



## CHLORAMINE

### What is CHLORAMINE?

Chloramine is a compound containing nitrogen and chlorine that is used to create a liquid used in jet and rocket fuels. It is a disinfectant formed when free chlorine is added to water containing ammonia. This process is called residual chlorination, chloramination or the chloramine process.

### Where can chloramine be found and how is it used?

Chloramine is used to disinfect water. About 20 percent of public drinking water supplies in the United States are treated with chloramine.

### How can people be exposed to chloramine?

*You could be exposed to chloramine through:*

**Breathing** chloramine. It is possible to breathe large amounts of chloramine.

**Drinking** water treated with chloramine. This is not likely to happen from treated water.

**Eye Contact** by touching the eyes with water treated with chloramine. This could happen from washing or showering. This is not likely to happen from treated water.

### How does chloramine work and how can it affect my health?

While some people can develop skin allergies from contact with chloramine solutions, this is unlikely from contact with chloramine-treated water. Tests on animals have not shown harmful health effects from exposure to chloramine-treated water.

### How is chloramine poisoning treated?

There is no treatment for chloramine poisoning. It is considered safe in drinking water.

### What should I do if I am exposed to chloramine?

No action needs to be taken if you are exposed to water treated with chloramine.

### What factors limit use or exposure to chloramine?

If you are concerned about exposure to chloramine in drinking water, contact your water provider. If water was treated with chloramine, you can reduce exposure by using an alternate source of water.

### Is there a medical test to show whether I've been exposed to chloramine?

There is no medical test to show exposure to chloramine. You can ask your drinking water provider if your water was treated with chloramine.



## Technical information for chloramine

CAS Number: 10599-90-3

Chemical Formula:  $\text{NH}_2\text{Cl}$

Carcinogenicity (EPA): Monochloramine has been designated as not classifiable as to human carcinogenicity.  
MCL (Drinking Water): There is no MCL for chloramine but there is a MRDL (maximum residual disinfectant level) of 4.0 mg/L for chloramines as  $\text{Cl}_2$ .

OSHA Standards: There is no OSHA standard for chloramine.

NIOSH Standards: There is no NIOSH standard for chloramine.

## References and Sources

American Conference of Governmental Industrial Hygienists (ACGIH). 2003. *Guide to Occupational Exposure Values*. Cincinnati, OH.

*Drinking Water Criteria Document for Chloramines*. U.S. Environmental Protection Agency, Washington, DC, ECAO-CIN-D002, 1994.

*NIOSH Pocket Guide to Chemical Hazards*. 2003. Atlanta, GA: U.S. Department of Health and Human Services.

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