

#### Forschungs- und Untersuchungs-Gesellschaft mbH Aschaffenburg

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> 7 May 2021 Dr. Dr/Dr-hu

#### UNBEDENKLICHKEITSERKLÄRUNG CERTIFICATE OF COMPLIANCE CERTIFICAT DE CONFORMITE

eingetragen registered no. registré

54550 U 21

Hesse GmbH & Co. KG Warendorfer Straße 21 59075 Hamm Germany

Produkt Product Produit

für

for

pour

Proterra NATURAL-SOLID-OIL GE 1125x

The product manufactured by the company mentioned above is a surface treatment agent for wood that is used as work surfaces in food processing companies.

Wood panels treated with the product were examined by us according to the

Methoden zur Untersuchung von Kunststoffen, soweit sie als Bedarfsgegenstände im Sinne des Lebensmittel- und Bedarfsgegenständegesetzes verwendet werden, einschließlich der 62. Mitteilung des BfR zur Untersuchung von Hochpolymeren, Bundesgesundheitsblatt 50, 524 (2007), Stand vom April 2007,

(Methods for testing plastics as far as they are used as consumer goods as defined by the Foodstuffs and Consumer Goods Act, including the 62<sup>nd</sup> memorandum of the BfR on the examination of high polymers, Bundesgesundheitsblatt 50, 524 (2007), state of April 2007).

for the composition as well as for the release of substances which might endanger health as well as to the

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DAkkS Deutsche Akkreditierungsstelle D-ZE-14160-01-00

Postfach 100565 . 63704 Aschaffenburg . Germany . Fon: +49 6021 4989-0 . Fax: +49 6021 4989-30 . E-Mail: info@isega.de . www.isega.de Geschäftsführer: Dr. Ralph Derra . Handelsregister Aschaffenburg HRB-Nr. 3329

Series of standards EN 1186, EN 13130 and CEN/TS 14234 "Materials and Articles in Contact with Foodstuffs – Plastics", current state,

for the migration behaviour.

Wood panels treated with the surface treatment agent are in compliance with the rules of the

Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC, Official Journal of the European Union L 338/4 of 13.11.2004, modified by app. no. 5.17 of the regulation (EC) No 596/2009 of 18 June 2009, Official Journal of the European Union L 188 of 18 July 2009, article 3, 1. (a) and (b),

as well as of the

Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch (Lebensmittel- und Futtermittelgesetzbuch - LFGB) in the version of the notification of 15 September 2021 (BGBI I. p. 4253), last amendment by article 97 of the law of 19 June 2020 (BGBI. I S. 1328), §§ 30 and 31),

as far as the product mentioned is concerned.

Thus, the product **Proterra NATURAL-SOLID-OIL GE 1125x** according to the sample material submitted may be used safely for surface treatment agent for wood that is used as work surfaces in food processing companies and may stand in direct contact with all types of food, provided that no hygiene regulations are violated.

This certificate of compliance has a validity of 2 years and consists of 3 pages.

Certification decision ndelskam Dr. rer. nat. Ralph Derra Sachverständiger für Verpackungsmaterialien

Staatilch enorkannter Sactiverständige eer Untersuchung der Gogenproben von Verpackungsmitteln un heipier, Pappe Kunststoffen, nies Weißbiech und eonstigen Mitalli packur on auf ihre sbenamitsverriche Underskuchke (Behrendt) Officially certified and authorized food

chemist

The translation of the above stamps is given on page 3. La traduction des estampilles est donnée en page 3.



Dr. Ralph Derra

Authorized expert for the analyses of packaging materials, attested by the Aschaffenburg Chamber of Industry and Commerce.

Expert autorisé pour l'analyse des matériaux d'emballage, assermenté par la Chambre d'Industrie et de Commerce d'Aschaffenburg. Staatlich anerkannter Sachverständiger zur Untersuchung der Gegenproben von Verpackungsmitteln aus Papier, Pappe, Kunststoffen, Glas, Weißblech und sonstigen Metallverpackungen auf ihre febensmittelrechtliche Unbedenklichkeit

State registered expert for the analysis of contrasting samples of packaging materials of paper, board, plastics, glass, tin plate and other metallic packaging materials as to their suitability for use with foodstuffs.

Expert public pour l'étude du contrôle des contre-échantillons d'emballages de papier, cartons, plastiques, verre, fer-blanc et d'autres emballages métalliques concernant leur conformité alimentaire.



Dr. Ralph Derra

Authorized expert for the analyses of soil and air, attested by the Aschaffenburg Chamber of Industry and Commerce.

