Certificate

Version: 2012:1

July 9, 2012

Declaration of Compliance

Trade name

Cupforma Natura BIO and Cupforma Natura 2BIO

	(hereafter referred to as the extrusion coated paperboard)
Product description	Bleached cup board with BIO coating
Base board grammage	Ranges between 170 g/m ² to 330 g/m ²
Extrusion coating	The BIO coating can be on one side or both sides of the board.
	Coating weights vary depending on specifications.
	For more information see technical specification.
Fiber source	Virgin fiber
Bleaching	All used pulps are elementary chlorine free (ECF-pulps)
Production site	Cupforma Natura BIO and 2BIO are manufactured at Stora Enso renewable
	Packaging, Imatra Mills
Producer	Stora Enso Renewable Packaging, Imatra Mills

Instructions for safe and appropriate use

This extrusion coated paperboard is intended for packaging dry, aqueous, acidic, low alcoholic <5% (v/v) and fatty foodstuffs.

This extrusion coated paperboard is <u>suitable</u> for use under the following conditions of temperature and time. Please see also storage conditions.

- Freezer/fridge (-20°C to 5°C more than 24 hrs)
- Room temperature (up to 40°C for more than 24 hrs)

With aqueous and acid foodstuffs also:

• Hot-fill (70°C for up to 2h or heating up to 100°C for up to 15 min)

This extrusion coated paperboard is not suitable for use under the following conditions and temperatures;

- Microwave oven
- Conventional oven

The information given in this certificate is based on written confirmations of our chemical suppliers as well as evaluations and analyses made by and the certificate of compliance given by an independent research laboratory, Harlan Laboratories Ltd., Product Certification Services.

Food contact

We hereby declare that this **extrusion coated paperboard** before conversion complies where applicable and under foreseeable conditions of use with the relevant requirements of;

- Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food
- Commission Regulation (EC) No 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food



Stora Enso Renewable Packaging Imatra Mills FI-55800 Imatra, Finland Tel +358 2046 121 www.storaenso.com Stora Enso Oyj Domicile: Helsinki VAT no: FI10390508 Business ID: 1039050-8

Industry Guideline

The Industry Guideline for the Compliance of Paper and Board Materials and Articles for food contact provides harmonised approach for self-regulation of paper and board. Stora Enso as a company support and operate according to the Industry Guideline. More information on the guideline can be found on the following web site; http://www.cepi.org/content/default.asp?pageid=617

Raw materials / Compliance with European food contact legislation

Paperboard

For the purpose to achieve high chemical and microbiological purity only virgin fibers and food contact approved chemical additives are used as raw material in the production of paperboard. The pulp and paper manufacturing process conforms to established technology involving the use of generally recognized chemicals.

All chemical additives used as raw materials for the paperboard are mentioned where applicable in the following regulations. Information below is based on the written confirmation of our suppliers and analysis performed on the paperboard.

The paperboard complies where applicable and under foreseeable conditions of use with;

- Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food
- Regulation (EC) No 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food
- BfR Recommendation XXXVI, Paper and board (2011)

Plastic layer

All substances used as raw materials for the extrusion coating are mentioned where applicable in the following regulations. Information below is based on the written confirmation of our suppliers and analysis performed on the extrusion coated paperboard.

The substances used in the extrusion coating comply where applicable and under foreseeable conditions of use with:

- Regulation (EC) No 1935/2004 on materials on materials and articles intended to come into contact with food
- Commission Regulation (EU) 10/2011 as amended 1282/2011 on plastic materials and articles intended to come into contact with food

SML – plastic layer

Substances used in the extrusion coating contain the following monomers, other starting substances, macromolecules obtained from microbial fermentation, additives or polymer production aids with specific migration limit (SML) according to Commission Regulation (EU) 10/2011:

Substance	CAS-number	SML in plastic (mg/kg)
Hexamethylene diisocyanate	822-06-0	1 mg/kg in final product expressed as isocyanate moiety
1,4-Butanediol	110-63-4	5 mg/kg
Terephthalic acid	100-21-0	7,5 mg/kg
Tetrahydofuran	109-99-9	0,6 mg/kg

Dual Use Additives - plastic layer

The following additives are also authorized as food additives by Regulation (EC) No 1333/2008 or as flavourings by Regulation (EC) No 1334/2008 and according to our supplier may be present in the **substances used in the extrusion coating**:

Substance	E number
Lactic acid	E 270



Analyses / Migration tests according to Commission Regulation (EU) 10/2011

The overall migration tests have been performed on representative samples of **the plastic layer of extrusion coated paperboard** according to EN 1186-1, EN 1186-5 and EN 1186-14 with the following results. The contact area to volume ratio in the migration tests was 98 ml/dm². The overall migration limit 10 mg/dm² stipulated in the Commission Regulation (EU) 10/2011* is not exceeded.

