

Food-handling utensils are right at the centre of your operations. If designed, used and maintained properly, they can help you work more effectively and ensure product quality and consumer safety.

This guide is intended to help you familiarise yourself with the qualities and capabilities that food-handling tools need if they are to do their job effectively. It provides advice, tips and tricks on how best to select, use, clean and maintain your tools

The topics we'll cover include colour-coding, food-contact compliance, hygienic design, ergonomics and tool cleaning and maintenance. The products we show as examples are all part of Vikan's comprehensive range of food-handling tools, including bowls, scoops, scrapers, buckets, jugs, mixers, shovels and more.

If you have any questions about the topics covered in the guide, visit Vikan.com, where a wealth of information and advice is available. And by all means feel welcome to contact us or your local Vikan distributor if there's anything else we can do to help.



Colour code for greater food safety

In the food and beverage industry, colour coding is used to ensure food safety by separating processes, zones and equipment in production and processing facilities.

Colour coded separation minimises the risk of cross-contamination from microorganisms, food debris, allergens, chemicals and foreign bodies. More generally, it promotes a culture where workers take ownership of their equipment, tools and work zones.



Tips and tricks

Keep it simple. Colour coding systems work best when they're kept simple. Try to restrict your colour coding plan to as few colours as possible.

Use contrasting colours. Think about the colour of your food product ingredients and choose a contrasting colour for the tool. This makes it easy to spot any tools or fragments that end up in a food product.

Colour match tools and storage. Make sure your utensils are stored in the same area where they are used, and use matching colour coded storage solutions, such as shadow boards and wall brackets.

Set up a colour coding maintenance plan. Regularly monitor and review your utensil colour coding plan to make sure it continues to protect your products from cross-contamination.

Utensil colour coding step by step

1

Identify the risks

You'll want to start your colour-coding project by identifying all the associated food-safety hazards (allergens, microorganisms, foreign bodies, etc.) in your production setup. Note that this will vary depending on the type of food you produce, your production processes, your customer segment and relevant legal and compliance requirements.

2

Choose your strategy

Once you have identified the hazards and their associated risk, you'll need to choose the most appropriate strategy for colour coding the utensils in your facility.

Commonly used strategies are:

Colour coding by use

With usage-based colour coding, you'll want to designate specific colours to specific usage scenarios. For example, you might choose specific colours for utensils used to handle ingredients or products containing allergens.

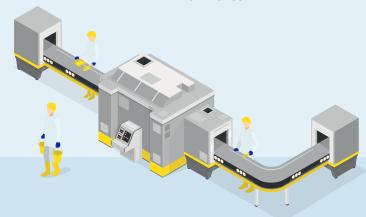
Colour coding by process

This is often used at manufacturing and processing plants where processes need to be kept separate to prevent crosscontamination. For example, colour coding can distinguish utensils used for different types of products.

Colour coding by zone

In this case, you would assign different colours to tools used in different zones. This prevents cross-contamination between zones, e.g. high-risk cooked product zones versus low-risk raw product zones, and helps to keep your staff accountable for the tools used in their particular work zones.





3

Prepare your colour coding plan

At Vikan, we not only supply a full range of food-handling utensils in a variety of colours. We also provide extensive support in setting up your colour-coding plan. The best way to get started is to visit Vikan.com.

Comply with food-contact rules

Regulations require that utensils used to handle food and beverages are made from food-contact-compliant materials that cannot transfer unwanted substances into the products you are making or packing.



Regulations applicable in the EU

Plastic utensils used in contact with food in the EU must comply with the following regulations on food contact materials:

- (EC) 1935/2004 on food-contact materials
- (EC) 2023/2006 on good manufacturing practice for food-contact materials
- (EU) 10/2011 on plastic food-contact materials

Utensils complying with the EU regulations on food-contact materials will be marked with the 'Glass & Fork' symbol on the label or have this engraved/ moulded on the product itself. Many utensils also comply with the US FDA Regulation CFR21, but this alone is not sufficient to allow their use in the EU.

