

MULTI-MIX® MEDIA TYPE: MM-1100

CHEMICAL MEDIA SPECIFICATION



MULTI-MIX® MEDIA

Circul-Aire manufactures a wide variety of unique MULTI-MIX® chemical filter media specially designed to remove an extensive range of contaminants from the air. Circul-Aire's MULTI-MIX® chemical filter media, used either individually or in combination, provide continuous purification of air containing corrosive, odorous, and toxic contaminants in both commercial and industrial environments.

Activated Alumina Impregnated with Potassium Permanganate

Circul-Aire's MM-1100 MULTI-MIX® media is a high surface area activated alumina pellet, impregnated through a special process with a concentrated solution of potassium permanganate during its manufacturing. The result is a chemical filter with an elevated level of potassium permanganate giving superior performance in removing Hydrogen Sulfide (H₂S), Sulfur Dioxide (SO₂), Nitrogen Dioxide (NO₂), Mercaptans, as well as light organics from airstreams. Circul-Aire's MM-1100 MULTI-MIX® media is a chemisorbent, filtering by adsorption and then oxidation, and has a low pressure drop due to its uniform size and spherical shape.

TYPICAL PHYSICAL PROPERTIES

Potassium Permanganate (minimum):	8%
H₂S Capacity (minimum):	0.12 g H ₂ S/cc
Moisture:	22 wt%
Compaction (minimum):	2.7 kg (6 lb.)
Particle Diameter:	3.2 mm (1/8 in.)
Substrate Surface Area:	250 m ² /g
Shape:	Spherical Pellet
Apparent Density:	0.88 g/cc (55 lb./ft ³)
Pressure Drop @ 50 fpm (0.25 m/s):	1.0 in. of water/ft. of bed

PERFORMANCE GUIDELINES

Circul-Aire's MM-1100 MULTI-MIX® media functions under the following conditions:

- **Temperature:** -20°C to 51°C (-4°F to 125°F)
- **Humidity:** 10% to 95% RH
- **Airflow:** Ranging from less than 25 cfm (42.5 m³/hr.) to over 100,000 cfm (169,920 m³/hr.), with velocities from 50 fpm (0.254 m/s) to 500 fpm (2.54 m/s)

QUALITY CONTROL

Circul-Aire's MM-1100 MULTI-MIX® media undergoes the following quality control tests before shipment:

- Potassium Permanganate Content
- Moisture Content
- Size Distribution
- Bulk Density
- Compaction



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ADVANTAGES

- Non-toxic and nonhazardous
- Non-desorbing
- Unsupportive of bacterial or fungal growth
- Compatible with other Circul-Aire MULTI-MIX® media
- Circul-Aire laboratory testing and analysis available to determine remaining service life, through Circul-Aire's TECH-CHEK™ Service

PACKAGING

Circul-Aire's MM-1100 MULTI-MIX® media is available in 50-lb. boxes and 6-cu. ft. or 20-cu. ft. super sacks.

SAFETY PRECAUTIONS

- Avoid contact with easily oxidizable matter
- Keep away from heat and flammable materials
- Handle in a well-ventilated area
- Store in a cool, dry area, away from incompatible materials
- Always wear protective eyewear and gloves when handling chemical media
- **Workers should follow federal, provincial/state, and local safety guidelines when disposing of MULTI-MIX® chemical media**
- Refer to Material Safety Data Sheet (M.S.D.S.) for further information

TECH-CHEK™ SERVICE

Circul-Aire's TECH-CHEK™ Service is offered on an ongoing basis to all its clients at no additional charge. Samples of Circul-Aire's MULTI-MIX® chemical media, which are ideally taken quarterly from the client's filtration equipment, are sent to Circul-Aire's in-house ISO-Certified laboratory, where the media is

analyzed for Life Expended. Via a detailed report to the client, Circul-Aire's TECH-CHEK™ Service not only provides a precise maintenance schedule, but also ensures the highest performance of Circul-Aire's equipment at the most economical cost.

Circul-Aire Inc. reserves the right to make any changes in the design or specifications of any product, at any time, without prior notice.

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