

Systemfiltration Canada  
Mr. Ken Judson  
10 Baie Vista Court  
Shediac Cape, NB  
E4P 2Y8

Canada

25. März 2009

## Effects of the VITO oil filter system on frying oil quality regarding Acrylamide

Dear Ken,

Acrylamide in food occurs through the Maillard reaction, especially during baking, frying or deepfrying. In fried or baked goods acrylamide are being produced at temperatures above 120°C (248 °F) and jumps above temperatures of 170-180°C (340-355°F). Notably much acrylamide occurs when starchy foods, such as potatoes or cereal containing food is heated dry with temperatures above 180°C (355°F). Often a dry layer, like the brown surface on french fries holds a high amount of acrylamide.

The particles created by frying in a deep fryer hold the main part of acrylamide in frying oil. These particles stick to the fried goods and are in the end served to the customer.

Acrylamide itself is categorized as cancer-causing, poisonous, may cause reproductive harm among other things.

The acrylamide does not occur in the frying itself, it's being produced through the mentioned Maillard reaction in the fried foods and only get into the frying oil through the burned particles that remain in the oil, where they often remain for several days. By using the patented VITO oil filter system the acrylamid concentration is being highly reduced as the frying oil is filtered using a high pressure method that picks up particles up to 5 microns.

To cut it short, acrylamide is not found in the frying oil, it is in the burned particles within the oil. VITO filters 95-99% of those particles. So by using VITO you effectively remove acrylamide from your fryer.

Using VITO on a day to day basis preserves the quality of the frying oil and prolongs it's lifetime as well.

Your guests will be thankful.

Yours sincerely,



Andreas Schmidt  
Chief Executive Officer  
SYS Systemfiltration GmbH

