

# Three Levels of ASTM Rated Protection to Enhance Comfort and Safety

Dukal offers three levels of protection to provide valuable options for both healthcare providers and patients based on procedure, type of protection, and personal preference.

## Surgical Mask Level 1

ASTM Level 1 surgical masks are a cost-effective solution for procedures with a low fluid exposure risk (i.e. splashes or sprays can be produced).

- 3-ply pleated lightweight, breathable material
- BFE of 99%
- Flexible nosepiece

Item #	Description	Packaging
1540	Ties, Blue	50/BX, 6 BX/CS
1541	Earloop, Blue	50/BX, 6 BX/CS
1550	Ties, Anti-fog, Blue	50/BX, 6 BX/CS



## Surgical Mask Level 2

ASTM Level 2 surgical masks are ideal for procedures with a moderate fluid exposure risk (i.e. splashes or sprays can be produced).

- 3-ply pleated lightweight, breathable material
- BFE of 99%
- Flexible nosepiece

Item #	Description	Packaging
1580	Earloop, Blue	50/BX, 12 BX/CS



## Surgical Mask Level 3

ASTM Level 3 surgical masks meet the highest performance requirements defined by ASTM F2100-11. Masks feature three layers of construction, offering clinicians comfort, protection, and breathability. Designed for fluid protection and are ideal for procedures with a high risk of fluid exposure (i.e., splashes or sprays can be produced).

- 3-ply pleated lightweight, breathable material
- BFE of 98%
- Flexible nosepiece



Item #	Description	Packaging
1590	Earloop, Blue	50/BX, 12 BX/CS

### Understanding ASTM Levels

### ASTM LEVEL 1 Low fluids

### ASTM LEVEL 2 Light to moderate fluids

### ASTM LEVEL 3 Moderate to high fluids

BFE at 3.0 micron	≥95%	≥98%	≥98%
PFE at 0.1 micron	≥95%	≥98%	≥98%
Differential pressure ( $\Delta P$ ) mm H <sub>2</sub> O/cm <sup>2</sup>	<5.0	<6.0	<6.0
Fluid resistance (mmHg)	80 mmHg	120 mmHg	160 mmHg
Flammability	Class 1	Class 1	Class 1

### Bacterial filtration efficiency (BFE)

Tests filtration ability against an aerosol containing bacteria 3.0 microns in size.

### Particle filtration efficiency (PFE)

Assesses filtration ability when tested against sub-micron particulate matter 0.1 microns in size— which is representative of some viruses.

### Differential Pressure ( $\Delta P$ )

Gauges air flow from one side of a mask to the other, assessing breathability

### Fluid Resistance

Tests penetration resistance to synthetic blood at three protection levels – 80 mm Hg, 120 mm Hg and 160 mm Hg.

Find our full line of products at [dukal.com](http://dukal.com)

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