Expert autorisé pour l'analyse du sol et de l'air, assermenté par la Chambre d'Industrie et de Commerce d'Aschaffenburg.

Die Rücklagen des untersuchten Materials werden bei der Gutachterstelle verwahrt.

Dieses Dokument ist eine Übersetzung einer deutschen Originalversion. In Streitfällen ist das Originaldokument die rechtlich bindende Version.

A file sample of the tested material is kept at the expert's office.

This document is a translation of an original in German. In case of dispute, the original document should be taken as authoritative.

# **Technical information**

# Proterra NATURAL SOLID OIL GE 11254



### >Product description

Is a mixture of extremely low-solvent and low-odour high solid natural oils with excellent mechanical and chemical resistance. For low-emission surface finishes on exclusive wood surfaces subject to normal to high indoor demands. Easy to apply, fast drying and free from cobalt and lead-based siccatives. NATURAL-SOLID-OIL already exhibits good resistance and abrasion resistance in the first coat without hardener. The product can optionally be hardened for even faster drying and even better resistance. Apply once or twice using a spatula, roller or cloth and then rub it in and remove the excess. Our NATURAL-SOLID-OIL is so high-yielding that the wood is reliably protected by just one application of the hardened oil. This natural oil contains at least 94 % of renewable raw materials and only has a solvent content of less than 0.5 %. The oiled surfaces are suitable for contact with food of all kinds.

#### >Areas of application

For coating parquet and furniture; surface treatment of wood in interior areas, such as living rooms, bedrooms and children's rooms, wall and ceiling panels.Suitable for coating children's toys. Certified according to IMO so it can be applied on ship interiors

#### >Surface Preparation

Surface preparation	In the furniture sector: Clean, well seasoned wood, depending on species, application process and the desired effect. On parquet flooring: Careful, even and graduated bare wood sanding of properly laid and prepared parquet surface.
Substrate sanding grits from-to	120 - 320
Comments on sanding	The quality and uniformity of the wood and of the lacquer sanding are crucial to the final surface finish. After sanding, remove dust as prescribed.
>Finishing	
Finishing	After adequate drying. On furniture: regular cleaning and care using Proterra Cleaning agent GR 1900. On parquet flooring: initial care and subsequent maintenance using Hesse PROTECT-CLEANER PR 90 or Hesse ANTISLIP-CLEANER PR 93 and Hesse INTENSIV-CLEANER PR 91. In order to preserve the exclusivity of the oiled surface as long as possible in time and regular oiling is required.

Working Temperature Range	20 - 40 °C
conditions of transport	frost-free - up to a maximum of 35 °C
Drying	16 h / 20 °C
Subsequent coating within	36 h / 20 °C
Stackable after	16 - 24 h / 20 °C
Complete drying	24 h / 20 °C
Accessible after	16 h / 20 °C
Load bearing after	7 d / 20 °C

## Technical information

## Proterra NATURAL SOLID OIL GE 11254



### Application

Application	Nozzle size in mm Spray pressure in b		
Filling			
Filling			
Manual application -all			
Gauze pads / cloth			
Rolling			
Spreading			
Roller coating		/	
Smooth roller	perbonan quality		
Spraying			
Compressed air spraying	1,5 - 1,8 mm	2,0 - 3,0 bar	
Wiping with a cloth			

#### >Processing instructions

In the furniture sector: Apply and rub in the product with a saturated fine sanding fleece. After a short exposure time, remove any excess with a cotton cloth. The surface should appear dry; if not, drying problems may occur. On parquet flooring: Apply the material with an appropriate trowel; after a short exposure time, work in evenly using the single-disc sander and white non-abrasive pad until the surface appears dry.

Optional, additional sealing:

Surfaces treated 2 x with the oil at a mixing ratio of 25 : 1 with OIL-HARDENER HIGH-SOLID OR 5180 can be sealed without sanding using Hesse HYDRO Seals (e.g. PURA-ONE HDE 51-(gloss level) or PURA-NATURA HDE 52-0) after drying over night at 20 °C room temperature with sufficient air circulation.

If the oil surface is older than 16 h / 20 °C), it should be lightly sanded back (do not sand through it!) to achieve a good surface result.

This additional sealing will influence the colour tone, feel and look of the surface. Please assess this based on a trial coating.

