

2-Ethyl-6-methyl-benzenamine

This document provides a brief description of 2-ethyl-6-methyl-benzenamine, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS safety data sheet.

Identification

Product Name:	2-Methyl-6-ethylaniline Distilled
Chemical Name:	Benzenamine, 2-ethyl-6-methyl-
Synonym(s):	2-Ethyl-6-methyl-benzenamine 6-Ethyl-o-toluidine MEA Methyl ethyl aniline
CAS Number:	24549-06-2

Description

Overview:	2-Ethyl-6-methyl-benzenamine is a colorless to pale red liquid at ambient temperatures. The chemical has a pungent, solvent-like odor and darkens with exposure to air.
Uses:	2-Ethyl-6-methyl-benzenamine is used as an intermediate in the production of dyes, pesticides, pharmaceuticals and other products.
Properties:	Freezing Point: -27.4°F (-33°C) Approx. Boiling Point: 447.8°F (231°C) 221°F Flash Point: 102°C Solubility in Water: Slight

Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists through inhalation, ingestion, skin or eye contact during the manufacture of 2-ethyl-6-methyl-benzenamine and at transloading, storage and staging areas. A much lower potential for exposure exists in facilities using the chemical as an intermediate in the manufacture of other products. The majority of 2-ethyl-6-methyl-benzenamine sold by LANXESS is used in closed manufacturing processes by trained personnel.

Employee Training

Workers handling 2-ethyl-6-methyl-benzenamine are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved air-purifying respirator is recommended for transloading, unloading and other operations not contained within a closed system. In addition, LANXESS recommends that goggles, long pants, long-sleeved shirt, gloves and foot protection be worn when handling 2-ethyl-6-methyl-benzenamine. Engineering or process controls may be necessary to keep airborne concentrations of the chemical below appropriate standards/guidelines.

Consumer Exposure

LANXESS does not sell 2-ethyl-6-methyl-benzenamine to the general public.

Short-Term Health Effects

2-Ethyl-6-methyl-benzenamine is moderately toxic by skin absorption, inhalation and ingestion. Overexposure may cause methemoglobinemia (a temporary condition that reduces the ability of blood to carry oxygen) with symptoms of cyanosis (a purplish-blue coloring of skin, fingernails and lips). Eye contact with liquid or concentrated vapors may be irritating. Inhalation may cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Long-Term Health Effects

2-Ethyl-6-methyl-benzenamine is not known to have any long term health concerns.

Physical Hazards

2-Ethyl-6-methyl-benzenamine is stable under normal conditions of use. Avoid contact with oxidizing agents and acids. Hydrogen gas may be generated in contact with strong reducing agents. Heating to decomposition may release carbon oxides, nitrogen oxides and other potentially toxic fumes. Exposure to heat, open flames and other potential sources of ignition must be avoided.

Potential Environmental Impact

2-Ethyl-6-methyl-benzenamine is not readily biodegradable but will degrade with exposure to sunlight. An accidental release to water may pose a danger to fish (high toxicity), invertebrates (high toxicity) and plants (moderate toxicity) prior to degradation.

Conclusion

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, 2-ethyl-6-methyl-benzenamine is not expected to pose a significant risk to human health or the environment.

References

Chemical Information Profile for Alkylanilines, National Toxicity Program, U.S. Department of Health and Human Services, National Institutes of Health

Fourth National Report on Human Exposure to Environmental Chemicals - 2009, Centers for Disease Control and Prevention (CDC), National Center for Environmental Health, Division of Laboratory Services

IUCLID Dataset - CAS 24549-06-2, European Chemicals Bureau, European Commission

Safety Data Sheet (SDS), 2-METHYL-6-ETHYLANILINE, LANXESS Corporation

MedlinePlus Medical Encyclopedia, U.S. National Library of Medicine and the National Institutes of Health

OECD Existing Chemicals Database - CAS 24549-06-2, Organization for Economic Cooperation and Development

Contact Information

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

Notices

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