Newsletter

National Service of Assistance BPA SUBSTITUTION





N°7 March 2015

BPA news

Two possible alternatives to BPA for polycarbonate and epoxy resins.

ALTERNATIVE TO POLYCARBONATE: TOPAS® COC (copolymer of cyclic olefins and linear olefins) is a colorless transparent polymer, often processed by extrusion. Its development is studied for the medical or food containers markets (including flexible transparent pockets). According to the manufacturer, this polymer is approved for food contact in the EU. The characteristics declared by the manufacturer of this product (see below) do not consider this solution as an alternative to all polycarbonate uses (among the uses identified, these might include food packaging and health products).

Benefits declared by the manufacturer	Disadvantages reported by manufacturer
Appearance: Good transparency	Cost: The product price is higher
Use: Easy to extruding or thermoforming	Low resistance to stress cracking
Properties: Good resistance to steam and water	Low impact strength

Made by: TOPAS Advanced Polymers source: http://www.topas.com

ALTERNATIVE TO EPOXY RESIN: 2 polyester resins.

a/ The saturated polyester resins DYNAPOL® L, are proposed for the food containers market (included boxes, caps or cans). According to the manufacturer, they provide good performance in terms of flexibility, sterilization resistance, film hardness and scratch resistance.

Main characteristics declared by the manufacturer*	
Neutral smell and taste Adhesion to metals, even after deformation	Good skills: Resistance to solids Resistance to light solvents Resistance to yellowing and annealing Heat resistance (sterilization)

Made by: EVONIK Corporation OL® L . source: http://www.dynapol.com

b/ CRODA COATINGS offers the **Pripol – F®**, a biobased acid dimer which is FDA approved. This product is a monomer that allows the formulation of polyester resins (without bisphenol A) for the metal food packaging (or the metal parts of the food packaging). According to this manufacturer, it provides flexibility and water resistance with a low color and a high stability to heat and oxidation.

Main characteristics declared by the manufacturer	
Appearance: Excellent flexibility	Chemical Properties: Good resistance to hydrolysis
Finish: glossy surface	Cost: reduction of processing time

Made by: CRODA COATINGS source: http://www.crodacoatingsandpolymers.com

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^{*} No problem was reported by the manufacturer (further investigations would be to carry on a comparison of this solution with a reference).

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Thermal paper: 2 phenol free solutions

PERGAFAST®201: An alternative to BPA as a color developer for thermal papers.

BASF offers an alternative to bisphenol A for its use as thermal developer in the sales and credit card receipts. Pergafast®201 is a non-phenolic urea color developer. From the qualitative point of view, the producer emphasizes the image stability over the time. This alternative is commercially available and is already implemented for some receipts available on the European market.

source: http://product-finder.basf.com/qroup/corporate/product-finder/en/brand/PERGAFAST

Publications

The French Government report on substitutes of Bisphenol A (Act of 24 December 2012) was released in mid-November 2014 to Parliament.

This report provides an overview of knowledge about the substitution of Bisphenol A in materials in contact with food and various other applications such as thermal tickets or flame retardants. This inventory is accompanied by a review of available data on toxicity substitutes. It was based on the work of INERIS, of ANSES and of ANSM.

Source (in French): http://www.developpement-durable.gouv.fr/IMG/Substituts-BPA-Rapport-Parlement-Loi-24122012.pdf

Alpha® free: thermal paper without phenols.

Developed and patented by APPVION company Alpha® free thermal paper is guaranteed by the manufacturer without phenols (such as BPA, BPS, D8...) or urea compounds (such as Pergafast®201, compounds urea/urethane, ...): the thermal developer is vitamin C.

The potential applications include thermal paper receipts (supermarket , restaurant, ...) and the coupons. Already available in the US , this product will be soon be Europe.

source: http://www.appvion.com

Events

Show CFIA at Rennes (French) **Event Date:** from 10 to 12 March 2015

Conference "Bisphenol A: review and feedback on the failover in the early 2015 towards content Bisphenol A-

NI¹.

Speakers: Vincent TRUELLE Director FIAC² and Patrice

DOLE Laboratory Director packaging **CTCPA**³.

*Bisphénol A-NI: Bisphénol A Non Intentional
*FIAC: French Federation of Preserved Food.

³CTCPA: French Technical Center for Agricultural Products

Preservation.

For more information (in French):

http://www.cfiaexpo.com

Show Anuga FoodTec at Cologne (Germany)

Event Date: from 24 to 27 March 2015

The Anuga FoodTec brings the food chain providers to light industrial new solutions. Every 3 years the Anuga FoodTec brings the food and beverage industry . Among other topics , this international-scale living will discuss recent developments in the areas of food packaging and food safety.

For more information: http://www.anugafoodtec.com