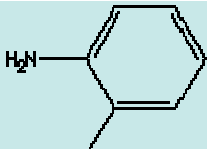
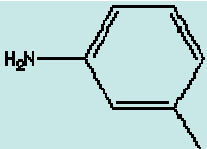



TOLUIDINES

GENERAL

Toluidine is the other name of methylaniline or aminotoluene. There are three structural isomers, *ortho*-TOLUIDINE, *meta*-TOLUIDINE, and *para*-TOLUIDINE. The prefix of these three compounds indicate amino group positions relative to the methyl group on the same benzene ring. They can be obtained from coal tar as by-products in the fractional distillation or can be prepared by reducing nitrotoluene which are made by nitration of toluene. Toluidines are homologous compounds to aniline (the simplest aromatic amine). They show conventional aromatic amine properties. They are weak basic compounds. Toluidine is not soluble in water but soluble in acidic aqueous solution. O-toluidine and m-toluidine are clear to pale yellow, oily liquid. But P-toluidine solidifies to an off-white crystalline solid at about 43 C as it has more symmetrical structure. They are sensitive to air and light and tend to darken on storage. They are toxic if inhaled, ingested, or absorbed through the skin. Typical end-use markets of toluidines and their derivatives are imaging products like pigment, dyestuffs, and photographic chemicals. These compounds are also used in the production of antioxidants, agricultural, pharmaceutical and rubber chemicals.

ortho-TOLUIDINE	meta-TOLUIDINE	para-TOLUIDINE
		
CAS No. : 95-53-4 2-Methylaniline	CAS No. : 108-44-1 3-Methylaniline	CAS No. : 106-49-0 4-Methylaniline

PHYSICAL AND CHEMICAL PROPERTIES

	o-TOLUIDINE	m-TOLUIDINE	p-TOLUIDINE
MELTING POINT	-14.7 C	-30 C	43 C
BOILING POINT	200 C	203 C	201 C
SPECIFIC GRAVITY	1.008	0.989	0.962
SOLUBILITY IN WATER	Slightly		
REFRACTIVE INDEX	1.5725	1.5681	1.5636
NFTA RATINGS	health-3; flammability-2; reactivity-0		
FLASH POINT	86 -87 C		
STABILITY	Stable under ordinary conditions		

APPLICATION

Manufacture of various dyes and pigments, photo chemicals, pharmaceutical intermediates.
Manufacture of antioxidants, curing agent, accelerator for polymer and rubber industry

SPECIFICATION

PROPERTY	o-TOLUIDINE	m-TOLUIDINE	p-TOLUIDINE
Appearance	Clear to pale yellow liquid tend to darken on storage		Clear to redish fused solid or clear to pale yellow liquid
Purity	99.5% min	99.3% min	99.5% min

Isomer Impurity	0.5% max	0.6% max	0.5% max
Moisture	0.2% max	0.2% max	0.1% max
Freezing Point	-	-	43 °C min

SYNONYMS

o-TOLUIDINE

Methyl-2-aminobenzene; 2-Aminotoluene; C.I. 37077; o-Methylaniline; o-Tolylamine; 2-Methyl-1-aminobenzene; 2-Methylbenzenamine; 1-Amino-2-methylbenzene; 2-Amino-1-methylbenzene; 1-Methyl-2-aminobenzene;

m-TOLUIDINE

m-Tolylamine; 3-Methylbenzenamine; 3-Aminophenylmethane; m-Toluamine; m-Aminotoluene;

p-TOLUIDINE

4-Aminotoluene; 4-methylbenzenamine;

TRANSPORTATION

Packing : 200kgs in Drum , Iso-Tank

HAZARD CLASS : 6.1

UN NO. : 1708