

## Technical Data Sheet CA Series filters

Product	Product name	Product code
Particle filter P2	P2R	40301
Particle filter P3	P3R	40302
Combined filter P2RC	P2RC	41521
Combined filter P3RC	P3RC	41522

Product	Product name	Product code
Gas filter A1	CA-A1	40201
Gas filter A2	CA-A2	40202
Gas filter K1	CA-K1	40204
Gas filter AX	CA-AX	40225
Gas filter ABEK1	CA-ABEK1	40203

### Product Description

Filters of CA series, are designed for use with all of Shigematsu negative pressure half masks and full face masks. The gas filters can easily be combined with combined filter P2RC, P3RC of CA series in order to obtain protection also against -solid and/or liquid particles (CA-AX filter is a single use only).

### Applicable Gas and Colour

Colour	Filter Type	Application
Brown	A	Organic gases and vapours (boiling point > 65°C)
Grey	B	Inorganic gases and vapours
Yellow	E	Sulphur dioxide and other acidic gases and vapours
Green	K	Ammonia and organic ammonia derivatives
Brown	AX	Organic gases and vapours (boiling point < 65°C)
White	P	Solid and Liquid particles

### Class Type of Filters

#### Particle Filters

Class	Filter Efficiency	Max. Filter Penetration (%)
P1	Low	20
P2	Medium	6
P3	High	0.05

#### Gas Filters (A, B, E, and K)

Class	Max. Permissible Concentration
1	1,000 ppm (0.1 vol.%)
2	5,000 ppm (0.5 vol.%)
3	10,000 ppm (1.0 vol.%)

## Technical specification

Series			CA series								
Type			Particle Filters		Combined Filters (+ Gas Filters)		Gas filters				
Class			P2	P3	P2	P3	A1	A2	K1	AX	ABEK1
Product name			P2R	P3R	P2RC	P3RC	CA-A1	CA-A2	CA-K1	CA-AX	CA-ABEK1
Product code			40301	40302	41521	41522	40201	40202	40204	40225	40203
Approval			EN 143:2000 AS/NZS 1716:2012			EN 14387:2004+A1:2008 AS/NZS 1716:2012					
Test Gas	Requirement (min)	Concentration (PPM)	Breakthrough time (min)								
Cyclohexane (C <sub>6</sub> H <sub>12</sub> )	70	1,000	-	-	-	-	≥ 85	-	-	-	≥ 70
Cyclohexane (C <sub>6</sub> H <sub>12</sub> )	35	5,000	-	-	-	-	-	≥ 35	-	-	-
Chlorine (Cl <sub>2</sub> )	20	1,000	-	-	-	-	-	-	-	-	≥ 70
Hydrogen sulphide (H <sub>2</sub> S)	40	1,000	-	-	-	-	-	-	-	-	≥ 100
Hydrogen cyanide (HCN)	25	1,000	-	-	-	-	-	-	-	-	≥ 40
Sulphur dioxide (SO <sub>2</sub> )	20	1,000	-	-	-	-	-	-	-	-	≥ 35
Ammonia (NH <sub>3</sub> )	50	1,000	-	-	-	-	-	-	≥ 220	-	≥ 50
Dimethylether (CH <sub>3</sub> OCH <sub>3</sub> )	50	500	-	-	-	-	-	-	-	≥ 50	-
Isobutane (C <sub>4</sub> H <sub>10</sub> )	50	2,500	-	-	-	-	-	-	-	≥ 50	-
Inhalation resistance (at 47.5 L/min) (Pa)			≤ 130	≤ 300	≤ 120±20	255±45	-	-	-	-	-
Maximum filter penetration (at 47.5 L/min) (%)			6	0.05	6	0.05	-	-	-	-	-
Diameter (mm)			77	77	86	86	82	82	82	82	82
Height (mm)			21	21	+14.5	+14.5	24	34	34	44	34
Weight (g)			≤ 22	≤ 22	≤ 20	≤ 20	≤ 55	≤ 80	≤ 125	≤ 130	≤ 100
Storage Temperature (°C)			0-50	0-50	0-50	0-50	0-50	0-50	0-50	0-50	0-50
Shelf life (years)			10	10	10	10	5	5	5	5	5

## Material List

Component	Material Type	Filter
Panel	Polystyrene	CA-A1, CA-A2, CA-K1, CA-AX, CA-ABEK1
Backup filter (panel)	Polyamide, Rayon	CA-A1, CA-K1, CA-ABEK1
	Nylon, Rayon	CA-A2, CA-AX
Case	Polystyrene	P2R, P3R, CA-A1, CA-A2, CA-K1, CA-AX, CA-ABEK1
	Polypropylene, TPU	P2RC, P3RC
Backup filter (Case)	Polyamide, Rayon	CA-A1, CA-K1, CA-ABEK1
	Nylon, Rayon	CA-A2, CA-AX
Prefilter	Polypropylene, Acryl	CA-K1, CA-ABEK1
Filter	Glass microfibers	P2R, P3R, P2RC, P3RC
Activated carbon	Activated carbon	CA-A1, CA-A2, CA-K1, CA-AX, CA-ABEK1
Label	Paper	CA-A1, CA-A2, CA-K1, CA-AX, CA-ABEK1