the surface should be lightly sanded, and a final thin coat reapplied as normal.

### 2. Q - The finish is not as expected and/or patchy after I have used Hardwax Oil. What has caused this?

A - The final finish can be influenced by a number of factors, the most likely of these could be

- Insufficient mixing before use.
- Uneven/incomplete removal of previous coatings.
- Overapplication of each coat.
- Insufficient surface preparation e.g., not properly or unevenly sanded.

In these cases, the surface should be lightly sanded, the tin shaken thoroughly, and then a thin coat re-applied.

### 3. Q - Why is it necessary to apply the Hardwax Oil in thin coats?

A - Armourflex Hardwax Oil dries (or more accurately hardens) by reacting with the oxygen from the air, but once the top layer has cured, it prevents oxygen from reaching the layers below. Consequently, applying too much in a single application will prevent full hardness from developing and will leave the layers below soft.

### 4. Q - I coated my table with Hardwax Oil and it dried brilliantly but has since become tacky. What can cause this?

A - This can occur if harsh chemical cleaners such as those containing alcohol are used, or surfactants which have not been diluted sufficiently. The solution would be to lightly sand back and re-apply a fresh coat.

### 5. Q - What is the solids content of Armourflex Hardwax Oil?

A - Approximately 50% which provides the optimal viscosity for penetration into the wood.

### 6. Q - You suggest a lint-free cloth - what is this?

A - A lint-free cloth simply means one which will not drop fibres. Some companies sell specific cloths branded this way. However, t-shirt material or a microfibre would be suitable, providing it is checked for loose fibres before use.

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## 7. Q - Why is it important to use a good quality brush? What properties should I be looking for?

A - A good quality brush will not shed bristles into the coating and will hold the product well, without it dripping too quickly. For a solvent-based product like Hardwax Oil, natural bristle fibres work well.

### TECHNICAL DATA

PROPERTY	VALUE
SG	0.900
Odour	Hydrocarbon solvent, very little odour when dry
Flash Point	41°C
VOC content	450-460 g/l
Appearance	Yellow to amber liquid, free flowing, semi opaque

### SAFETY

Danger. Contains Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics;  
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Flammable liquid and vapour.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Use only outdoors or in a well-ventilated area.

IF SWALLOWED: Immediately call a POISON CENTER, a doctor. Do NOT induce vomiting.

Call a POISON CENTER, doctor if you feel unwell.

Store locked up.

Repeated exposure may cause skin dryness or cracking.

Dispose of contents and container to a hazardous or special waste collection point.

Do not empty into watercourses. Contact your local authority for disposal advice.



**Warning**