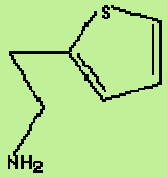
THIOPHENE-2-ETHYLAMINE



PRODUCT IDENTIFICATION

CAS NO.	30433-91-1
EINECS NO.	
FORMULA	C_6H_9NS
MOL WT.	127.20
H.S. CODE	
TOXICITY	
SYNONYMS	2-Thiophene Ethylamine; 2-(2-Thienyl)amine;
DERIVATION	
CLASSIFICATION	

GENERAL DESCRIPTION OF THIOPHENE

Thiophene, also known as Thiofuran, is a cyclic compound containing four carbon atoms and one sulphur atom in a ring. It is a toxic, flammable, highly reactive, colorless liquid insoluble in water (soluble in alcohol and ether) and melts at 38 C, boils at 84 C. It is used as a solvent and chemical intermediate. Its derivatives are widely used in manufacturing dyes, aroma compounds and pharmaceuticals. They are used as monomers to make condensation copolymers.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	clear to yellow liquid
MELTING POINT	
BOILING POINT	201 - 202 C
SPECIFIC GRAVITY	1.08 - 1.09
SOLUBILITY IN WATER	
SOLVENT SOLUBILITY	slightly soluble
FLASH POINT	87 C
STABILITY	Stable under ordinary conditions

APPLICATIONS

Thiophene, also known as thiofuran, is a cyclic compound containing four carbon atoms and one sulfur atom in the ring. Thiophene is an analog to furan and pyrrole where the sulfur atom is replaced by O and NH respectively. Thiophene is a toxic, flammable, and colorless liquid; insoluble in water (soluble in most organic solvents including alcohol and ether); melting at -38 C, boiling at 84 C. Thiophene is the simplest aromatic compound containing sulfur atom and it shares some similar chemical properties with benzene. The lone electron pairs on sulfur in the delocalized pi electron system does not exhibits the properties of thioethers but aromaticity. The sulfur atom is unreactive but the adjacent carbons are susceptible to attack by electrophiles. It is reactive toward sulfonation. In commercial thiophene can be prepared by the reaction of butane and sulfur. Thiophenes are also prepared by the reaction of diketones with Lawesson's reagent. Thiophene and its derivatives exist in petroleum or coal. Thiophene derivatives are also found in natural plant pigments. Biotin, a water-soluble B-complex vitamin, is a reduced thiophene derivative. Thiophene moiety is found in ccphalothin antiboitics. Thiophene is used as a solvent and chemical intermediate. Its derivatives are used in manufacturing dyes, aroma compounds and pharmaceuticals. They are used as monomers to make condensation copolymers. Organic conductive polymers are responsible for the important materials science for the application of polymer electro luminescence.

Thiophene-2-ethylamine is used as an intermediate to manufacture pharmaceuticals such asantiplatelet drug (Clopidogrel, Ticlopidine) used to lessen the chance of heart attack or stroke.

SALES SPECIFICATION

APPEARANCE	clear to yellow liquid
ASSAY	99.0% min
WATER	0.5% max

TRANSPORTATION

PACKING	50kgs in can
HAZARD CLASS	Not regulated
UN NO.	

PRICE INFORMATION