



Environment, soil, geology, marine science



Organic chemistry, pharmacy



Food analysis & security



Petrol chemistry, coal, energy



Quality control

Nitrogen in Wheat Flour

Instrument: ECS 8060

Mode: N,protein

Pretreatments: none

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NC TECHNOLOGIES

Innovative Elemental μ -Analysis

Nitrogen in Wheat Flour



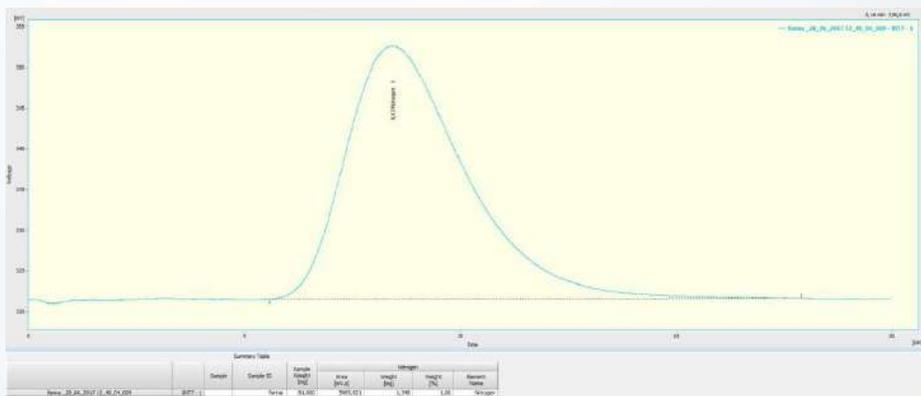
The wheat flour is composed by starch and protein. Proteins in wheat flour are important from nutritional and productive points of views. Glutein and gliadin, assisted by water, form gluten; this proteinic compound is physically a grid that captures starch and gas during leavening stage. The content of those two proteins and their ratio are fundamental for dough characterization, its employment and production techniques. The strength of flour depends by the quality and type of gluten so, by the protein content. This amount is responsible of water capture during the dough stage; the more is the protein content, the more is the gluten achieved during the processing. A protein content of 9-15% as average range is normally reported; In this application note, by multiplying the crude protein coefficient 6.25 and total nitrogen, a 12% protein content was calculated.

Nitrogen amount has a fundamental role in wheat flour based food, so consequently assumes importance in industrial food productions, techniques choices and human health.

In this case, ECS8060 was able to produce high reproducibility results. Moreover, the innovative oxygen injection and technology, let to obtain a perfect combustion, even if flour reports a range of 90-95% of volatile solids.

Parameter	Nitrogen
Average	1.92
Standard deviation	< 0.01
Average Accuracy	< 0.01

All reported values unit: %



- ✓ Configuration: N
- ✓ Furnaces: No. 2
- ✓ Sampler: Pneumatic
- ✓ Chemical standard: EDTA

To send your samples for free demonstration analyses:
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For analytical and technical questions:
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