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PRODUCT SAFETY STATEMENT**AEGLE® BARRIER PLUS PRODUCTS**

We hereby declare that these AEGLE dispersion coated barrier board products are monomaterial products consisting of three-ply paperboard enhanced with water-based dispersion layers.

Products are manufactured in compliance with Commission Regulation (EC) No 2023/2006 good manufacturing practice for materials intended to come into contact with food and quality management system certified according to ISO 9001 and ISO 22000.

SPECIFIC INSTRUCTIONS FOR SAFE AND APPROPRIATE USE

In terms of the product safety this barrier board is suitable to use for packaging dry, aqueous, acidic, fatty foods and low alcohol < 8% (v/v) under the following conditions. Please note barrier coated side of the board is intended to be contact with food.

- Freezer/fridge
- Room temperature and below
- Overall migration tests 10/2011 30min/90°C: Test conditions representative of the most unfavorable foreseeable conditions of use of the material.

With dairy products and modifications oil-in-water emulsions, high- or low- fat

- Hot filled or pasteurized (above 65 °C)

With acidic, aqueous products and moist bakery products with surface containing no free fat or oil

- Up to boiling water temperatures (100 °C)

When converting these paperboards each part of the converting chain is responsible of the suitability for the intended end-use. Converter needs to take into account and test possible limitations of the product before use.

This document adds up the written information from our suppliers, analysis performed on representative paperboard samples and the certificate of compliance given by accredited independent research laboratory.

We hereby declare that the compliance of AEGLE barrier board as a multilayered monomaterial product is fully covered under the following regulations. Compliance of separate barrier layer or board only is not applicable.

COMPLIANCE FOR FOOD CONTACT

has been confirmed by independent accredited laboratory as follows

- European Parliament and Council Regulation (EC) 1935/2004/EC

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- BfR recommendation no. XXXVI, 1 September 2017, Germany
 - In terms of its chemical composition, the board is suitable as packing material both dry and non-fatty foods as well as moist and fatty foods, in direct contact with food at temperatures up to 90°C, barrier as contact side.
- FDA regulations, 21 CFR, parts 170 – 189, 1 April 2018, USA
 - In terms of its chemical composition, the board is suitable to be in contact with dry foods (food type VIII) and aqueous and fatty food types I, II, IV-B, VI-A, VI-B and VII-B, which are listed in Table 21 CFR 176.170 © at temperatures up to boiling water temperature and food types III, IVA, V, VII-A and IX up to room temperature.

Compliance of specific board delivery is confirmed by corresponding order confirmation and/or by product labelling.

The appropriate handling and storage conditions (in RH50%, 23°C) of product shall be utilized to ensure the safe use. We recommend converting of the paperboard within twelve months from manufacturing date.

COMPLIANCE TO

- Law concerning the revision of the Foodstuffs, Consumer Goods and Animal Feed Code (LFGB), 30th June 2017 §§ 30 and 31, Germany
- The composition and purity requirements of Italian Ministry Decree (21st of March 1973) and subsequent amendments: The suitability of AEGLE Barrier board, to come into contact with food products for which migration tests are not to be performed and which migration test are to be performed the purity, extractable and contaminant has been tested and confirmed with traceable representative board sample by approved Italian laboratory. Contact with fatty and moist food is intended and tested for uncoated board only.
- France Decree no 92-631 and brochure no. 1227 of the Official Journal, France. In terms of its chemical composition, the suitability of AEGLE Barrier board to come into contact with food has been tested and confirmed by external laboratory.
- Regulation (EC) No 1907/2006 of European Parliament and of the Council, and its amendment (EC) No 552/2009, phthalates in toys and childcare articles
- EN 71-3:2013 Safety of Toys: Migration of certain elements
- EN 71-9+A1:2008 Safety of Toys: Organic chemical compounds
- Regulation EC 94/62 Packaging and Packaging Waste directive and the latest amendment concerning metals
- PTS Method RH: 021/97, the material is rated as repulpable and recyclable

have been confirmed by accredited laboratories.

- Kotkamills Oy operates according to the Industry Guideline for the Compliance of paper and board materials and articles for food contact. More information on the guideline can be found on the following web site; <http://www.cepi.org/mediacentre/publications>

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RAW MATERIALS

FIBRES

All the fibers used in board products are covered by CoC certifications and the obligations of the European Union Timber Regulation (EU TR 995/2010) and Due Diligence System (DDS).

Our board products are manufactured from 100% virgin forest fibres.

Main Species are Pine (Pinus Silvestris), Spruce (Picea Abies), Birch (Betula spp).

Absence of recycled fiber excludes the possible risk from non-intentionally added substances (NIAS) and traces of printing inks or mineral oils.

