



MILWAUKEE TOOL

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To Whom It May Concern,

Milwaukee®, in partnership with Industrial Hygiene Sciences, LLC, has conducted testing on the Milwaukee SDS Max Chisel Boot (5318-DE). Results show that the user will be below the Permissible Exposure Limit (PEL) as described by OSHA 29 CFR 1926.1153 when using the below combination, assuming it is used in accordance with manufacturer’s instructions. Testing results and procedures are outlined below:

Unit Tested	Average Sample Duration	% Silica (Quartz) in Sample	Average Respirable Crystalline Silica Concentration (µg/m³)	OSHA PEL in 1926.1153
	61	39	5 µg/m³ TWA	50 µg/m³

- All chiseling was performed using a Milwaukee 8 Gallon Dust Extractor (8960-20) paired with the M18™ FUEL™ 1-9/16” SDS Max Rotary Hammer Drill (2717-20), SDS Max Bull Point 18” Concrete Chisel (48-62-4077), and SDS Max Chisel Boot (5318-DE)
- The chiseling was completed in a downward orientation to concrete at foot level
- Vacuum was turned to auto-cleaning, ON and power level was turned to HIGH
- Concrete blocks were poured from a 5000 PSI concrete mix.
- The room size was 12’9” x 26’5” x 8’
- The room where each testing was conducted was closed with no ventilation.
- The room surfaces were wiped down between trials to ensure accurate measurements
- Samples were collected on 3 piece 37 mm diameter preweighed PVC filter mounted in a BGI GK2.69 respirable dust sampler, run at 4.2 lpm and connected to a Gilian 10i air sampling pump. A field blank was submitted with each day’s set of samples.
- Samples were analyzed using OSHA ID-142 by the Wisconsin Occupational Health Laboratory, an AIHA Accredited laboratory. The sampling method used meets the definition of respirable crystalline silica in 1926.1153 (a) and Appendix A of the OSHA Respirable Crystalline Silica Standard (1926.1153).
- The Time Weighted Average (TWA) was calculated assuming zero exposure to respirable crystalline silica for the non-sampled portion of a 480 minute (8 hour) shift. Longer exposure times, assuming that the dust exposures would be similar to those collected in these trials, would likely result in higher TWAs. Factors, including, but not limited to the ventilation and air flow patterns in the space where the work is done, how flat the grinder is held, the condition of the shroud brush, the silica content of the concrete, how much grinding was done when the shroud is not on a full, flat surface, the presence of other respirable silica dust generating activities in the area, how often the user knocks collected dust from the HEPA filter, how aggressively the HEPA filter is knocked off and how the vacuum is cleaned could affect actual user exposures.
- SDS Max Bull Point 18” Concrete Chisel reflects the highest dust generating application used in this test, any smaller sizes chisels suggest based on volume of dust would also be compliant when using the 5318-DE SDS Max Chisel Boot