

SUBJECT: ASTM F15.19 Methods for Measuring Re-Breathing Task Group

FY 23 OP PLAN ENTRY: Infant Bedding

DATE OF MEETING: 2/27/2024

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ashley Johnson (HSPP)

FILING DATE: 3/08/2024

CPSC ATTENDEE(S): Ashley Johnson (HSPP), Suad Wanna-Nakamura (HSPP), Tim Smith (ESHF), Daniel Taxier (ESME), Frederick DeGrano (ESME), Zachary Foster (ESHF)

NON-CPSC ATTENDEE(S): Contact ASTM for the full attendee list

Summary of Meeting:

The subject Task Group (TG) is developing test methods to measure firmness, airflow, and carbon dioxide (CO₂) re-breathing for infant products.

The TG Chair began the meeting by explaining that the most recent Standard Test Method for Firmness of Infant Products ballot (the ballot) closed on January 18, 2024, and two negative votes remain. Before the TG reviewed the comments to the draft ballot, the TG chair first discussed Consumer Product Safety Commission (CPSC) staff plans to consider a firmness requirement for a range of infant products this year, including bouncers, infant carriers, strollers, swings, rockers, infant support cushions, and nursing pillows. This included discussing a table from the CPSC's Fiscal Year 2024 Operating Plan, as approved on November 8, 2023, which showed CPSC staff plans to work on the infant products listed in the table. This work will involve continuation of rulemaking activities, and it will include data analysis and technical activities supporting ongoing or potential future rulemaking activities. The TG chair also stated that the ASTM Interlaboratory Study that has been initiated for the Firmness Test Method (ILS 1887) is prepared to move forward but is currently delayed until the Firmness Test Method is published. The TG chair explained that the goal is to complete the ILS as soon as possible. The TG chair also explained, after a TG member question, that an ILS takes place after the publication of a test method and that ASTM allows five years to complete the ILS. Following that, the test method can be revised.

The TG then reviewed comments on the ballot. The TG first reviewed Draft 21 of the Firmness Test Method, with incorporated revisions marked in red, intended to address the two remaining negative votes in the last ballot. The TG chair requested that the TG send in comments because he would like to send out a new ballot soon. The TG then reviewed a proposal from one of the negative voters to re-write the test method. The proposal generated substantial discussion. Topics discussed included the terms 'firmness' verses 'compressibility,' whether the scope of the test method should intend to quantify the firmness of "soft infant products" or be changed to 'sleep surfaces,' and whether to exempt products less than 1 inch in thickness. After discussion, the TG decided not to change the phrasing from 'firmness' or 'soft infant products' but agreed that products less than 1 inch in thickness require further TG discussion. The proposal also included added definitions to the Terminology section and revisions to the Summary of Test Method, Significance and Use, Apparatus, Test Specimen, Procedure, and Precision and Bias sections. The TG chair encouraged TG members to send in comments to the draft ballots.

Lastly, the TG chair presented different types of handheld firmness devices, including the device used in Boise State University's 2023 "Seated Products Characterization and Testing" report. The TG discussed its utility as a screening tool for firmness of curved seating products, the advantages and disadvantages of various types of handheld firmness devices, the specifications of different types, and the similarities and differences between a handheld firmness device and the test stand firmness method.

Next Steps:

The TG will continue discussing draft firmness, airflow, and CO₂ re-breathing test methodologies at the next meeting. The next TG meeting is expected to take place on March 12, 2024.