

P129. ACRYLAMIDE: THE ISSUE OF FOOD SAFETY

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Acrylamide, $\text{CH}_2=\text{CH}-\text{CONH}_2$ (Mol. Wt. 71.08 g/mol), is a well-known synthetic polymer used in the production of poly (acrylamide). It is a white crystalline solid, odorless, has low vapor pressure and melting point of about 85°C. It is extensively used in certain industrial processes such as making paper, dyes, and plastics, and in treating drinking water and wastewater. However, acrylamide is a potentially toxic and cancer-causing substance naturally present in uncooked food and produced when starch-rich foods are cooked at high temperatures. It is a natural by-product of the cooking process which include baking, frying, grilling and toasting especially at temperatures over 120°C. There is an outcry from international communities to determine if acrylamide has harmful human health effects and suggest potential measures to put in place to regulate its use.

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