

# Safe Lid for MAS-100 NT<sup>®</sup> Air Sampler

Order Number 1.17421.0030

## Introduction

The Safe Lid for MAS-100 NT<sup>®</sup> is a disposable, sterile, and ready-to use perforated lid for active air sampling with the MAS-100 NT<sup>®</sup> air sampler. It comes in a box with 30 individual double-bagged lids, sterilized by irradiation. The lid is designed to always provide access to sterile lids without the need for autoclaving.

The Safe Lid allows for safe transfer into cleanrooms and minimizes cross contamination risks as well as false-positive results. It can be an option for active air sampling in environments with potentially hazardous materials.

The Safe Lid for MAS-100 NT<sup>®</sup> shares the same lid geometry as the standard autoclavable perforated lid (ref. 1.09195.0001), made from aluminum delivered with the MAS-100 NT<sup>®</sup>, with 300 x 0.6 mm holes to achieve comparable sampling efficiency at the same impaction speed of 20m/s and nominal d50 of 1.1 µm. It has been validated acc. EN 17141 to have comparable recovery rates to MAS-100 NT<sup>®</sup> with the default aluminum lid.



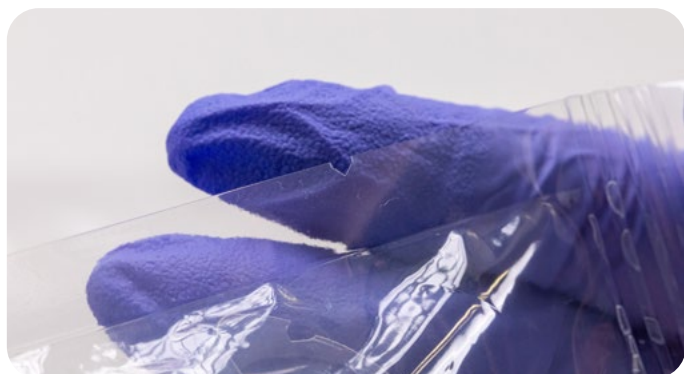
## Incoming control and storage

The Safe Lid is delivered in a cardboard box with 30 individual double-bagged disposable lids. Please download the batch specific Certificate of Quality (CoQ) from the [here](#).



## Transfer to sampling location (cleanroom)

The double package layers allow for a safe transfer into the cleanroom. The outer layer can be disinfected by wiping and removed in a material air lock or a transfer hatch. The primary layer is removed just before sampling. Both individual bags can tear open at the indentation with gloved hands without the need for any tools.



## Air Sampling with MAS 100 NT®

The Safe Lid (ref. 1.17421.0030) is used in the same way as the standard perforated lid (ref 1.09195.0001). For instructions on the MAS-100 NT® microbial air sampler, please refer to the user manual (ref 1.09191.0001).

The lid can be positioned quickly without the need for twisting and can facilitate robotic handling as well. Place the lid on top of the instrument base already equipped with an open 90 mm agar plate.

Alternatively, you can get access to the COQ by scanning the barcode present on left side of the product label via the "My M safety" App.



Do not turn the instrument upside down after placing the Safe Lid to ensure sample security. During sampling, the tightness of the closure is created by the vacuum of the instrument and holds the Safe Lid even in an upside-down position.



The Safe Lid can either be used as single-use device to avoid cross-contamination or multiple times at various sample locations during one working shift. Single or multiple use should be based on the internal risk assessment with reference to cleanroom activities. If used for multiple samples in a dedicated cleanroom during one working shift, the Safe Lid is designed to be resistant to a broad range of disinfectants. In between the single samplings, the lid can be disinfected by wiping. Once all samples are complete, the lid can be disposed. The following mixtures of disinfectants have been evaluated up to 10 times to be suitable for wipe disinfection:

Disinfect Type	Composition
A	Ethanol (70%)
B	Isopropanol (70%)
C	Acetic acid (10% ) hydrogen peroxide (1%) peracetic acid (0.08%)
D	Sodium hypochlorite (0.55%)
E	Didecyltrimethylammonium chloride (13%); ethanolamine (10%); 1-propanol (5%); N,N-Dimethyl octylamine-N-oxide (5%); N,N-Bis(carboxylatomethyl) alanine trisodium salt (5%); ethanol (1.5%)

The Safe Lid is also compatible with the standard dust cover (ref 1.09084.0001) of the MAS-100 NT® and MAS-100® Regulus for calibration.

### Data Integrity Features:

To track the data of the used perforated lid, the Safe Lid is laser marked with the following information:

- Product number
- Batch number
- Individual number (serial number SN; limited to batch)
- Expiry date



The marking is provided as readable text as well as a GS1 Data Matrix code. The GS1 Data Matrix code can be used via a barcode reader to track the data into an environmental monitoring data pool (e.g., by specific EM software programs).

### Composition of GS1 Data Matrix:

(AI): Application Identifier GS1 standards	Composition
(10) Batch number	4502258064
(17) Expiry Date (YY mmDD)	251231
(21) Serial number	00074
(240) Product Name	1174210030

### Disposal

We recommend that you discuss your separation practices with your facility's Environmental, Health and Safety (EHS) officer to ensure compliance with the waste regulations that apply where your lab or plant is located.

The fully recyclable disposable safe lid is made from 100% ABS and doesn't contain any hazardous materials. The multilayer transparent bags are made from polyamide and polyethylene that can be managed as plastic waste.



## Technical Specifications

Parameter	Composition
Packaging Content	30 x 1 individually double-bagged disposable lid
Dimensions	109 mm diameter; height 32 mm
Weight	39 g
Lid geometry	300 holes x 0.6 mm - nominal d50 of 1.1 µm at 100 LPM acc. to the formula of EN 17141
Reproducibility	Reproducible results thanks to 100% visual, camera-based inspection of the holes
Flow rate accuracy of MAS-100 NT® with Safe Lid	100 SLMP ± 5%
Collection Efficiency	Comparable to an already ISO 14698 qualified MAS-100 NT® with a standard perforated lid (simplified validation acc. EN 17141)
Hardware compatibility	MAS-100 NT®, MAS-100 NT® dust cover; MAS-100® Regulus
Culture media plate compatibility	90 mm Petri dishes (ICR/ICRplus settle plates)
Battery capacity MAS-100 NT®	By using the Safe Lid, at least 10% more samples can be taken per battery charge
Materials	Lid: Acrylonitrile butadiene styrene (ABS), 100% recyclable Transparent film bags: biaxially oriented polyamide (15 µm) and m-polyethylene (LLDPE/LDPE) (60 µm)
Sterility	Sterilized via a validated e-beam irradiation in the final packaging

[SigmaAldrich.com/environmentalmonitoring](https://SigmaAldrich.com/environmentalmonitoring)

### To place an order or receive technical assistance

In the U.S. and Canada, call toll-free 1-800-645-5476

For other countries across Europe and the world, please visit: [SigmaAldrich.com/offices](https://SigmaAldrich.com/offices)

For Technical Service, please visit: [SigmaAldrich.com/techservice](https://SigmaAldrich.com/techservice)

[SigmaAldrich.com](https://SigmaAldrich.com)

We have built a unique collection of life science brands with unrivalled experience in supporting your scientific advancements.

**Millipore®** **Sigma-Aldrich®** **Supelco®** **Milli-Q®** **SAFC®** **BioReliance®**

MilliporeSigma  
400 Summit Drive  
Burlington, MA 01803

