Alternate Mold Neutralizer for Far East

The neutralizer that is generally recommended to molding customers in the U.S. is Step 1 Neutralizer (AEMI - N816) sold by the I.M.S. Company.

It is reported that the import of this material into certain countries in the Far East is restricted. According to the MSDS, the product contains hazardous ingredients including Liquefied Petroleum Gas propellant, Zinc Naphthenate, and 1,2,4-Trimethylbenzene (see attached MSDS for more information).

There is the need to recommend a neutralizer to Far East customers that they can prepare from common, readily available products. One neutralizer that will help to protect the mold surface can be prepared from water and sodium bicarbonate (baking soda). This solution is basic in nature and should neutralize residual acids on the mold.

The solution can be made by taking water (preferably distilled or deionized) and adding baking soda until the solution is saturated.

The saturation point occurs when vigorous stirring of the solution will not produce a clear liquid and the undissolved baking soda is visible to the eye.

This basic solution should then be applied to the mold. The application can be through a mist spray or a saturated cloth, and the neutralization will occur almost instantaneously. Care should be taken if the mold is hot. The cooled mold should be wiped clean before use. Pressurized air can also be used to dry any excess moisture that may remain on the mold following application.

This solution should be applied daily for best results, regardless of tooling metallurgy used. All slides, injector pins, or other moving parts should also be treated.

This mixture is not as desirable or effective as the commercially available oil-based spray propellants. However, it is much more preferable to leaving the mold untreated.

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