




Puremed's guide to color-coding





Simply put,
food safety is essential
when producing foods.
Good hygiene and
cleaning practices
increase food safety.

Why use color-coding?

Color-coding helps ensure greater food safety by making it easier to more effectively separate processes, zones, and equipment in your food production setup and thus minimize cross-contamination. Color-coding can be embedded into your work processes as a natural part of your Good Manufacturing Practice (GMP), or as a proactive risk reduction step as part of your HACCP prerequisite program.

What is GMP?

GMP (Good Manufacturing Practice) describes the conditions and practices necessary for the manufacturing, processing, packing, and storage of food to ensure its safety and wholesomeness. There is great emphasis on compliance with GMP in all relevant food legislation and food safety standards.

What is HACCP?

The HACCP (Hazard Analysis and Critical Control Point) system is designed to ensure the correct analysis and control of biological, chemical, and physical hazards in the food production chain, from raw material production through to manufacturing, distribution, and consumption.

Did you know...?

Both the EC regulation 852/2004 and the American FDA Food Safety Modernization Act require food processors to have a written food safety plan, including systematic hazard analysis, risk assessment, and implementation of control measures.

A must-have for GFSI approval

The GFSI (General Food Safety Initiative) approved food standards BRC, FSSC22000, IFS and SQF all require special measures to prevent cross-contact and cross-contamination. Color-coding is ideally suited to this. In the BRC standard it is mandatory that your cleaning equipment is suitably identified for intended use, which could mean color-coding.



BRC Global Standard for Food Safety Issue 8 requires color-coding or labeling for the identification of cleaning equipment.



FSSC 22000 Version 4.1 is comprised of ISO standards that specify the need for cross-contact and cross-contamination controls.



IFS Food Standard 6.1 mentions that the intended use of cleaning equipment shall be clearly identified. Cleaning equipment shall be used in a way that avoids cross-contamination.



SQF Code Edition 8 on Food Manufacturing requires the separation of functions, products, and zones based on risk.



LEAN

The use of color-coding of tools and equipment is also in line with the 5S Lean system, which uses five steps – Sort, Set in order, Shine, Standardize, and Sustain – to ensure the correct order, systematization and ownership in a production process or facility.

The advantages of color-coding

- ✓ You minimize the risk of your products becoming contaminated with microorganisms, allergens, or foreign bodies by separating steps, sections, and areas in the food production process.
- ✓ You reduce the risk and cost of product rejection and recall as there is a lower risk of cross-contamination in your finished products.
- ✓ You speed up your processes by ensuring equipment is easy to locate and kept in the right place. This approach is also in line with the HACCP principles on monitoring and checking.
- ✓ You help remove misunderstandings. A color-coding system is easy to understand and learn – irrespective of language skills.
- ✓ You improve safety by promoting a culture that encourages employees to take ownership of their equipment and work zones.
- ✓ You extend the service life of your equipment by ensuring it is stored correctly on hooks, hangers, or shadow boards.
- ✓ You reduce costs linked to replacing equipment, because it lasts longer.
- ✓ You reduce the quantity of tools and equipment used in food production.
- ✓ You create a neat, well-ordered work area, with a clearly visible focus on food safety. This makes an attractive impression on customers, authorities, auditors, and other visitors.



Prepare correctly

Before starting to use color-coding in your food production set-up, it is essential to address the following questions.

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What are the potential hazards in my food production set-up?

You must identify all potential food safety hazard risks (allergens, microorganisms, foreign bodies), in your production set-up, based on the type of food you produce, as well as your production processes, customer segment, legislation, and certification(s). If you have a HACCP plan, you will have identified these hazards and assessed the associated risk already.

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Is there a risk that my product(s) may become contaminated by allergens?

If the answer is yes, the ideal color-coding solution is to allocate a specific color code to the tools and equipment that come into contact with these allergens.

