



**Global Standard
FOOD SAFETY**

**UNDERSTANDING AIR QUALITY
IN FOOD PRODUCTION**

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Introduction

The food and beverage industry is well regulated and there are strict controls on how manufacturing facilities must operate to ensure that food is produced free of contaminants and safe to consume.

Air quality and hygiene are paramount to ensure both the safety of food production and for the environment for staff working in food and beverage facilities. However, there is little guidance on what air quality is required in these facilities and what specification or classification of air filtration is needed to achieve it. This document will assist sites in carrying out internal risk assessments and provide the key facts that should be considered.

This publication has been written with reference to the Eurovent 4/23 standard which defines the recommended air filtration efficiencies dependent on application and outdoor air quality. Eurovent is Europe's industry association for indoor climate, process cooling, and food cold chain technologies. Its members from throughout Europe represent more than 1,000 companies, who provide independent standards for the industry. It also gives guidance surrounding the change in air filter classifications from the old EN 779:2012 standard to the current EN ISO 16890-1:2016. The standards provide clear, independent advice regarding what filtration efficiencies are needed for most industrial applications, including the food and beverage industry.

This publication will help you to define your outside air quality, the supply air category to achieve, and identify the right filter choices for your facility.

There are four stages to air filtration within a production facility:

First stage - which is typically used to filter out coarse or larger particles

Second stage - is used to remove fine particles.

Third stage - used where the process within the manufacturing area requires a high degree of cleanliness or a cleanroom is present.

Fourth stage - if required, would utilise molecular filters to remove presence of nuisance/irritant or toxic odours.

The guidance is aimed at individuals and teams responsible for food production facilities, sites seeking more information on sections of the BRCGS Global Standard Food Safety, or anyone tasked with reviewing and assessing current filtration and air quality within their site.