
Information and recommendations for patients

- Patients exposed only to hydrazine vapor do not pose a significant risk of secondary contamination. Patients whose clothing or skin is contaminated with hydrazine liquid can secondarily contaminate rescue and medical personnel by direct contact or through off-gassing hydrazine.
 - Hydrazine vapor or liquid is irritating and can cause corrosive burns to eyes or skin.
 - Systemic toxicity comprises of nausea, vomiting, abdominal pain, CNS depression, trembling, ataxia, seizure, and changes in the red blood cells (methemoglobinemia).
 - Inhalation of the vapor can result in rhinorrhea, coughing, and dyspnea. Swelling of the throat and signs of accumulation of fluid in the lungs (shortness of breath, cyanosis, expectoration, coughing) may occur.
 - Treatment consists of symptomatic and supportive measures.
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Substance information

Hydrazine (NH₂-NH₂), CAS 302-01-2
Hydrazine hydrate (N₂H₄-H₂O), CAS 10217-52-4
(contains 55% Hydrazine w/w); CAS 7803-57-8 (contains 64% Hydrazine w/w)
Synonymes: diamide, diamine, nitrogen hydride (anhydrous)
Hydrazine is at room temperature a colorless, fuming, oily liquid with an ammonia-like or fishy odor. The substance decomposes producing ammonia fumes, hydrogen and nitrogen oxides, causing fire and explosion hazard (boiling point 113.5 °C, flash point 37.8 °C).
Hydrazine has been used as a rocket fuel, for corrosion prevention, as chemical reactant, and in the urethane coating production.

What immediate health effects can result from exposure to hydrazine?

Most exposures to hydrazine occur from breathing the vapor. People usually notice the pungent odor of even small amounts and experience burning of the eyes, nose, and throat. Tearing, coughing and choking may occur. Exposure to high levels can cause death from a swollen throat or from chemical damage to the lungs. Further poisoning signs comprise of nausea, vomiting, abdominal pain, central nervous depression, trembling, seizure and changes in the red blood cells (methemoglobinemia) with headache, weakness, drowsiness, shortness of breath and blue or grey skin, lips and nailbeds.

Are any future health effects likely to occur?

A single small exposure from which a person recovers quickly is not likely to cause delayed or long-term effects. Some people who have had serious exposures have developed permanent breathing difficulty and tend to develop lung infections easily. Hydrazine is a sensitizer and a suspected carcinogen.

Follow-up instructions

Keep this page and take it with you to your next appointment. Follow only the instructions checked below.

- () Call your doctor or the Emergency Department if you develop any unusual signs or symptoms within the next 24 hours, especially:
 - coughing or wheezing
 - difficulty breathing or shortness of breath
 - increased pain or a discharge from exposed skin or eyes
 - chest pain or tightness
 - stomach pain or vomiting
- () No follow-up appointment is necessary unless you develop any of the symptoms listed above.
- () Call for an appointment with Dr. _____ in the practice of _____
When you call for your appointment, please say that you were treated in the Emergency Department at _____ Hospital by _____
and were advised to be seen again in _____ days.
- () Return to the Emergency Department/ _____ Clinic on (date) _____ at _____ am/pm for a follow-up examination.
- () Do not perform vigorous physical activities for 1 to 2 days.
- () You may resume everyday activities including driving and operating machinery.
- () Do not return to work for _____ days.
- () You may return to work on a limited basis. See instructions below.
- () Avoid exposure to cigarette smoke for 72 hours; smoke may worsen the condition of your lungs.
- () Avoid drinking alcoholic beverages; alcohol may worsen your clinical conditions.
- () Avoid taking the following medications: _____

- () You may continue taking the following medication(s) that your doctor(s) prescribed for you: _____

- () Other instructions: _____

Signature of patient _____ Date _____
Signature of physician _____ Date _____

References

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