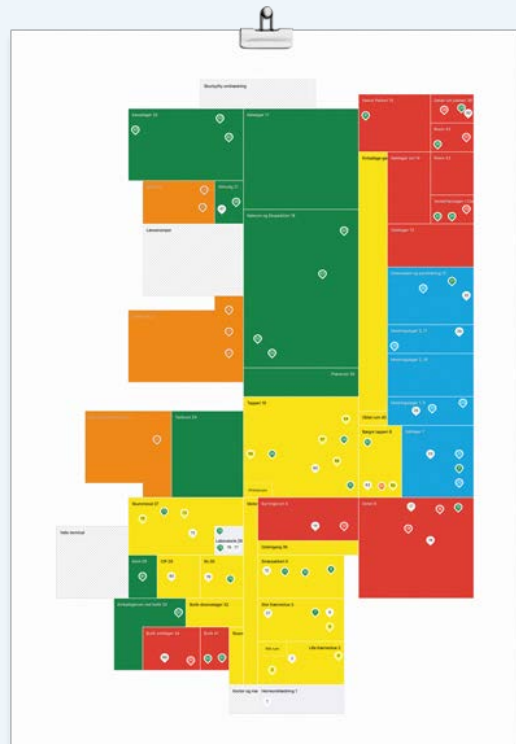
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Is your food production set-up divided into zones?

If your production facility is already divided into zones, you can base your color-coding on your existing zones, if that makes practical sense.

Give each zone its own color to make it easy to identify the equipment and tools that belong to each zone, and keep them separate from each other.

Zone division can also be applied at the production line level to limit the risk of cross-contamination between one production line and another. This type of zone control involves allocating a designated color to equipment intended for use exclusively within a particular area and/or on a particular production line.



Tips and tricks on how to implement color-coding effectively

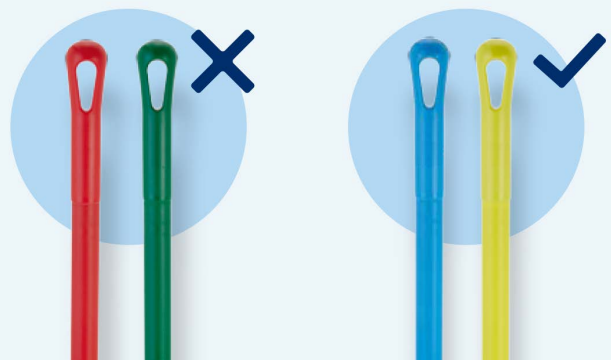
Use contrasting colors.

Color contrast enables you to easily spot plastic fragments or stray bristles from equipment in the food. You should, of course, always inspect and replace cleaning equipment and food handling tools as soon as they begin to show any signs of wear.



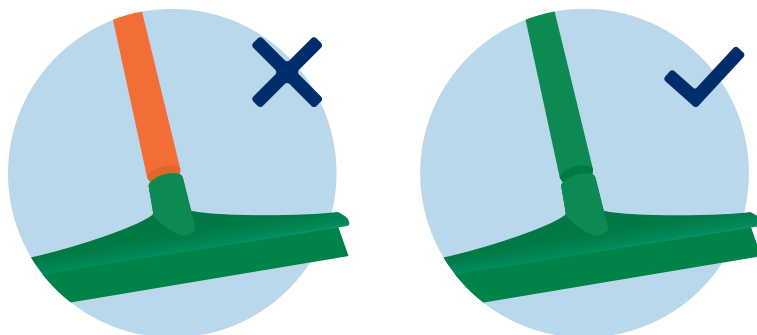
Use color-blind friendly combinations.

1 in 12 men and 1 in 200 women are color-blind. Use different shades and contrasts to make it easier for color-blind staff to differentiate colors. If in doubt, take a photo of the colors and convert the photo into black and white. If you can tell the difference, the shade differentiation is strong enough.



Avoid complicated color combinations.

We recommend not combining colors on individual tools or tool groups, but instead using the same color for handles as well as broom/squeegee heads.



Keep it simple.

Limit the number of colors as much as possible. Do not try to assign colors for each and every step of a complicated process. If the color-coding system is too complicated, your staff may not understand or follow it.

Make sure the colors make sense.

The colors you select should make sense to your employees. If possible, you should select colors that are logically associated with a specific zone or food product.







Use signs to make it clear.