Declarations of Compliance

In Europe, all plastic tools used in contact with food must be accompanied by a Declaration of Compliance (DoC). These declarations guarantee that the tools comply with applicable regulations on food-contact materials and are safe to use in contact with food and beverages.

The plastics used in food utensils are also subject to migration testing. The usage data found in your DoC tells you how long you can use the utensil in contact with food, and at what temperatures.



Tips and tricks

Know your regulations. The regulations listed above apply in the European Union. If you operate elsewhere, be sure to find out – and comply with – all applicable regulations.

Keep track of your DoCs. When the auditors come calling, you'll want to have all relevant DoCs readily on hand. On Vikan.com you have access 24/7 to DoCs covering every Vikan food-handling utensil.

If you are unsure whether your current DoCs meet all legal and auditor requirements, download our convenient checklist at vikan.com.



One of the most exciting developments in food-handling utensils in recent years is hygienic design. The purpose of hygienic design is to reduce the risk of products being contaminated by microbes, food debris (including allergens) chemicals and foreign bodies.

How it works

Hygienic design involves making food-handling tools easier to decontaminate by adhering to a number of design principles formulated by the European Hygienic Engineering Design Group (EHEDG). These principles cover everything from the basic design of a utensil to the materials used to make it.

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Hygienic design principles

- Utensils should not have areas where contamination can become trapped, or that are difficult to clean and dry, such as holes, recesses, crevices, and sharp internal angles
- Utensils should feature a one-piece construction
 or at least be easy to take apart and reassemble
- Utensil surfaces should be smooth and non-porous
- Utensils should be well made and durable
- Materials must be non-tainting, appropriately resistant to corrosion, abrasion and heat, and food-contact compliant



Empowering workers through ergonomics



Food-handling tools are important, but the real stars of safe and effective food handling are the people who do the actual work. Accordingly, food-handling utensils need to be designed to support those who use them. And ergonomics is the vehicle that enables this to happen.

It starts with the grip

Like many tools, food-handling utensils work as extensions of the hands that wield them. As the critical point where tool meets hand, the grip has to meet a number of ergonomic requirements to enable the worker to use the tool effectively and comfortably.

A good grip will

- Feel comfortable in the hand, with no sharp edges or annoying hollows
- Be roomy enough to accommodate different hand sizes and positions comfortably
- Be positioned on the tool in a way that makes using the tool as easy as possible
- Have just the right angle for effective, comfortable use
- Optimise the tool's centre of gravity and distance from the body's centreline





Tips and tricks

Check for ergonomic design. When choosing a food-handling tool, remember to ask about ergonomics. Your supplier of food-handling tools can provide guidance, as can product descriptions and sales materials.

Test the product physically. There's no better way to test for ergonomics than to try using a tool yourself. When trying out a product, test for:

- Handle/grip quality is it large enough, comfortable, positioned and angled optimally?
- Adaptability will the tool's design accommodate different needs and usage preferences?
- Balance and leverage attributes are there design features that alleviate stress, strain and discomfort?



Food-handling utensil cleaning & maintenance

Most good food-handling utensils will be designed with hygienic design principles in mind (see "Design goes hygienic"). This makes them quicker and easier to decontaminate and minimises the risk of product contamination.

There are different methods for cleaning these utensils, but all should be based on a comprehensive decontamination program.





Whatever method of utensil cleaning you use, it should be based on risk assessment, and be validated, monitored and/or verified and documented.

Risk assessment

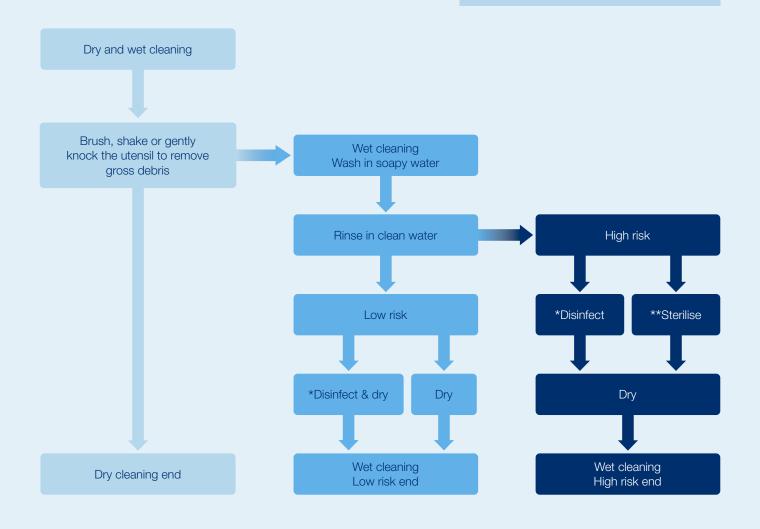
In performing a risk assessment, you'll want to consider:

