

ALPHA NAPHTHYLAMINE AWARENESS TRAINING

Substance: Alpha Naphthylamine

CAS Registry Number: 134-32-7

Synonyms: 1-Naphthylamine, 1-aminonaphthalene, C.I. Azoic Diazo Component 114, Fast garnet B Base, Naphthalidine.

Description:

Alpha Naphthylamine are colorless crystals that can give off an ammonia like odor. Alpha Naphthylamine can enter your body through ingestion, absorption or inhalation. Symptoms of exposure include dermatitis, hemorrhagic cystitis, dyspnea (difficulty breathing), ataxia, methemoglobinemia, hematuria (blood in the urine), dysuria.

Alpha Naphthylamine is used as a tobacco additive, as a chemical intermediate for certain dyes, in toning prints and in certain herbicides. Alpha Naphthylamine is mostly found as colorless crystals that darken in air to a reddish purple color. Alpha Naphthylamine is carcinogenic and the target organs are the bladder and skin. Alpha Naphthylamine can also be found in solution.

The regulatory agencies that regulate Alpha Naphthylamine are the Environmental protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). OSHA regulates Alpha Naphthylamine as one of thirteen carcinogens under the General Industry Standard, 1910.1003.

There is no Action Level for Alpha Naphthylamine. The regulation calls for no exposure at any level that can be detected.

The key provisions of the Alpha Naphthylamine regulations include:

Areas where Alpha Naphthylamine is manufactured or handled are considered regulated areas. Signs must be posted at the entrance to these areas and only authorized personnel may enter.

Authorized personnel must work with Alpha Naphthylamine in closed or isolated systems. If work must be performed to transfer the chemical between closed systems, work must be performed in a hood and a respirator and other personal protective equipment identified by the standard must be worn.

Within regulated areas with only closed systems, employers must:

- Use engineering controls and work practices to reduce exposure.
- Identify regulated areas.
- Post signs at the entrance to regulated areas and place labels on all containers that contain Alpha Naphthylamine that are in accordance with the standard.
- Supply respirators, a laboratory fume hood and training to employees when fluid must be transferred from one closed system to another.
- Provide emergency shower facilities, and emergency eyewash stations

Respiratory Protection:

Respirators shall be used to control exposure only in the following circumstances:

- When work is performed in a fume hood or when the substance is transferred from one closed system to another.
- During maintenance, repair and other operations for which engineering controls are not feasible
- When there is a spill or leak or a closed or isolated system is violated.
- In emergencies such as spills.

Action Level:

There is no airborne action level for Alpha Naphthylamine. However, it is regulated by this standard if a liquid or solid contains 1% or more of it by weight or volume.

Exposure Monitoring:

No exposure monitoring is required under the standard.

Medical Surveillance:

The standard requires a comprehensive medical surveillance program to be conducted by or under the supervision of a licensed physician. Employers must provide medical surveillance initially and annually to employees who are authorized to enter regulated areas.

Regulated Areas:

A regulated area is an area where Alpha Naphthylamine is manufactured, processed, used, repackaged, released, handled or stored. Employers must identify regulated areas and clearly mark them. All work with Alpha Naphthylamine must be conducted in closed or isolated systems such as a glove box or fume hood within regulated areas. Drinking fountains are not allowed in regulated areas. Eating and drinking is not allowed in regulated areas. All authorized employees must wash hands, forearms, face and neck upon exiting regulated areas if exposed to Alpha Naphthylamine or if transferring between closed systems. Washing must occur close to the point of exit. Only authorized employees are allowed into regulated areas.

Communication of Alpha Naphthylamine Hazards to Employees:

Establish regulated areas and clearly mark them to allow only authorized persons to enter. Provide the signs and labels specified by the standard clearly indicating alpha Naphthylamine's carcinogenic hazards and the prohibition of eating or drinking in regulated areas. Train workers at initial assignment, and then, annually. Maintain a Material Safety Data Sheet that conforms to the provision of OSHA's Hazard Communication Standard, 29 CFR 1910.1200(g).

Record Keeping:

Medical records must be retained for the duration of the employment and then forwarded to the director of the National Institute for Occupational Safety and Health (NIOSH).

Applicability

This standard applies to solid or liquid mixtures containing 1.0% or more, by weight or volume, of Alpha Naphthylamine.

To protect Alpha Naphthylamine workers against exposure, follow these safety precautions:

- Only trained workers are allowed in work areas.
- Proper personal protective equipment (gloves, goggles, lab coat and respirator) must always be worn while in the regulated area. If working under a hood or in an open system, a respirator must be worn and decontamination procedures followed.
- See a doctor if you are exposed to Alpha Naphthylamine or if you have signs or symptoms of exposure.
- No eating, drinking, or applying cosmetics are allowed in the regulated area.
- Always wash hands directly after working with Alpha Naphthylamine even if using an isolation chamber.

Emergency Procedures:

In a medical emergency call 911, then 4111. Thoroughly wash any parts of the body exposed to Alpha Naphthylamine using the eye wash or safety shower or any other clean water source. In the event of a spill, Class B personal protection including a Self Contained Breathing Apparatus (SCBA) device must be donned and the employee must be decontaminated after the spill has been addressed. Employee must shower after decontamination.

Inhalation:

Remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, administer oxygen. Contact a physician.

Skin Contact:

Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye Contact:

Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Ingestion Effects:

Call a physician immediately.

Before working with any chemical, review the Material Safety Data Sheet.

MSDS: MSDSs are available from EH&S at X4150, at the MSDS centers or on the web at <http://www.hazard.com>.