Understanding ASTM & EN Face Mask Performance Levels

The first step begins with selecting the right surgical face mask based on its catered procedure and environment. Although masks may look similar, they each possess a notable difference in terms of quality, duty and filtration efficiency.

As a critical component of your Personal Protective Equipment (PPE) protocol, understanding and abiding by the ASTM performance level and EN standard of each surgical face mask will not only make selection effortless and straightforward but also crucial to your protection.

Cross Protection® surgical face masks assembled under ASTM and EN specifications material are designated as one or more of the following performance levels based on the quality, filtration level efficiency and barrier performance properties.



A rating system is designed to aid the convenience of your selection process. Cross Protection's surgical face masks are categorized based on various aspects performances achieving and some even exceeding the ASTM and EN standard and requirements.

Allow the displayed chart to assist your decision making on selecting the correct surgical face mask tailored specifically to your individual needs and requirements.



TEST	ASTM F2100-11			EN14683:2014		
	Level 3	Level 2		Type IIR	Type II	Туре I
Synthetic Blood / Splash Resistance Penetration, mmHg / kPa	160	120		16.0 kPa	Not Required	Not Required
Bacterial Filtration Efficiency (BFE), @ 3 microns, %	≥98	≥98		≥98	≥98	≥95
Sub-micron Particulate Filtration Efficiency (PFE), @ 0.1 micron, %	≥98	≥98		Not Required	Not Required	Not Required
Delta P, mmH2O/cm²	<5.0	<5.0	<4.0	<5.0	<3.0	<3.0
Flammability	Class 1	Class 1		Not Required	Not Required	Not Required
Microbial Cleanliness (CFU/g)	Not Required	Not Required	Not Required	≤30	≤30	≤30

Specification Definitions

- Synthetic Blood / Splash Resistance Penetration measures the mask's ability to prevent fluids from traveling through the material. The higher the fluid resistance (filtration), the better the protection. (Measured in mmHg.)
- Bacterial Filtration Efficiency (BFE) measures the mask's ability to prevent bacteria from traveling through the material. (Measured at 3 microns.)
- Sub-micron Particulate Filtration Efficiency (PFE) measures the mask's ability to prevent sub-micron particulates from traveling through the material. The size of the particles filtered is critical (Measured at 0.1 micron.)
- Differential Pressure (Delta P) determines breathing resistance the higher the Delta P, the less the breathability, but the better the filtration. (Measured in mmH2O/cm²)
- Flammability is a ranking derived by laboratory standard test methodology of a material's propensity to burn rapidly and spread flames.
- Microbial Cleanliness it measure the total number of viable microorganisms on the face mask.
 The lower the value, the cleaner the mask. (Measured in CFU/g)



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Made In Malaysia

FACE MASK

TIE ON



- Maximum barrier protection for any situation with potential of exposure to heavy levels of aerosols, sprays and fluids.
- · Complex oral surgery.
- · Crown preparation. · Implant placement.
- · Periodontal surgery.
- · Use of ultrasonic scalers (Magnetostricive and Piezo).
- · Root planing & Scaling.

ASTM LEVEL 2

- Ideal for procedures where low amounts of fluid, spray or aerosols are produced.
- · Patient exams.
- · Operatory cleaning / maintenance.
- · Impressions.
- · Lab trimming, finishing & polishing.
- · Orthodontics.

ASTM LEVEL 3

- Moderate barrier protection for low-to-moderate levels of aerosols, sprays and fluids.
- · Limited oral surgery.
- · Endodontics.
- · Prophylaxis.
- Restoratives / compositives.
- Sealants.

ASTM LEVEL 1

Yellow

Color Guide





Orange







Folding









Diamond Fold

Res-Q 300 Ultra (4ply)

The most premium class of surgical face mask.

•BFE: ≥98% •PFE: ≥98% Meets EN 14683 - Type IIR

Code : 2-407EL

Packing: 40 Pieces x 20 Boxes





Res-Q 300 Plus - Sensitive (3ply)

Catered to individuals with sensitive, allergy and easily irritated skin.

•BFE: ≥98% •PFE: ≥98% Meets EN 14683 - Type IIR

Code : 2-426EL

Packing: 50 Pieces x 20 Boxes

Res-Q 300 Plus (3ply)

• BFE: ≥98% • PFE: ≥98%

Code : 2-406EL

Proven reliable protection against

common pathogens and particulates.











Res-Q 300 Plus - Kids (3ply)

Packing: 50 Pieces x 20 Boxes

Catered to children aged between 4 to 12 years.

• BFE: ≥98% • PFE: ≥98%

Code : 2-688EL Packing: 50 Pieces x 20 Boxes





Res-Q 300 (3ply)

General standard for both procedural and surgical use.

• BFE: ≥95% • PFE: ≥95% Meets EN 14683 - Type II

Res-Q 300 Basic (3ply)

pathogens and particulates.

Packing: 50 Pieces x 20 Boxes

• BFE: ≥95%

Code : 2-403EL

Reliable protection against common

Code : 2-400EL Packing: 50 Pieces x 20 Boxes







Proven reliable protection against common pathogens and particulates. •BFE: ≥98% •PFE: ≥98% Meets EN 14683 - Type IIR

Code : 2-406TO

Packing: 50 Pieces x 20 Boxes

Res-Q 300 Plus (3ply)

Res-Q 300 Ultra (4ply)

• BFE: ≥98% • PFE: ≥98%

Code : 2-407TO

Meets EN 14683 - Type IIR

Packing: 40 Pieces x 20 Boxes

face mask.

The most premium class of surgical





Res-Q 300 (3ply)

General standard for both procedural and surgical use.

• BFE: ≥95% • PFE: ≥95% Meets EN 14683 - Type II

Code : 2-400TO Packing: 50 Pieces x 20 Boxes





ACCESSORIES

Face Shield (Anti-Fog)

Constructed with lightweight, transparent anti-fog shields.

• Aid to increase peripheral protection · Ideal for dental and medical industries

Code : 5-903 Packing: 10 Pieces x 1 Bag



Clip On (Face Mask)

Ideal for medical officers wearing hood, tudung covers or hair tied in a bun.

- · Effortless and convenient wearability
- Reusable

Code : FC001 Packing: 10 Pieces x 1 Bag

