FACT SHEET

Acetone

CAS # 67-64-1

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

What is acetone?

Acetone is a colorless liquid with a distinct smell and taste. It is found naturally in the environment from plants, trees, volcanic gases, and forest fires. It is also produced industrially to manufacture other chemicals that make plastics, fibers, and drugs, or used to dissolve other substances. The body normally contains some acetone because it is made during the breakdown of fat. Synonyms for acetone include: 2-propanone, dimethyl ketone, dimethylformaldehyde, ketone propane, and methyl ketone.

How is acetone released into ambient air?

Acetone is released into the environment during its production and use, in exhaust from automobiles, from tobacco smoke, landfills, and certain kinds of burning waste materials.

How can acetone affect my health?

Permitted levels of acetone should not cause adverse health and welfare effects. The acute toxicity of acetone is relatively low. Following acute inhalation exposure to sufficiently high concentrations of acetone, the primary effects in humans are sensory irritation and neurological effects, thus the critical effects of acetone are considered to be irritation of mucous membranes and neurobehavioral effects. Neurotoxicity (heavy feelings in the head, faint feelings, nausea) is the critical effect from long-term acetone exposure. In accordance with the Draft Revised Guidelines for Carcinogen Risk Assessment, the United States Environmental Protection Agency states that data are *inadequate for an assessment of the human carcinogenic potential* of acetone.

Is acetone odorous or harmful to plants?

Acetone's odor has been described as sweet and sharp with the hedonic tone described as neutral to unpleasant. No information was found regarding the potential effects of acetone on plants.

Why does the TCEQ set Regulatory Guidelines for acetone?

The TCEQ has set various air quality guideline levels (ESLs and ReVs) to protect human health and welfare. Please see Definitions of ESLs, ReVs, and AMCVs located on the TCEQ DSD webpage for more information. The ESLs and ReVs for acetone have been designed to protect the general public from short-term and long-term adverse health and welfare effects. The general

public includes children, the elderly, pregnant women and people with preexisting health conditions. If you would like to know more about the specific ESLs and ReVs developed, what the values are and what they are used for, please see the DSD.