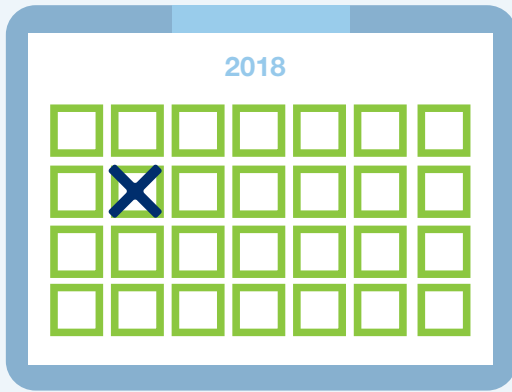
Support your color-coding system with good signage (using images or multilingual text where necessary) to ensure it is followed correctly.

A Puremed Site Survey provides you with a color-coding plan that you can use as an overview of the complete facility or area.



Cleaning station - blue

	Product No.: 0617 Quantity: 1 Wall Bracket for 4 Products, 320 mm,	Comment:
	Product No.: 31713 Quantity: 1 UST Broom, 400 mm, Soft, Blue	Comment:
	Product No.: 41799 Quantity: 1 UST Hand Brush with short handle, 260 mm, Soft, Blue	Comment:
	Product No.: 45813 Quantity: 1 UST Bench Brush, 330 mm, Soft, Blue	Comment:
	Product No.: 56603 Quantity: 1 Dustpan, 330 mm, Blue	Comment:
	Product No.: 71609 Quantity: 1 Ultra Hygiene Squeegee, 600 mm, Blue	Comment:



Fully carry out the color-coding program.

Implement your color-coding system within all the zones affected at the same time. For greater clarity, have a definite date for phasing out your old system, and a clear start date for your new color-coded system.



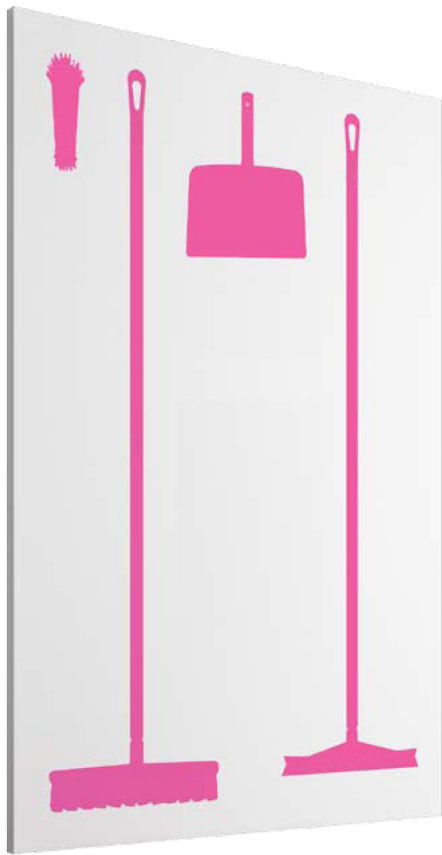
Communicate your plan clearly throughout the facility.

Meet with each of your shift managers first to ensure they understand the system, then roll out the program to other employees.



Select colors that will accommodate all your cleaning and food handling needs.

We recommend using the standard colors (green, blue, red, white and yellow) in the larger color zones where many different kinds of cleaning equipment and food handling tools are needed. And using other colors – such as pink, orange, purple and lime – in smaller areas focused on high risk and allergen control, that use fewer cleaning equipment and food handling tools.



Color match your tools and storage areas. Make sure the tools are stored in the same area where they are used, and use color-coded storage, such as shadow boards and wall brackets.



Follow through.

Ensure your purchasing department, quality manager, and employees use the same documentation, so everyone can follow the same system.



Set up a color-coding maintenance plan.

Regularly monitor and review your color-coding plan and check and maintain your equipment to maximize your control of cross-contamination.

Good practice examples of color-coding

Color-coding by use

Choose one color for the cleaning equipment and food handling tools that come into contact with food, and a different color for equipment and tools that do not. Also, select one particular color for cleaning drains.

There are no set rules or regulations about which color to use where in a food facility. For increased food safety, we recommend choosing a color that contrasts clearly with the food you produce.

Non-food contact

For example, green could be used to identify cleaning tools used on the floor.

Food contact

Blue is commonly used for cleaning tools for food contact surfaces, because few foods are blue.

