



Sodium Azide Classification and Management

FACT SHEET 37-065-0514

Uses: Sodium azide is a useful probe reagent, mutagen, and preservative. In hospitals and laboratories, it is used as a biocide in bulk reagents and stock solutions to prohibit bacterial growth. A dilute concentration (.01% or less) of sodium azide is a component in staining kits such as the Jorgenson Laboratories Dip Quick Stain Set. These kits are typically found in Health Care Facility labs and Veterinary clinics.

EPA classification: The EPA classifies unused commercial products that contain sodium azide as the sole active ingredient as a toxic P-listed waste (P105). However, once the stain has been used it becomes a process waste and no longer meets the EPA definition of a P-listed waste. The 0.01% sodium azide solution is stable at standard temperature and pressure and not reactive in accordance with RCRA reactivity characteristics.

Disposal/Discharge to sanitary sewer after use: Reading the MSDSs can often create confusion as to the acceptable disposal method for these stains. While the MSDS indicates that the product is stable, it also contains cautionary messages concerning lead and copper azide formation, and explosive hazards should sodium azide come in contact with metals. In order for sodium azide to form an explosive lead azide or copper azide it must come into contact with lead, copper and/or their lead/copper salts. It is unlikely that a dilute sodium azide solution that is poured into a sink drain and rinsed with water will contact lead, copper, or their salts in the manner required to form the explosive lead and copper azides. The sodium azide must also be afforded enough time in contact with the lead/copper piping to create an explosive situation. Discharging water down the drain as part of the staining process, combined with the constant presence of liquid in the sink trap and using the drain for other laboratory uses, will ensure copious amounts of water flush the piping and prevent this situation from occurring.

Collection of sodium azide solution: Should the installation environmental office prohibit the discharge of the sodium azide solution due to wastewater treatment plant permit limitations it may become necessary to collect the waste. If so, ensure that non-metallic waste containers are used for collection to avoid the possibility of explosive azides being formed in a metallic collection container over time. Note that the waste should be classified as a non-RCRA regulated waste.

If you have questions regarding this document please contact:

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