

QUICK REFERENCE COMPRESSED AIR PURITY GUIDE FOR FOOD MANUFACTURERS

DIRECT OR IN-DIRECT CONTACT COMPRESSED AIR

Direct Contact:

Air that comes into direct contact with production equipment, preparation surfaces, ingredients, finished products or packaging.

Examples:

- Sparging
- Air knives (cutting/peeling/cooling)
- Spraying/coating
- Conveying (movement)
- Direct cooling
- Packaging
- Drying

In-direct contact:

Air that comes indirectly into contact with or inadvertently encounters production equipment, preparation surfaces, ingredients, finished products or packaging.

Examples:

Where you have valves, cylinders and pneumatics operating in the manufacturing environment where the contaminated exhaust air can then inadvertently encounter direct contact areas.

If you have compressed air that fits either the direct or in-direct contact definition, then it should meet or exceed the air purity (quality) classification as set out in ISO 8573-1:2010:

Compressed air purity designation ISO 8573-1:2010 [1:2:1]

ISO8573-1:2010	Solid Particulate			Water	Oil
	Maximum number of particules per m ³			Vapour Pressure Dewpoint	Total Oil (Aerosol liquid and vaourt)
	0.1 ~ ≤ 0.5	0.5 ~ ≤ 1.0	1.0 ~ ≤ 5.0	°C PDP	mg/m ³
	≤ 20,000	≤ 400	≤ 10	≤ -40°C	≤ 0.01
Class	1			2	1

NON-FOOD CONTACT COMPRESSED AIR

Non-food contact = compressed air used outside of the food manufacturing process and/or facility

Example: workshop air

If you have compressed air that is non-food contact, then it should meet or exceed the air purity (quality) classification as set out in ISO 8573-1:2010:

Compressed air purity designation ISO 8573-1:2010 [2:4:2]

ISO8573-1:2010	Solid Particulate			Water	Oil
	Maximum number of particules per m ³			Vapour Pressure Dewpoint	Total Oil (Aerosol liquid and vaourt)
	0.1 ~ ≤ 0.5	0.5 ~ ≤ 1.0	1.0 ~ ≤ 5.0	°C PDP	mg/m ³
	≤ 400,000	≤ 6000	≤ 100	≤ +3°C	≤ 0.1
Class	2			4	2

The information in this quick reference guide has been taken from the BCAS (British Compressed Air Society) Best Practice Guide for Food and Beverage Grade Compressed Air.

You can find the full guide on the PPS website via the QR code overleaf.