

unlocking the FLAVOR of precision:

Your Guide to Reference Materials for Food and Beverage Testing

The quality and safety of the food we eat and the beverages we drink is of paramount importance for everyone of us.

The big variety of raw ingredients of food within a complex global supply chain makes it a challenging task for the food industry, testing labs and regulators to ensure safety and consistent quality of food. Reliable analytical testing capabilities and methods are a crucial tool to achieve that goal. However, an analytical result is only as accurate as the reference used for calibration.

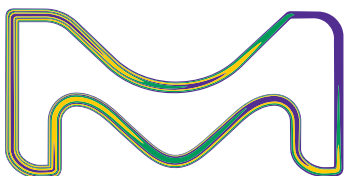
We are a renowned provider of a huge range of analytical standards and, with four ISO 17034 accredited manufacturing sites globally, a trusted manufacturer of SI traceable certified reference materials (CRMs). However, it can be sometimes challenging to find the right reference material you need among thousands of products.

We want to simplify your search for the right product by providing you an overview on the most important product classes relevant for food testing.

We divided this overview into two sections: **Reference Materials for Food Safety** and for **Food Quality Testing**.



To browse the Reference Materials Portfolio, please visit
SigmaAldrich.com/standards



Assure Food Safety

Pesticides

Discover more than 1200 [analytical standards](#) and [certified reference materials](#) of pesticides at SigmaAldrich.com/pesticides

Check out this [flyer for Pesticide reference Materials specific for Food Testing](#)



Biotoxins

We offer a comprehensive range of reference materials for [mycotoxins](#), [marine toxins](#) or phytotoxins like [pyrrolizidine alkaloids](#).

Check out our [mycotoxin standards](#) brochure and [marine toxins flyer](#)



Veterinary Drugs

Under our [VETRANAL®](#) brand you can find more than 240 analytical standards for testing of veterinary drug residues in food.

We also offer certified reference materials for [antibiotics](#), [steroids & hormones](#)



Allergens

For reliable testing of food allergens we offer a comprehensive range of purified [food allergen protein reference materials](#), containing a big range of [standards from Inbio](#) as well as [milk protein CRMs](#)



Food Contact Materials

Check out our portfolio of [reference materials of common migrants from food contact materials](#). A specific flyer is available for the [EU 11/2011 regulation](#) for plastics to come into contact with food. Also we provide [E&L mixes](#) for system suitability tests



PFAS

Discover our analytical Standards and Certified Reference Materials for [per- and polyfluoroalkyl substances \(PFAS\)](#).



Heavy Metals

Our comprehensive portfolio of [CRM metal solutions for ICP and AAS measurements](#) comprises both [single component](#) as well as [multi component solutions](#) under the renowned brands TraceCERT and Certipur.



Genetically Modified Organisms (GMOs)

We are distributing a big variety of [matrix materials with certified mass fractions of GMO material](#) from the European Joint Research Center (JRC)



Other Contaminants

Our portfolio includes many other potential contaminants such as banned [food dyes](#), [PAHs](#), [Nitrosamines](#) or [PCBs and Dioxins](#). Check out the [Reference Materials main webpage](#) to discover our entire portfolio



Assure Food Quality

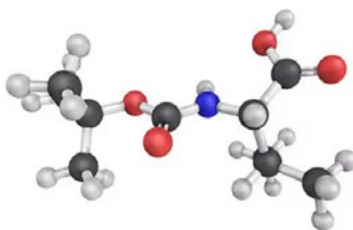
Food Matrix Materials

We offer a comprehensive range of [food matrix materials](#) from various trusted manufacturers such as NIST, JRC, METAS and FERA. The most efficient way to find the most suitable matrix analyte combinations is by visiting the new [Food Matrix Reference Materials Brochure](#)



Amino Acids

Discover our amino acid [analytical standards](#) and [certified reference materials](#). Also check out [labelled amino acid mixes](#).



Carbohydrates and Sweeteners

Browse our portfolio of [carbohydrates](#) and [sweeteners](#) standards. Also we offer a series of [carbohydrate CRM solutions for IC](#)



Lipids and Fatty Acids

Our portfolio of lipids and fatty acids contains [analytical standards](#) and [certified reference materials](#) and includes a considerable selection of [FAME \(Fatty acid methyl ester\) mixes](#)



Vitamins

We provide more than 150 [analytical standards](#) and [certified reference materials](#) of [vitamins](#)



Phytochemicals

Discover more than [2000 reference materials for phytochemicals](#). The portfolio includes more 1400 products manufactured by [PhytoLab](#). For some common medicinal plants [CRM solution mixes](#) are available. Please also check out our [botanical reference materials](#)



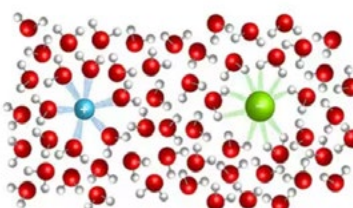
Flavors and Fragrances

Our portfolio comprises more than [200 individual standards](#) for flavors and fragrances and [CRM mixes](#) of allergenic fragrances suitable for IFRA methods



Ions


We offer Ion chromatography calibration solutions for [inorganic anions](#), [inorganic cations](#), [sugars](#) and [organic anions](#). Beside a comprehensive portfolio of [single component solutions](#) we also provide a selection of [multi-ion solutions](#)



Physical Properties

You can find a big variety of physical property reference materials relevant for testing physical properties of food such as [pH](#), [viscosity](#), [density](#), [particle size](#), [colour](#) or [conductivity](#)





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MilliporeSigma
400 Summit Drive
Burlington, MA 01803

SigmaAldrich.com