This product must only be combined with other approved and technically suitable products when used as a flame retardant coating material for seagoing vessels according to the latest version of SOLAS 74/88 Reg. II-2/3, II-2/5 and II-2/6, IMO Resolution MSC.36(63)-(1994 HSC-Code) 7 and IMO Resolution MSC.97(73)-(2000 HSC-Code) 7. The maximum application amount in wet film when using this product as a flame retardant coating material for seagoing vessels is 30 g/m<sup>2</sup>.



### >Technical data

Proportion of renewable raw mat als %	eri- 94.1
Flow time (+/- 15 %)	55 s / DIN 53211 - 4 mm
Appearance	colourless
Decopaint basis	LB
Decopaint category	F
Density series kg/l	0.948
Yield per coat	47 - 95 m²/l
	The spreading rate is heavily dependent on the type of application. The specifications relate to a liter of ready-for-use product, if necessary includ ing hardener and thinner.
Giscode	Ö20+
Form of delivery	fluid
Non-volatile content series %	99 - 99
VOC EU %	1 %
VOC FR	A+
Working Temperature Range	20 - 40 °C
Storage temperature	10 - 25 °C
Shelf life in weeks	104
conditions of transport	frost-free - up to a maximum of 35 °C
Number of coats (max)	2
Amount per layer (minimum)	10 g/m²
Amount per layer (max)	20 g/m²
Total application volume	40 g/m²

## >Ordering information

Order number	Gloss level 60° (Gloss)	Container Size
GE 11254	-	1 l, 3 l, 5 l, 25 l

## >Thinners

Order number	Product description	Container Size
OV 1200	Special thinner	1 l, 3 l, 5 l, 25 l
OV 89	OIL-THINNER	1 l, 3 l

## Cleaning agent and care product

Order number	Product description	Container Size
PR 90	PROTECT-CLEANER	1 l, 3 l, 15 l, 25 l
GR 1900	Cleaning agent	1 l, 2.5 l, 3 l, 25 l
PR 91	INTENSIVE-CLEANER	1 l, 25 l
PR 93	ANTISLIP-CLEANER	1 l, 25 l

## >Supplementary products

Order number	Product description	Container Size
OR 5180	OIL-HARDENER HIGH SOLID	0.25 l, 1 l, 3 l, 15 l, 25 l



### >Particular instructions

NATURAL-SOLID-OIL can be used as an accentuating and wood content blocking basecoat beneath special HY-DRO-PU lacquers.

Complete drying and the mechanical and chemical resistance of the surface will be increased by hardening at 100 : 4 with OR 5180 or OR 5188. Pot life of the mixture: 1 hour at 20 °C room-temperature. The hardener contains isocyanate. Please observe safety instructions; see the safety data sheet. The material dries with oxidation – please observe the general application instructions. A skin can form on open containers due to the spontaneous reaction of the product with atmospheric oxygen! Please check before application! This skin cannot be incorporated, but must be carefully removed and disposed of before application. We recommend that you also sieve the material before applying it.

"A risk assessment was undertaken according to Directive 2014/90/EU, Annex II, Section 3. This coating does not pose a physical risk to health nor a risk to the environment when cured and dried."

For coating the insides of cupboards, we recommend Proterra Resit GE 17102 because of its low intrinsic smell. After suitable drying, can be re-coated with, for example, GZ 1020-0001, GZ 1022-0045 or GZ 1622.

### >Sample process

#### Walnut living room shelving

Bare wood sanding: 320 grit with subsequent dust removal.

Use a fine sanding fleece to apply 1 x 10 - 20 g/m<sup>2</sup> Proterra NATURAL-SOLID-OIL GE 11254 and rub in evenly. Allow a brief absorption period and then use a soft cotton cloth to remove the excess until the entire surface appears uniformly dry.

Drying: > 16 h / 20 °C and with adequate air exchange.

Use a fine sanding fleece to apply 1 x 10 - 20 g/m<sup>2</sup> Proterra NATURAL-SOLID-OIL GE 11254 and rub in evenly. Allow a brief absorption period and then use a soft cotton cloth to remove the excess until the entire surface appears uniformly dry.

Drying: > 16 h / 20 °C and with adequate air exchange. Full resilience is achieved after > 7 d / 20 °C.

#### Rustic oak planks, laid as per instructions.

Wood sanding: 150 grit with subsequent dust removal.

Use a spatula to apply 1 x 15 - 20 g/m<sup>2</sup> Proterra NATURAL-SOLID-OIL GE 11254.

Absorption period: 1 h / 20 °C (depending on surface area), without padding.

Use a spatula to apply 1 x 15 - 20 g/m<sup>2</sup> Proterra NATURAL-SOLID-OIL GE 11254.