The pulps used in Kotkamills' boards are;

- CTMP from chlorine free bleaching process
- Elemental chlorine free (ECF) chemical pulps

OTHER RAW MATERIALS

Reach

Our paper and board grades are defined as articles. Thus registration doesn't apply for our paper and board grades.

All chemicals and additives used by Kotkamills Oy as downstream user fulfill the REACH requirements. We do not intentionally add any substances containing above 0.1% (W/W) of Substance of Very High Concern (SVHC) that will be published on the Candidate list. We continuously follow the development of the candidate list and the substances for authorization.

Food Contact Requirements

All products are regularly tested by independent third party laboratory for food contact suitability. The raw materials we use are under foreseeable conditions, and as confirmed by writing by our suppliers, approved according to the

- German recommendation XXXVI of BfR and
- USA regulations of FDA, 21 CFR, parts 170 – 189

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Substances with Specific migration limits, SML

Based on the written confirmation of our suppliers, substances having SML restrictions either in regulations mentioned earlier or according to

- German regulation BfR XIV Polymer Dispersions and
- Commission Regulation (EU) no. 10/2011

are given below and are not to be exceeded as determined by a worst-case calculation

Substance	CAS-number	SML (specific migration limit)
Acrylic Acid	CAS 79-10-7	SML(T) = 6 mg/kg
Acrylic Acid / esters	CAS Not Admitted	SML(T) = 6 mg/kg
Butadiene	CAS 106-99-0	SML = 1 mg/kg
Butyl acrylate	CAS 141-32-2	SML = 6 mg/kg
Emulsifiers	Total Migration Limit	= 5 mg/dm ²
Ethylene Oxide	CAS 75-21-8	SML = Not detectable, restr. 1 mg/kg
Propylene Oxide	CAS 75-56-9	SML = Not detectable, restr. 1 mg/kg
Methacrylic Acid	CAS 79-41-4	SML(T) = 6 mg/kg
Methacrylic Acid / esters	CAS Not admitted	SML(T) = 6 mg/kg
MIT	CAS 2682-20-4	SML = 0,5 mg/kg
n-Butyl acrylate	CAS 141-32-2	SML = 6 mg/kg
Polyethylene glycol (EO = 1-50) ethers of linear and branched primary (C8-C22) alcohols		SML = 1,8 mg/kg
2-ethylhexanol	CAS 104-76-7	SML = 30 mg/kg
Sulphosuccinic acid alkyl (C4-C20) or Cyclohexyl diesters, salts		SML = 5 mg/kg
Polyethylene glycol	CAS 25322-68-3	SML = 1,8 mg/kg
Vinyl acetate	CAS 9003-20-7	SML = 12 mg/kg

Dual Use Additives

Based on the information given of the raw materials and on the knowledge of the manufacturing process, the following dual use additives can be present;

Substance	E number	ADI (Acceptable Daily Intake)
Sodium disulfite	(E223)	ADI for E220-E228 0,7 mg/kg
Sodium nitrate	(E251)	ADI for E251-E252 3,7 mg/kg
Malic acid	(E296)	
Citric acid	(E330)	
Adipic acid	(E355)	ADI for E355-E357 5 mg/kg
Xanthan gum	(E415)	
Sorbitan monolaurate	(E493)	ADI for E491-E495 25 mg/kg
Sorbitan monostearate	(E491)	ADI for E491-E495 25 mg/kg
Magnesium chloride	(E511)	
Sodium sulphate	(E514)	
Ammonium Sulphate	(E517)	
Hydroxides	(E524-528)	
Silicon dioxide	(E551)	
Magnesium silicate	(E553a)	
Talc	(E553b)	
Polyethylene glycol	(E1521)	ADI 10 mg/kg
Glutaral	(FL No 05.149)	

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ANALYSES

Migration tests for AEGLE Barrier board was performed according to (EU) no. 10/2011 and FDA 176.170. AEGLE Barrier boards are produced of paperboard and water based dispersion layer(s) which are used only as a water and grease repellent coating and adhesive. As there is no relevant regulation to this kind of product, migration tests are performed according to (EU) 10/2011.

Overall Migration tests

Overall migration test was done with flat sheets and carried out according to the SFS-EN 1186-1 and SFS-EN 1186-5. Surface to specific simulant volume ratio is given in the table below. The test condition was 30 minutes +90 °C. The results are average on three parallel tests. The overall migration limit 10 mg/dm² stipulated in the Commission Regulation (EU) no. 10/2011 are not exceeded.

Simulant	Contact time	Temperature (°C)	Surface to simulant volume ratio, dm ² / ml	Overall migration limit, mg/dm ²
3 % acetic acid	30 min	90 °C	2,3 / 200	< 10
20 % ethanol	30 min	90 °C	2,3 / 100	< 10
50 % ethanol	30 min	90 °C	2,3 / 100	< 10

FDA-extractions

FDA Food Contact Article test in accordance with 21 CFR 176.170. The following extractions have been performed in migration cell, barrier as contact side.