Simulant	Contact time	Temperature (°C)	Results (mg/ dm²)
3% Acetic acid	30 min	100°C	< 10
3% Acetic acid	10 days	40°C	< 10
50% Ethanol	10 days	40°C	< 10
95% Ethanol	10 days	40°C	< 10
Isooctane	2 days	20°C	< 10

Compliance with three SML limitations mentioned below has been shown by worst case calculations. The specific migration limits stipulated in the Commission Regulation (EU) 10/2011* are not exceeded.

Substance	CAS-number	SML in plastic (mg/kg)
Hexamethylene diisocyanate 1,4-Butanediol	822-06-0 110-63-4	< 1 mg/kg in final product expressed as isocyanate moiety < 5 mg/kg
Terephthalic acid	100-21-0	< 7,5 mg/kg

Compliance with SML limitation for Tetrahydrofuran, CAS-number 109-99-9, has been shown by migration measurements according to EN 13130-1 and EN 13130-8. The specific migration limits stipulated in the Commission Regulation (EU) 10/2011* are not exceeded.

Simulant	Contact time	Temperature (°C)	Results (mg/kg)
3% Acetic acid	30 min	100°C	< 0,6
3% Acetic acid	10 days	40°C	< 0,6
50% Ethanol	10 days	40°C	< 0,6
Olive oil	10 days	40°C	< 0,6

* <u>Transitional provisions in Commission Regulation (EU) 10/2011</u>: Until 31st December 2012 the supporting documents referred to in Article 16 shall be based on the basic rules for overall and specific migration testing set out in the Annex to ECD 82/711/EEC (the old rules). As from 1st January 2013 the supporting documents referred to in Article 16 for materials and articles placed on the market until 31st December 2015 may be based on either the old rules (as above) or the new rules according to Commission Regulation (EU) 10/2011. As from 1st January 2016 the supporting documents referred to in Article 16 shall be based on the new rules according to Commission Regulation (EU) 10/2011.



Raw materials / Compliance with US food contact legislation

Paperboard

All chemical additives used as raw materials for the paperboard are mentioned where applicable with the following regulations. Information below is based on the written confirmation of our suppliers.

The paperboard complies where applicable and under foreseeable conditions of use with;

- FDA, Title 21, §176.170: Paper and Paperboard Components (2011)
- FDA, Title 21, §176.180: Paper and Paperboard Components (2011)

Plastic layer

All substances used as raw materials for the extrusion coating are mentioned where applicable in the following regulations. Information below is based on the written confirmation of our suppliers.

• Food Contact Notifications (FCN) No 178, 475 and 916

Analyses / Extraction tests according to Table 2 at 21 CFR §176.170

Based on the extraction tests and information from our suppliers this extrusion coated paperboard is suitable for packaging food types I, II, III, IV A-B, V, VI B, VII A-B, VIII and IX up to condition of use C and food types VI A and C up to condition of use D as listed in table 2 of 21 CFR §176.170.

Analyses / Paperboard

Compliance with BfR Recommendation XXXVI

The paperboard complies with the requirements in BfR Recommendation XXXVI, Paper and Board as follows. Analyses have been performed on representative samples of paperboard.

Heavy metals:

< 0.1 mg/kg
< 0.1 mg/kg
< 1.0 mg/kg
< 1.0 mg/kg
not detectable

Formaldehyde: Analysis has been performed according to EN 1541. The amount of formaldehyde is < 1 mg/dm².

Pentachlorophenol (PCP): Analysis has been performed according to EN ISO 15320. The amount of PCP is < 0.15 mg/kg.

Fluorescent whitening agents: Analysis has been performed according to EN 648. There was no visible transfer (grade 5) for any of the test fluids.

Colour fastness: Analysis has been performed according to EN 646. There was no visible transfer (grade 5) for any of the test fluids.

Hemmohof test: Analysis has been performed according to EN 1104. There is no transfer of antimicrobial constituents. We do not add surface biocides on top of the paperboard which can also be seen in the result.

Dioxin in paperboard

The content of polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) expressed in World Health Organization (WHO) and NATO/CCMS toxic equivalents in paperboard are below 1 ng/kg board. The paperboard does not contain "dioxin-like" coplanar polychlorinated biphenyls (PCBs) above 2 ng/kg board.



Substances / Paperboard

Intentionally added shall mean deliberately utilized in the formulation of a material or component where its continued presence is desired in the final product to provide a specific characteristics, appearance or quality. Please note that we do not analyze the paperboard for the substances listed below. Information below is based upon information given by our chemical suppliers.

<u>Animal origin</u>

We hereby confirm that no additive of animal origin is intentionally added in the production of paperboard.

<u>BSE</u>

We hereby confirm that no substances causing Transmissible Spongiform Encephalopathies, TSEs including Bovine spongiform encephalopathy, BSE and Creutzfeldt Jakob Disease, JCD is intentionally added in the production of paperboard.