Absorption period: 1 h / 20 °C (depending on surface area) then use a single-disc sander with white pad to work it in until the surface appears dry. Pad it off again after a further 20 - 30 min / 20 °C until the surface is even. Drying: > 16 h / 20 °C and with adequate air exchange. The parquet is then accessible with care.

Full resilience is achieved after > 7 d / 20  $^{\circ}$ C.

Advantages of this application method: pronounced accentuation and protective effect, formation of complete oil structure within a day, time saving (only one intensive and one light padding stage)



## >General information

Materials with oxidative drying: a skin can form on the surface in containers, mainly opened containers. This should be removed prior to use. Low temperatures, increased ambient humidity, inadequate air exchange and wood contents that inhibit drying can extend the oil's drying time.

The risk of spontaneous combustion means that coating substances generating heat during drying (oxidative drying oils) and coating substances forming highly flammable deposits may not be applied in the same spray booth without further precautions (see BGR 500, section 3: Handling different coating substances). Cotton cloths, cardboard and paper saturated with oil pose a risk of spontaneous combustion due to heat accumulation. They should therefore be spread out in the air to dry before being disposed of. Even oil-saturated wood dust is prone to spontaneous combustion; as a precaution please do not dispose of it in sealed containers and, where possible, do not use the spray booth for sanding. The oil itself does not combust spontaneously.

The necessary cleaning, care and refresh intervals should be matched to the number of layers of oil applied and the nature and intensity of use. The material properties have been tested on commonly available woods, such as oak, beech, etc. Resins in softwoods, coloured woods and exotic or unusual wood species can result in delayed drying and optical impairments. Please therefore check for suitability prior to use on such woods. Please also note that oils, like almost all natural materials, change colour over time under the influence of light and heat. Their colour can alter both under the influence of light (e.g. the sun's UV rays, etc.) and due to light deprivation (yellowing at absence of light, e.g. beneath tablecloths, carpets, cabinets, etc.). This can become particularly apparent on brightly pigmented substrates. Oiled surfaces have a distinctive odour. This diminishes in a matter of days with progressive drying.

Test standard / basis	Testing labora- tory	Mark	Report	No.
Product meets the requirements of sol- vent based paints and coatings regulation - ChemVOCFarbV (German ordinance on sol- vent-based paints and varnishes) - according to the national implementation of 2004/42/ EG ("Decopaint Directive ").	HESSE	ChemVoC FarbV Decopaint fähig		
Non-slip class R10 per DIN 51130	SFV	SAUREFEST DURCH SÄUREFLIESNER	Test certifi- cate number	84.461.803.001
Emission-tested construction product per DIBt [German institute for construction tech- nology] principles,	DIBt	U	Approval no.	Z-157.10-240
Saliva and sweat resistance according to DIN 53160 Parts 1 and 2: no discolouration (Level 5)	HESSE	TOV TOV TOV TOV TOV TOV TOV TOV TOV TOV		
Antimicrobial effect according to ISO 22196: 2007	SANITIZED AG	Sanitiged. Actifresh	Test certifi- cate number	2014-0570
Toy safety DIN EN 71-3 (2014-12)	HESSE			

### >Particular properties and/or testing standards



## >Particular properties and/or testing standards

Test standard / basis	Testing labora- tory	Mark	Report	No.
EC type examination certificate (module B); coating agent for seagoing vessels according to IMO Resolution MSC.307(88)-(FTP-Code 2010).	Trade associa- tion transport and traffic; Ship Safety Division, Hamburg		Approval No. U.S. Coast Guard Ap- proval No.	116524-00 164.112/ EC0736/ 116524-00
Information on biodegradability	HESSE	Peprüft		
Suitable for the surface treatment of wood- en work surfaces in food processing opera- tions and may come into direct contact with all kinds of food.	ISEGA	Forschungs- und Untersuchungs- Gesellschaft mbH Aschaffenburg		
Baubook registered		1		
Classification of fire behaviour under DIN EN 13501-1 on validated substrate materials	MPA Stuttgart	MPA	Classifica- tion:	C <sub>fl</sub> -s1

Our technical information is continually adapted to keep up to date with the latest technology and statutory regulations. The indicated values are no specification, but typical product data. The latest version is always available online at www.hesse-lignal.de or talk to your local account manager. This information is for advice and is based on the best knowledge available and careful research in line with the current state of the art. This information cannot be held as legally binding. We also refer you to our terms and conditions of business. Safety data sheet is provided in accordance with EC regulation no. 1907/2006.