Extractives in water 24h, 120 °F (mg/inch ²)	Chloroform soluble part in water extractives (mg/inch ²)	Extractives in heptane 30 min, 70 °F (mg/inch ²)	Extractives in boiling water in cell, cooling in room temperature until (100 °F mg/inch ²)
0,8	< 0,5	< 0,5	< 0,5

Mineral oil (MOSH/MOAH)

Mineral oils typically originate from recycled fiber material and inks. Kotkamills Oy's board contain only virgin fibres avoiding the topic of mineral oils. Mineral oils are not added or used as raw materials in the manufacturing of this product.

Migration of antimicrobial agents

Absence of inhibition zones have been confirmed by standard EN 1104 (Hemmhof-test).

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Phthalates

Analysis with GC/MS from 24 hours ambient iso-octane extract gives the following results

DIBP<1 mg/kg
 DBP<1 mg/kg
 BBP<1 mg/kg
 DNOP<1 mg/kg
 DEHP<1 mg/kg
 DINP<10 mg/kg
 DIDP<10 mg/kg

Bisphenol A (BPA)

In production of AEGLE board grades Bisphenol A is not intentionally added to the products, nor detected in the analyses.

Total PCB

Content according to EN ISO 15318 is below determination limit (0,20 mg/kg)

Total PCP

Content according to EN ISO 15320 is below determination limit (0,03 mg/kg)

Metals

Metals from cold water extract according to EN ISO 17294-2

Metal	Cadmium, Cd	Mercury, Hg	Lead, Pb	Chromium, Cr
Content	<0,005	<0,0003	<0,025	<0,025
Unit	mg/kg	mg/kg	mg/kg	mg/kg

Optical Brighteners (OBA)

In Production of Aegle Barrier optical brighteners are used to control the shade and brightness of the products. The fastness of fluorescent whitening agents is determined according to EN 648 (long duration contact) by external laboratory. The declaration of conformity of each grade is given based on these results.

Generally Modified Organisms (GMO)

as defined by European Union are not intentionally added in the production of paperboard.

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Allergens

Substances or products causing allergies or intolerances listed in Regulation (EU) No 1169/2011 Annex II and in the Food Allergen Labelling and Consumer Protection Act of 2004 (FALCPA, U.S.A.) are not used as raw materials in the manufacturing process of our product.

However, raw materials may contain wheat. Based on the information given by our supplier, the gluten content of the final product does not exceed 20 mg/kg. According to "Commission Regulation (EC) No 41/2009 concerning the composition and labelling of foodstuffs suitable for people intolerant to gluten" and "Food Labeling; Gluten-Free Labeling of Foods - A Rule by the Food and Drug Administration on 08/05/2013 USA FDA" gluten free labelling for food can be used if the gluten content does not exceed 20 ppm (= 20 mg/kg).

Animal origin

Based on the given information by our chemical suppliers, no additive of animal origin is intentionally added in the production of board.

SENSORIAL PERFORMANCE

Flavour tests in accordance with method EN 1230-2:2010 (Robinson) and

Odour tests according to EN 1230-1:2010 have been carried out in external laboratories. The result indicate that the board is not indicated to bring any deterioration in the organoleptic characteristics of food being contact with the board.

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CERTIFIED MANAGEMENT SYSTEMS AT THE PRODUCTION SITE

ISO 9001:2015	No. 1405-13
ISO 14001:2015	No. 1535-14
ISO 22000:2005	No. 9486-03
OHSAS 18001:2007	No. 1965-13
PEFC ST 2002:2013, PEFC ST 2001:2008 v2	No. 2177-16
FSC-STD-40-003 (2.1), FSC-STD-40-004 (3.0), FSC-STD-40-005 (3.1), FSC-STD-40-007 (2.0)	INS-COC-100038/ INS-CW-100038



Johanna Mussalo
Compliance Manager

DISCLAIMER

This certificate is only valid to the extent it has been signed and delivered by an authorized employee of Kotkamills Oy and based on the delivery contract between Kotkamills Oy and the addressee.

It is the responsibility of the manufacturer of the finished packages to ensure that products fabricated from material manufactured by us meet all relevant regulatory and legislative requirements, specifications and limitations in the intended application. This contents and the information set out herein is accurate to our current knowledge only. This information is only valid as of its date of publication or as confirmed in order documents and we assume no liability for subsequent changes in regulatory requirements, information, processes or other contents. Kotkamills Oy makes no other warranty of any kind, express or implied, by contract, statute, or otherwise, and Kotkamills Oy expressly excludes and disclaims all implied warranties of merchantability or fitness for a particular purpose or otherwise. Any copying, distribution, sending or publication of information in this Declaration is prohibited without prior written consent.