- The risk from the type of contamination to be removed, e.g. microorganisms, allergens, foreign bodies, product residues
- The risk level of the food being produced, e.g., low risk, high care, high risk, ambient stable
- The type of food product/environment, e.g., wet or dry
- The risk to consumers, e.g., infants, elderly, allergic, health-compromised

Validation

- The method used to clean the utensil should be proven to work under the worst-case scenario
- It should detail the methods, equipment, and chemicals used for cleaning, and the frequency of cleaning required
- You may need to develop different methods for different utensils, used for different tasks

- * Reduce microbes to an acceptable level
- ** Kill all microbes



Monitoring and verification

Once you've established a validated cleaning method, you'll need to monitor and/or verify its efficacy each time the method is used.

- Monitoring methods determine whether the cleaning has been conducted effectively, in a time frame that allows for rapid detection and correction of any shortfall. Examples of monitoring methods include:
 - Visual inspection
 - Adenosine Tri-Phosphate (ATP) rapid detection sampling swabs
 - Protein rapid detection sampling swabs
 - Allergen rapid detection lateral flow sampling devices

- Verification methods, in addition to monitoring, determine whether the cleaning has been conducted effectively and/or is still effective.
 Examples of verification methods include:
 - Microbial sampling and analysis
 - Periodic review of visual inspection check/sign off sheets
 - Periodic review of ATP, protein, allergen, microbial swab test results

Records of your method validation, monitoring, and verification – and of the results, reviews and corrective actions taken – should be kept for auditing/due diligence purposes.

Utensil cleaning - wet

Wet washing food-handling utensils can involve:

- Immersion and agitation of the utensil in water containing a detergent
- Use of a low-pressure hose and/or manual cleaning (wiping/using a brush)
- Loading of utensils into an onsite cleaning system, such as a tray or dish washer

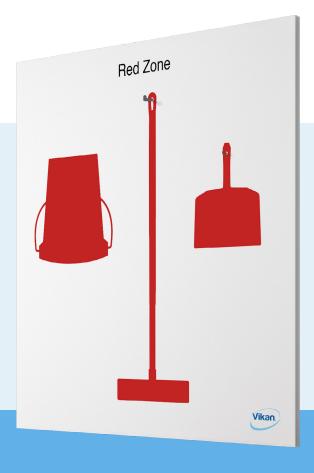
During the day, utensils may also be placed in a "sanitiser bath." Organic soiling on the utensil can quickly reduce the efficacy of the disinfectant component of the sanitiser, and act as a protective barrier to the microorganisms present. Consequently, sanitiser baths should be changed at frequently enough to prevent this.

Utensil cleaning - dry

Utensils used in dry goods manufacture can either be dry cleaned (see decontamination decision tree) and disinfected using disinfectant or alcohol wipes, or wet cleaned.

Be sure to dry utensils after wet cleaning, as any remaining moisture could increase the risk of microbial growth and cross-contamination.





Tips and tricks

To maintain your food-handling tools, follow these simple guidelines:

- Regularly inspect for damage and wear and tear, and replace as appropriate, based on risk assessment
- Produce descriptions/images of what is acceptable and what is not
- Keep records of utensil inspection and replacement for auditing/due-diligence purposes
- Avoid makeshift repairs to damaged utensils, as this will increase the risk of product contamination
- Store utensils appropriately (i.e., on colour-coded wall brackets or shadow boards) to minimise the risk of damage and cross-contamination



