



# FACT SHEET

## Ammonia

CAS Number: 7664-41-7

This fact sheet provides a summary of the Development Support Document (DSD) created by the TCEQ for the development of Regulatory Guidelines (ESLs, AMCVs and ReVs) for ambient exposure to this chemical. For more detailed information, please see the DSD or contact the TD by phone (1-877-992-8370) or e-mail ([tox@tceq.texas.gov](mailto:tox@tceq.texas.gov)).

### **What is ammonia?**

Ammonia is a colorless gas with a sharp and pungent odor. Atmospheric ammonia is produced by both natural and man-made sources. Ammonia is also known as anhydrous ammonia, spirit of hartshorn, and ammonia gas.

### **How is ammonia released into ambient air?**

Ammonia can be released into the air by both natural and man-made sources. Natural sources of ammonia in the environment include the breakdown of organic matter by soil microbes and/or fungi, volcanic eruptions, and in the exhaled breath of humans and other animals. The main use of ammonia is as a fertilizer, but it is also used in the manufacture of plastics, synthetic fibers, and explosives. Ammonia reacts with acidic compounds in the atmosphere to form ammonium salts.

### **How can ammonia affect my health?**

Permitted levels of ammonia should not cause adverse health and welfare effects. Well conducted human and animal studies demonstrate that ammonia acts as an irritant, in which tissue damage and inflammation may occur at the site of contact. At lower concentrations ammonia is an upper respiratory irritant, but at higher concentrations it may cause more severe respiratory effects in the lower respiratory tract. There are no human or animal studies indicating ammonia has a potential to cause cancer in humans. Ammonia is not currently classified as causing cancer by the International Agency for Research on Cancer (IARC) or other government agencies (e.g., USEPA, or National Toxicology program).

### **Is ammonia odorous or harmful to plants?**

Ammonia has a sharp and pungent characteristic odor.

Plants use ammonia as a source of nitrogen; however, it can also cause damage to plants at high concentrations.



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#### **Why does the TCEQ set Regulatory Guidelines for ammonia?**

The TCEQ has set various air quality guideline levels (ESLs, AMCVs and ReVs) to protect human health and welfare. Please see Definitions of ESLs, ReVs, and AMCVs located on the DSD webpage for more information. The air quality guideline levels for ammonia have been designed to protect the general public from short-term and long-term adverse health and welfare effects. The general public includes sensitive populations such as children, the elderly, pregnant women and people with preexisting health conditions. If you would like to know more about the specific ESLs, AMCVs and ReVs developed, what the values are and what they are used for, please see the DSD.