

# 2-THIOPHENE ETHANOL

## PRODUCT IDENTIFICATION

CAS NO.	5402-55-1
EINECS NO.	226-452-0
FORMULA	C <sub>6</sub> H <sub>8</sub> OS
MOL WT.	128.19



H.S. CODE

TOXICITY

SYNONYMS Thiophen-2-ethanol; 2-Hydroxyethyl Thiophene; 2-(2-Thienyl)ethanol; 2-(2-Hydroxyethyl)thiophene; Thiophene-2-ethanol; Thiopheneethanol; 2-(2-Thienyl)-Ethanol;

DERIVATION

CLASSIFICATION

## PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Clear to yellow liquid
MELTING POINT	
BOILING POINT	
SPECIFIC GRAVITY	1.153
SOLUBILITY IN WATER	slightly soluble
pH	
VAPOR DENSITY	
AUTOIGNITION	
NFPA RATINGS	Health: 1; Flammability: 1; Reactivity: 0
REFRACTIVE INDEX	
FLASH POINT	> 100 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 exhibit 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 cephalothin antibiotics. 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.

2-Thiophene Ethanol is used as an intermediate of such as antiplatelet drugs (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	200kgs in drum
HAZARD CLASS	
UN NO.	

## OTHER INFORMATION

Hazard Symbols: n/a, Risk Phrases: n/a, Safety Phrases: 24/25-28A-37-45

## PRICE INFORMATION