Food allergens

We hereby confirm that, with reference to the US FDA Food Allergen Labelling and Consumer Protection Act (FALCPA) and the Commission Directive 2007/68/EC, the following food allergens or products derived thereof are not intentionally added for the manufacture of paperboard:

- Cereals containing gluten and products thereof
- Crustaceans and products thereof
- Eggs and products thereof
- Fish and products thereof
- Peanuts and products thereof
- Soybeans and products thereof
- Milk and products thereof
- Nuts and products thereof
- Celery and products thereof
- Mustard and products thereof
- Sesame seeds and products thereof
- Sulphur dioxide and sulphites at concentrations that may cause transfer from food packaging into food exceeding 10 mg/kg expressed as SO₂.
- Lupin and products thereof
- Molluscs and products thereof

Consequently the products may reasonably be expected not to contain allergenic proteins.

Phthalates

We hereby confirm that no phthalates are intentionally added in the production of paperboard or extrusion coating.



Additional legislation and regulations, not food related

Packaging and Packaging Waste Directive

The **extrusion coated paperboard** complies with the Packaging and Packaging Waste directive 94/62/EC amended by 2004/12/EC.

- The sum of lead, cadmium, mercury and hexavalent chromium in the paperboard is less than 100 ppm (EN 13428).
- The level of substances hazardous* to the environment in the paperboard is less than 0.1 %(EN 13428).

* Classified in EU directive 67/548/EC and listed as N-classified in www.kemi.se/nclass

The extrusion coated paperboard is suitable for recovery by ;

- Material recycling (EN 13430)
- Energy recovery (EN 13431)
- Composting and biodegradation (EN 13432), certified by AIB-Vincotte, certification number 11-677-D*: <u>http://okcompost.be/en/certified-products/</u>

* A finished product made of an OK compost certified intermediate material like the food service boards of Imatra, does not automatically comply with the requirements of the OK compost test program. Because of the other unknown components that can be added to the finished product (ink, reinforcement path, glue etc.), this <u>finished product</u> needs to be submitted to OK compost certification in order to have the permission to put the OK compost mark on this finished product.

<u>REACH</u>

The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of properties of chemical substances. The REACH regulation gives greater responsibility to industry to manage the risks from chemicals and to provide safety information on the substances. REACH requires an extensive information exchange in the supply chain in order to fulfill all obligations.

Our obligations in REACH are as a downstream user and as a manufacturer of substances and articles. To secure REACH compliance from our suppliers we have included REACH demands in our purchasing agreement. For the substances that we manufacture and where REACH demands registration we have done or we will do the registrations according to the timelines set in the REACH regulation.

Cellulose pulp is defined as a substance and exempted from registration according to appendix IV. Our paper and paperboard grades are defined as articles <u>without</u> intended release according to REACH. Consequently this means that registration doesn't apply for our paper and paperboard grades.

If any of our articles contains above 0.1% (w/w) of a **S**ubstance of **V**ery **H**igh **C**oncern that will be published on the <u>Candidate</u> <u>List</u> we will inform you as REACH requires. We continuously follow the development of the Candidate List and the substances for authorization. To our knowledge today none of our articles contain any **S**ubstance of **V**ery **H**igh **C**oncern that is on the Candidate List in a concentration above 0.1% (w/w).

Safety of toys

We hereby confirm that the **paperboard** before conversion complies to the European Standard EN 71-3, Safety of toys – Part 3 with amendment A1: Migration of certain elements. This information is based upon information from our suppliers and upon analyses performed on the paperboard.



Certified management systems at the production site/sites

Certificates are available on the internet: http://www.storaenso.com/responsibility/certificates/Pages/certificates.aspx

Paperboard production ISO 9001 ISO 14001 ISO 22000 OHSAS 18001 FSC[®] CoC PEFC CoC Polymer coating ISO 9001 ISO 14001 ISO 22000 OHSAS 18001 FDA/IMS Compliance

Storage and handling requirements

In order to secure/ensure product safety the product must be well wrapped and stored indoor, sheltered from rain and snow. The recommended storage conditions are at 50-55 % relative humidity and 20-23° C. We recommend consumption within 12 months from manufacturing date and after this time rights of claims normally disappear.

Disclaimer

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 certificate and its contents are subject to the following additional limitations and disclaimers:

- Based on reasonable investigations, the information set out herein is accurate to our current knowledge only. We take no responsibility for information that has been provided to us by our suppliers and on which we have relied when producing the information contained herein.
- This certificate is only valid as of its date of publication and, for the avoidance of doubt, we assume no liability for subsequent changes in information, contents, processes, regulatory requirements or otherwise.
- This certificate is only valid to the extent it has been signed and delivered by an authorized employee of the Stora Enso group.
- Nothing in this certificate shall be interpreted as a warranty (direct or implied) with respect to (a) anything beyond what is expressly set out herein, (b) the merchantability or fitness for a particular purpose, (c) the use, or the suitability for use, in connection with other products or materials, or (e) the safety or legality in any use, processing and handling of our products.
- This certificate forms an integral part of the delivery contract between us and the addressee and any limitations of liability set out in such delivery contract shall apply to this certificate.
- No one other than the addressee may rely on this certificate and we assume no liability whatsoever to any third party

9 July 2012

luma kivinanta

Product Safety Engineer

Minna Kiviranta

