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## **XLVI. Cross-linked Polyethylene**

**As of 01.01.2010**

There are no objections to the use of cross-linked polyethylene in the manufacture of commodities in the sense of § 2, Para. 6, No 1 of the Food and Feed Code (Lebensmittel- und Futtermittelgesetzbuch), provided they are suitable for their intended purpose and comply with the following conditions:

### **A. Peroxide cross-linked Polyethylene**

1. Starting material:  
Polyethylene that complies with Recommendation III<sup>1</sup>.
2. Apart from the additives permitted by the Commission Regulation (EU) No 10/2011 in the manufacture of food-contact commodities made of plastic, in compliance with the restrictions stipulated therein, the following may also be used:
  - a) As cross-linking agent:  
Benzoyl peroxide  
Lauryl peroxide  
Di-tert-butyl peroxide  
tert-Butyl peroxybenzoate  
Dicumyl peroxide  
2,5-Dimethyl-2,5-di-tert-butylperoxy-hexane  
2,5-Dimethyl-2,5-di-tert-butylperoxy-hexine-3  
1,3-Bis(tert-butylperoxy-isopropyl)benzene  
3,3,6,6,9,9-Hexamethyl-cyclo-1,2,4,5-tetra-oxanonaneThe finished product must contain in total no more than 0.2 % conversion products from the above substances.
3. Surfaces of finished products must not test positively for peroxides.

### **B. Physically (electron-beam irradiation) cross-linked polyethylene**

1. Starting material:  
Polyethylen that complies with Recommendation III.
2. Apart from those already permitted by the Commission Regulation (EU) No 10/2011, the following emulsifiers may also be used:  
Sodium di-(2-ethylhexyl) sulfosuccinate, max. 1.0 %  
Polyethyleneglycol dodecylether, max. 1.0 %.

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<sup>1</sup> Recommendation III. "Polyethylene"