

## ANNEX I

### MITIGATION MEASURES REFERRED TO IN ARTICLE 2(1)

#### II.DOUGH-BASED POTATO CRISPS, SNACKS, CRACKERS AND OTHER DOUGH-BASED POTATO PRODUCTS

##### Raw Materials

1. For each product, FBOs shall specify target values for reducing sugars in their dehydrated potato ingredients.
2. The target value of reducing sugars in the products concerned shall be set as low as feasibly possible, taking into account all relevant factors in the design and production of the finished product such as the amount of potato ingredients in the product recipe, further possible mitigation measures, further processing of the dough, seasonality and the moisture content in the finished product.
3. Where the content of reducing sugars is higher than 1,5 % the FBOs shall provide data demonstrating that the level of acrylamide in the finished product is as low as reasonably achievable below the benchmark level set out in Annex IV.

##### Recipe and Process Design

1. Dehydrated potato ingredients shall be analysed prior to their use either by the supplier or the user to confirm that the sugar content does not exceed the specified level.
2. Where dehydrated potato ingredients exceed the specified sugar level, FBOs shall specify the additional mitigation measures to be taken to ensure that the level of acrylamide in the final product is as low as reasonably achievable below the benchmark level set out in Annex IV.
3. For each product FBOs shall review whether it is possible to utilise the partial replacement of potato ingredients with ingredients with lower acrylamide forming potential.
4. In wet dough-based systems, FBOs shall consider the use of the following substances insofar possible, taking into account that these substances may not be synergistic in their mitigation effect i.e. specifically applies to the use of asparaginase and lowering levels of pH:
  - Asparaginase
  - Acids or their salts (to reduce the level of pH of the dough)
  - Calcium salts.
5. Where dough-based potato crisps, snacks or crackers are fried, FBOs shall specify frying oil temperatures for each product at the exit of the fryer, control these temperatures and maintain records to demonstrate controls.
6. The oil temperature at the fryer exit shall be as low as feasibly possible on a specific line and for the specific product, in accordance with prescribed quality and food safety standards and taking into account relevant factors, such as the fryer manufacturer, fryer type, sugar content and the target moisture content for the product.

Where the temperature is higher than 175 °C at the fryer exit, FBOs shall provide data demonstrating that the level of acrylamide in the finished product. is below the benchmark level specified in Annex IV.

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**Status:** Point in time view as at 31/01/2020.

**Changes to legislation:** There are currently no known outstanding effects for the Commission Regulation (EU) 2017/2158, Division II.. (See end of Document for details)

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(Note: Most pellet products are fried at temperatures higher than 175 °C because of their very short frying time and the temperatures needed to achieve the required expansion and texture of these products).

7. Where dough-based potato crisps, snacks or crackers are baked, FBOs shall specify for each product the baking temperature at the exit of the baking oven and maintain records to demonstrate controls.
8. The temperature at the exit of the baking oven/drying process shall be as low as feasibly possible on a specific line and for the specific product, in line with expected quality and food safety standards, and taking into account relevant factors such as the machinery type, reducing sugar content of the raw material and the moisture content of the product.
9. Where the product temperature is higher than 175 °C at the end of the baking/drying process, the FBOs shall provide data demonstrating that the level of acrylamide in the finished product is below the benchmark level specified in Annex IV.
10. For each product, FBOs shall specify the moisture content post frying or baking which shall be set as high as feasibly possible on a specific production line and for a specific product, in line with the product quality and food safety requirements, and taking into account the fryer exit, baking and drying temperature. The moisture content in the final product shall not be lower than 1,0 %.

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**Changes to legislation:**

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