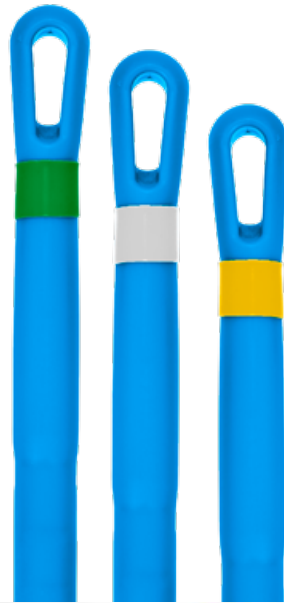


Drains

Black is commonly used for drains, engineering, and outside areas, as it does not show the dirt.

Allergens or chemicals

Instead of new colors for use on different lines within a color-coded zone, color-coded rubber bands can be placed on equipment to distinguish tools used for a particular line.



Allergens

Other colors – such as pink, orange, purple and lime – can be selected to differentiate among tools that are used with particular allergens.



Warehouse

Use more discreetly colored tools (brown and gray) in highly visible areas such as corridors.



Good practice examples of color-coding

Color-coding by process

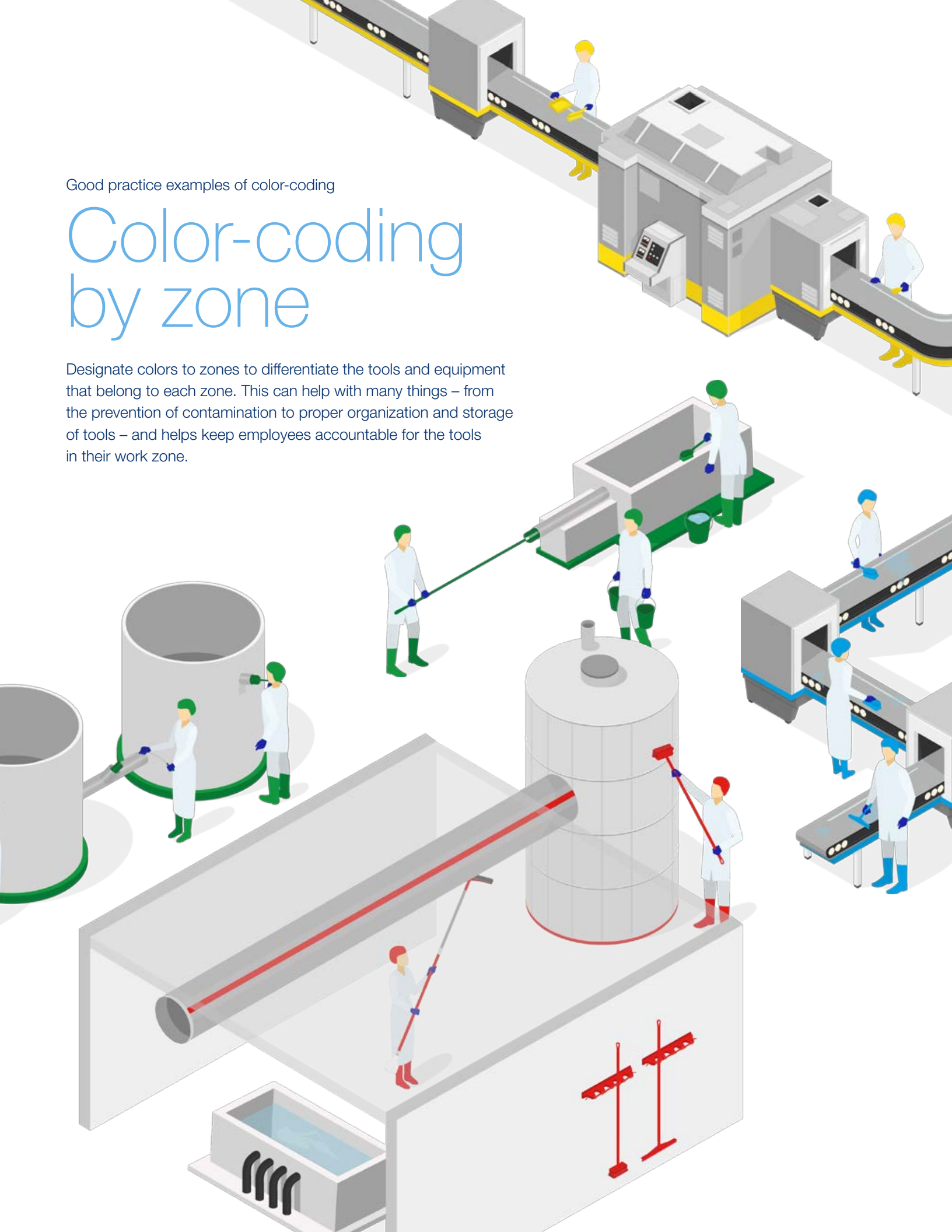
This is especially important in food manufacturing and processing plants where these steps need to be kept separate to prevent cross-contamination. For example, meat processing facilities and kitchens often color code to distinguish raw meat from meat that is cooked, or semi-processed or raw foods from more finished product.



