



CHLORAMINE

What is chloramine?

Chloramine is a colorless to yellow liquid containing nitrogen and chlorine. It is used to create a liquid used in jet and rocket fuels. It is a disinfectant formed when free chlorine and ammonia mix in water. In drinking-water systems, chloramine may be a by-product of adding chlorine, or it may be added to distribution systems to maintain disinfection. 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. As it can last longer in water pipes and produce fewer disinfection by-products than chlorine, some water utilities use chloramine to meet U.S. Environmental Protection Agency standards.

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.

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156



Frequently Asked Questions

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: NH_2Cl

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 Cl_2 .

OSHA Standards: There is no OSHA standard for chloramine.

NIOSH Standards: There is no NIOSH standard for chloramine.

Resources

Centers for Disease Control and Prevention, Water Disinfection with Chlorine and Chloramine.2020.

https://www.cdc.gov/healthywater/drinking/public/water_disinfection.html

U.S. Environmental Protection Agency, Chloramines in Drinking Water,

<https://www.epa.gov/dwreginfo/chloramines-drinking-water>

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156