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RE: National Gypsum® products and new OSHA Dust and Respirable Crystalline Silica Regulation

OSHA began enforcing its respirable crystalline silica rule for construction on September 23, 2017. The rule affects two million construction workers and, among other things, creates a new permissible exposure limit (PEL) to respirable crystalline silica of 50 micrograms (.05 milligrams) per cubic meter ($50 \mu\text{g}/\text{m}^3$ or $.05 \text{mg}/\text{m}^3$). In addition to the $50 \mu\text{g}/\text{m}^3$ PEL, the rule sets an “action level” of $25 \mu\text{g}/\text{m}^3$, averaged over an eight-hour shift. If employee exposure will or is reasonably expected to exceed the $25 \mu\text{g}/\text{m}^3$ action level under any foreseeable conditions, the construction employer must have a written silica exposure control plan and is subject to other requirements under the new rule. For detailed information about the new rule visit www.osha.gov/silica.

National Gypsum® joint compounds and gypsum boards contain silica in very small amounts as indicated in the Safety Data Sheets (SDS). Third party testing shows that when these products are used in normal operating conditions, respirable crystalline silica remains well below the new PEL.

ProForm® and Easy Finish® Brand Joint Compounds have been third party tested in jobsite conditions for respirable crystalline silica exposure. The test results show that with normal use of these products, respirable crystalline silica exposure remains well below the OSHA guidelines. Under normal jobsite conditions, National Gypsum® joint compounds show exposure levels as low as 72 percent below the new OSHA PEL of $50 \mu\text{g}/\text{m}^3$ and below the action level of $25 \mu\text{g}/\text{m}^3$. However, jobsites vary and tests results may differ. After testing All Purpose, Multi-Use, Lite and XP and XP LITE with Dust-Tech®, Dust-Tech® performed the best and should be used if additional dust control is needed and OSHA labels the use as engineering control. Testing was completed using NIOSH (National Institute for Occupational Safety and Health) testing criteria.

OSHA recommendations of using vacuum sanding or wet sanding also help reduce dust exposure drastically. While OSHA recommends use of “silica free” joint compounds, these products do not exist currently from any manufacturer. Even if silica content is too small to be detected by laboratory testing, no currently available joint compound is truly silica free.

Gold Bond® and DexCell® Brands Gypsum Board contain very little crystalline silica, approximately .5% by weight. Third party testing revealed respirable crystalline silica was non-detectable using cutting methods of score, snap and rasp, hand saw and rotary saw. The tests were conducted using NIOSH approved methods and respirable crystalline silica analysis was calculated using NIOSH 7500 testing criteria. The gypsum board testing was conducted in a lab using a 16' x 16' room, as well as jobsite conditions and participants were monitored for respirable crystalline silica during the cutting methods listed above. All three methods showed silica exposure as non-detectable under the applicable laboratory testing procedures. However, jobsites vary and tests results may differ. A test result of “non-detect” does not necessarily mean a product is silica free. OSHA still may require additional testing for verification of respirable crystalline silica exposure.

Please note that in addition to the respirable crystalline silica rule, OSHA is also monitoring total dust at jobsites which includes dust from other trades, jobsite conditions and jobsite cleanliness. These factors may be out of the control of jobsite workers but might have to be addressed with OSHA. Safety Data Sheets (SDS) for joint compound and gypsum board products provide additional information and product composition details.

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