

Cup Style Filtering Mask Technical Data Sheet

The SM100/SM200 are a non sterile disposable cup style filtering face mask that is manufactured in Korea and meets Korean KMOEL-2017-64 performance standards. The SM series have a minimum filter performance of 94% for filtering non-oil-based particles.



Multi-Layer



Easy to breathe through



Comfortable Headband



Prevention of dust

Model Number: SM100/ SM200

Alliable Medical's industrial mask (SM100/SM200) is developed with fine filter technology that enables high filtration performance while allowing breathability and comfort. The cup design holds shape and gives added reliability. The comparison chart below shows that USA, Europe, and Korea are considered to have equivalent performance standards.

Performance Standard Comparison Chart

| Certification/ Class (Standard) | N95 (NIOSH-42C FR84) | FFP2 (EN 149-2001) | Korea 1 st Class (KMOEL - 2017-64) |
|--|-----------------------|--|---|
| Filter performance – (must be ≥ X% efficient) | ≥ 95% | ≥ 94% | ≥ 94% |
| Test agent | NaCl | NaCl and paraffin oil | NaCl and paraffin oil |
| Flow rate | 85 L/min | 95 L/min | 95 L/min |
| Total inward leakage (TIL)* – tested on human subjects each performing exercises | N/A | ≤ 8% leakage (arithmetic mean) | ≤ 8% leakage (arithmetic mean) |
| Inhalation resistance – max pressure drop | ≤ 343 Pa | ≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min) ≤ 500 Pa (clogging) | ≤ 70 Pa (at 30 L/min) ≤ 240 Pa (at 95 L/min) |
| Flow rate | 85 L/min | Varied – see above | Varied – see above |
| Exhalation resistance - max pressure drop | ≤ 245 Pa | ≤ 300 Pa | ≤ 300 Pa |
| Flow rate | 85 L/min | 160 L/min | 160 L/min |
| Exhalation valve leakage requirement | Leak rate ≤ 30 mL/min | N/A | visual inspection after 300 L /min for 30 sec |
| Force applied | -245 Pa | N/A | N/A |
| CO ₂ clearance requirement | N/A | ≤ 1% | ≤ 1% |



 **MADE IN KOREA**



Intended Use

For single use for respiratory protection against dusts, mists, and fumes.

Source: 3M technical Bulletin 17915000

Features

- Multilayer protection
- Adjustable nose piece
- Sturdy cup design will not collapse from humidity or moisture
- Unique 3-shell construction provides ideal filtration
- Headband style for more secure and comfortable fit
- Made in Korea

| Materials | |
|--------------|----------------------|
| Outer | Polypropylene |
| Filter Layer | Polypropylene |
| Inner Layer | Polypropylene |
| Nose Clip | Aluminum |
| Straps | Braided Polyisoprene |

| Packaging | |
|------------|-------------|
| Qty/ Box | Boxes/ Case |
| 10 (SM100) | 12 |
| 20 (SM200) | 12 |

Fitting Instructions



1 Hold the mask by cupping outer shell in hand with inside facing upwards



2 Place mask firmly against your face covering your nose and mouth.



3 While holding mask in one hand, pull bottom headband over head and place below ears. Place top head band over head above ears.



4 With the use of both hands, mold nose piece to the shape of your nose by pushing down along the edges



5 Check fit of mask by cupping hands over mask. Exhale vigorously and check for leaks around nose and edges. Readjust again check again for better fit.



Warnings and Limitations

- Always confirm the product is suitable for the application
- Keep the mask on during all periods of exposure
- Fit testing should be performed before assigning a mask to an individual
- Inspect all parts of the mask to ensure it is in good condition before use
- Dispose according to applicable regulations
- Do not alter the product in any way
- To be stored within temperature range of -5-87 degrees fahrenheit

| General Limitations by NIOSH (All Part 84A Approvals) | |
|--|---|
| A | Not for use in atmospheres containing less than 19.5 percent oxygen. |
| B | Not for use in atmospheres immediately dangerous to life or health. |
| C | Do not exceed maximum use concentrations established by regulatory standards. |
| D | Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality |
| E | Use only the pressure ranges and hose lengths specified in the User's Instructions. |
| G | If airflow is cut off, switch to filter and/or cartridge and immediately exit to clean air. |
| H | Do not wear for protection against organic vapors with poor warning properties or those which generate high heats of reaction with sorbent. |
| I | Contains electrical parts which have not been evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH. |
| J | Failure to properly use and maintain this product could result in injury or death. |
| K | The Occupational Safety and Health Administration regulations require gas-proof goggles to be worn with this respirator when used against formaldehyde. |
| L | Follow the manufacturer's User's Instructions for changing cartridges and/or filters. |
| M | All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations. |
| N | Never substitute, modify, add or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer. |
| O | Refer to User's Instructions, and/or maintenance manuals for information on use and maintenance of these respirators. |
| P | NIOSH does not evaluate respirators for use as surgical masks. |
| S | Special or critical User's Instructions and/or specific use limitations apply. Refer to User's Instructions before donning. |

Source: <https://www.cdc.gov/NIOSH-CEL/Limitations/A84>
To be used as a reference guide only.