

September 13, 2024

**Customer Notification** 

Subject: Degreaser Chemistry Notification – Tergo MCF to Tergo HDF

We have recently learned that our supplier of Tergo MCF, a degreasing solvent used for cleaning AirBorn products since 2020, is now transitioning to Tergo HDF. We received the following as part of the supplier notification:

"Tergo HDF was designed to be a next generation addition to Tergo product line, with better polar solvency over Tergo MCF, which translates to better cleaning on inorganic soils. At about the time of our launch of Tergo HDF, one of the suppliers of a key ingredient in Tergo MCF decided to exit the market. The two solvents are fully compatible with each other, and the Tergo HDF can be added on top of the Tergo MCF with no issue. For the Tergo HDF, we have dual sourcing on all the components of this azeotrope, so we will not have a supply issue going forward."

AirBorn has recently completed internal validation testing confirming that Tergo HDF cleaning solvent is compatible/comparable to Tergo MCF and meets all cleaning performance requirements.

Information on Tergo HDF can be found here:

https://www.microcare.com/en-US/Products/Tergo-HDF-Heavy-Degreasing-Fluid

#### **Summary:**

AirBorn has qualified the use of Tergo HDF by performing product material compatibility testing, cleaning performance and flux removal. Below is a summary of the results for each test conducted.

### **Component and Material Compatibility and Cleaning Test Results**

**Test**: Simulate ultrasonic cleaning cycle of components used by AirBorn in Tergo HDF. The components tested are used in AirBorn products.

**Results**: Pass, no degradation or impact to components were observed.

## **Flux Removal Testing Results**

**Test**: Simulate ultrasonic cleaning cycle of finished product using Tergo HDF to verify flux removal.

**Results**: Pass, flux removal after tin dipping leads is one of our main use cases for degreasing. Passed visual and test.



## Permanency Testing Results - Simulating Marking of Finished Product

**Test**: AirBorn processed shells through Tergo HDF, then marked the products, and then processed them through Tergo HDF again before performing permanency tests.

**Results**: Four shell plating/finish types were tested in accordance MIL- STD-202. All products passed.

# **AirBorn's Change Notification Summary:**

The timeline to implement this as part of our supply chain and manufacturing process will be by October of 2024. This impacts all product lines offered by AirBorn.

Dwayne Zimmermann, Director of Quality Assurance

Jonathan Taylor, Director of Design and Development