Good practice examples of color-coding

Color-coding by zone

Designate colors to zones to differentiate the tools and equipment that belong to each zone. This can help with many things – from the prevention of contamination to proper organization and storage of tools – and helps keep employees accountable for the tools in their work zone.



Potential pitfalls in color-coding

❗ **Problem:** Not enough people are involved in the planning process.

✓ **Solution:** Involve your management team, purchasing agents, and line workers from the very beginning. With everyone involved, you ensure buy-in from the start – and better execution.

❗ **Problem:** Decisions are made too quickly.

✓ **Solution:** Your color-coding should be planned carefully, taking into account the specific requirements of your facility, processes, and people – as well as auditor requirements. Adjust your plan as you work in order to ensure it fits the unique needs of your plant.

❗ **Problem:** No company-wide training schedule.

✓ **Solution:** It is important that you ensure your team – at all levels of your organization – receive the training necessary to carry out your plan correctly. Organize training early, so your employees know how to work with color-coding from the start.

❗ **Problem:** The color-coding system is too complex.

✓ **Solution:** A color-coding system works best when it is as simple as possible. Restrict your color-coding plan to as few colors as makes sense. Keeping it simple helps everyone understand the plan – and stick to it.

❗ **Problem:** Colors chosen do not provide sufficient contrast with the food products.

✓ **Solution:** Select colors that contrast clearly with the food, in order to ensure that any foreign bodies (bristles or plastic fragments) are more easily seen, resulting in increased food safety.

❗ **Problem:** Purchasers choose the cheapest options.

✓ **Solution:** Sometimes the cheapest option will work – but a low initial investment often leads to long-term costs because equipment needs to be replaced more frequently and can increase the risk of food product contamination. Ensure your purchasing agents understand the long-term requirements and the food safety and quality implications, so they make the best choice from the start.

❗ **Problem:** Everyone is too focused on the big picture.

✓ **Solution:** It is important to keep the big picture in mind, but your solution must be practical. When designing your plan and selecting equipment, make sure to ask detailed questions. Will the tool work in practice? Is it durable enough? Is it hygienically designed? Is it food contact compliant and accompanied by the appropriate documentation? Is it easy to store?

Color-coding for better food safety

In the food production and processing industry, tightly controlled systems and procedures are essential to comply with regulations – and ensure food safety. A color-coding system for your work areas, tools, and equipment is a simple way to prevent cross-contamination, and ensures you are better prepared to meet GFSI-approved food safety standards. When correctly implemented, color-coding should be easy to follow, and encourages employees to take extra responsibility for food safety and cleanliness in their work area.

Getting started is simple

Just get in touch with your local Puremed representative. We are always happy to help with advice and guidance. To make your color-coding implementation easier, Puremed produces a full range of color-coded cleaning equipment, food handling tools, and storage solutions. All our equipment comes with documentation, including technical specifications and an EU Declaration of Compliance for food contact, when appropriate.



Puremed Hygienic Zone Plan

We provide our customers with a free and confidential color-coded site plan development service. We call it a Site Survey. It entails a comprehensive inspection of your plant to identify and tackle any hygiene challenges, including adding a color-coding plan, cleaning practice optimizations, and a review of cleaning equipment and

food handling tools. Conducted by a trained Puremed hygiene professional, a Site Survey helps make sure your plant's cleaning equipment, food handling tools and procedures are in line with changing compliance requirements, so you can be sure of passing any required hygiene audits.

Reach out

If you require any further information about our products or color-coding services, contact your sales representative or Puremed customer service.

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