

Solutions for the food industry



Cereals, dairy products, meat, fish, nuts, insect-based foods, mushrooms, eggs,...

STEAM DISTILLATION | KJELDAHL | DUMAS | HYDROLYSIS
EXTRACTION | DIGESTION

Specialist for food

Food can be plant- or animal-based, highly processed or not processed at all. The variety in food products is correspondingly very wide. That is why flexible analytical systems are in high demand in this particular area. C. Gerhardt offers various solutions for analysing food. With us, you not only get reliable products, but also expert advice from our application specialists.

Our website www.gerhardt.de provides you with detailed information about our analytical systems, including information specifically for your industry.

And, of course, we would be happy to offer you a personal consultation - just get in touch: info@gerhardt.de.



HYDROTHERM | SOXTHERM

Hydrolysis and solid-liquid extraction



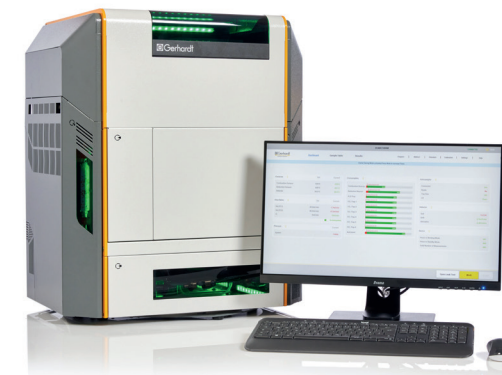
- ✚ Safe, automated and fast sample preparation and analysis
- ✚ Total fat analysis and preparation for fat spectrum analysis
- ✚ Resource-saving

Applications

- ➔ Total fat in:
 - plant-based drinks
 - milk and dairy products
 - cereals and cereal products
 - nuts and seeds
 - edible nuts
 - meat and meat products
 - fish and fish products
 - eggs and egg products
 - cocoa and cocoa products
 - potato flakes
 - olives
 - margarine
- ➔ Free fat in:
 - Cereals and cereal products
 - Potato crisps
- ➔ Dioxins and PCBs in food
- ➔ etc.

N-Realyzer

Automatic N-determination according to Dumas



- ✚ Automatic and flexible autosampler
- ✚ Intuitive Software
- ✚ Low operating costs and high accessibility
- ✚ Validated reference results for all sample matrices: liquid, pasty, solid

Applications

- ➔ Nitrogen/protein in:
 - meat substitutes (novel food)
 - milk and dairy products
 - cereals and cereal products
 - meat and meat products
 - insect-based foods
 - nutritional drinks and protein puddings
 - chocolate
 - food supplements
 - soy sauce
- ➔ Non protein nitrogen (NPN) in milk and milk products
- ➔ etc.

KJELDATHERM | VAPODEST

Acid digestion, Kjeldahl und Steam distillation



- ✚ Rapid and automatable analysis
- ✚ Glass varieties from 100ml to 1200ml
- ✚ Soft start during distillation to avoid strong reactions in sample tube
- ✚ Traceability on different user levels

Applications

- ➔ Nitrogen/protein in:
 - meat substitutes (novel food)
 - milk and dairy products
 - cereals and cereal products
 - meat and meat products
 - fish and fish products
 - eggs and egg products
 - sugar
 - chocolate
 - fresh yeast
- ➔ Non protein nitrogen (NPN) in milk and dairy products
- ➔ Chitin in insect-based foods, mushrooms and shellfish
- ➔ Hydrogen cyanide in kernels, flax seeds and almonds
- ➔ TVB-N in fish products
- ➔ Volatile organic acids in sauces
- ➔ etc.

FIBRE THERM | FibreBag System

Crude fibre extraction, ADF and NDF



- ✚ Rapid and automated
- ✚ Parallel analysis of up to 12 samples
- ✚ Optimised extraction and filtration conditions
- ✚ Automated addition of amylase (optional)

Applications

- ➔ Total dietary fibre in food
- ➔ Crude fibre in (oil)seeds
- ➔ Chitin in insect-based foods, mushrooms and shellfish
- ➔ etc.

VAPODEST 550 | TURBOTHERM TT SO₂

Special applications



- ✚ Rapid
- ✚ Automated alternatives to optimise Monier Williams method
- ✚ Glass variety
- ✚ Resource-saving

Applications

- ➔ SO₂ in food
- ➔ etc.

MEETING HIGH DEMANDS ON ANALYTICS:

C. Gerhardt's analytical systems cover a wide range of analytical possibilities, here are only a few examples:

Parameter	Matrix	Gerhardt Apparatus
Fat	Cereals and cereal products	HYDROTHERM SOXTHERM
Fat	Milk and dairy products Plant-based drinks	HYDROTHERM SOXTHERM
Fat	Meat and meat products	HYDROTHERM SOXTHERM
Fat	Nuts and (oil)seeds	HYDROTHERM SOXTHERM
Nitrogen Non protein nitrogen	Milk and dairy products	N-Realyzer KJELDATHERM VAPODEST
Nitrogen Protein	Meat and meat products Fish and fish products	N-Realyzer KJELDATHERM VAPODEST
Nitrogen Protein	Insect-based food	N-Realyzer
Fibre Dietary fibre	Food	FIBRETherm FibreBag System
Sulphur dioxide (SO ₂)	Food	VAPODEST 550 TURBOTHERM TT SO ₂



APPLICATION SERVICE

Our laboratory staff is regularly trained and is always available for specific questions. If desired, we can optimise your applications or create an application specifically for you.

- ✚ On-site service
- ✚ Evaluation of your samples in our application laboratory
- ✚ Applicative Support (Webinars / Trainings / Online-Support)
- ✚ Consultation / Installation and Training
- ✚ Aftersales Service / Customer Service

**Have you heard of
our webinars?**



STRONG PARTNER

We are global leaders in the automation of reference analysis. We stand for the development, production and global distribution of highly efficient, precise and reliable analytical systems.

Our specialties are automatic systems for

- ✚ Nitrogen analysis according to Kjeldahl
- ✚ Nitrogen analysis according to Dumas
- ✚ Determination of fat content (hydrolysis and extraction)
- ✚ Analysis of plant fibres (crude fibre, ADF, NDF)



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