

Acrylamide

FAQ: “I am in contact with a customer about the D25NC. My contact person is very keen on the parameter “Acrylamide”. I searched the internet and saw that acrylamide has something to do with baking potatoes.

Are you familiar with this and can tell me more about this?”

[Acrylamide](#) is a white odorless crystalline solid, soluble in water and other solvents. It is not a chemical made for itself but forms as a byproduct in starchy foods during high-temperature cooking processes, such as frying, roasting, and baking.

The most common application we encounter where acrylamide is mentioned is the high temperature frying of potato fries, chips and crisps. There is a toxicity concern that acrylamide may be a possible carcinogen but to date, there have been no definitive study that has shown this.

If you are a manufacturer of fried products such as potato fries, chips and crisps, you don't want to under- nor over-cook these products. This usually requires more precise color control related to the bake level than you can get from visual evaluation. This leads to instrumental measurement of fry color intended to optimize the process.

An example of a fry color application is [here](#).

[USDA Munsell Frozen French Fry Color Standards](https://support.hunterlab.com/hc/en-us/articles/208321666-USDA-Munsell-Frozen-French-Fry-Color-Standards)