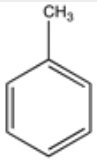
TO0085

Toluene, Multisolvent® HPLC grade ACS ISO UV-VIS

Identification

C_7H_8
M = 92,14 g/mol
CAS [108-88-3]
EC number: 203-625-9
Taric code: 2902 30 00



Synonyms

Methylbenzene, Phenylmethane

Applications

synthesis of organic products, solvents, as gasoline additive.

Specifications

assay (G.C.)	min. 99,9 %
identity (IR-spectrum)	passes test
density (20º/4º)	0,864 - 0,868
density (20º/20º)	0,865 - 0,869
appearance	clear
colour (Hazen)	max. 10
acidity	max. 0,0002 meq/g
alkalinity	max. 0,0002 meq/g
chlorides (Cl)	max. 0,00005 %
sulfates (SO_4)	max. 0,0001 %
aluminium (Al)	max. 0,1 ppm
antimony (Sb)	max. 0,02 ppm
arsenic (As)	max. 0,02 ppm
barium (Ba)	max 0,01 ppm
beryllium (Be)	max. 0,02 ppm
bismuth (Bi)	max. 0,1 ppm
boron (B)	max. 0,02 ppm
cadmium (Cd)	max 0,01 ppm
calcium (Ca)	max. 0,3 ppm
chromium (Cr)	max. 0,02 ppm
cobalt (Co)	max. 0,02 ppm
copper (Cu)	max. 0,02 ppm
gallium (Ga)	max. 0,02 ppm
gold (Au)	max. 0,1 ppm
indium (In)	max. 0,02 ppm
iron (Fe)	max. 0,1 ppm
lead (Pb)	max. 0,1 ppm
lithium (Li)	max. 0,02 ppm
magnesium (Mg)	max. 0,1 ppm
manganese (Mn)	max 0,01 ppm
molybdenum (Mo)	max. 0,05 ppm
nickel (Ni)	max. 0,02 ppm
platinum (Pt)	max. 0,02 ppm
silver (Ag)	max. 0,02 ppm
thallium (Tl)	max. 0,05 ppm
tin (Sn)	max. 0,1 ppm
titanium (Ti)	max. 0,05 ppm
vanadium (V)	max. 0,05 ppm
zinc (Zn)	max 0,01 ppm
zirconium (Zr)	max. 0,02 ppm
benzene (G.C.)	max. 0,05 %
sulphur compounds (as S)	max. 0,003 %
tiophene (C4H4S)	max. 0,0001 %
substances darkened by H_2SO_4	passes test
residue on evaporation	max. 0,0002 %
water (K.F.)	max. 0,02 %

liquid chromatography suitability absorbance..... passes test

min. transmission/max. absorbance in a 1,0 cm cell at

wavelength:	T(%)	A (AU)
285 nm	10 %	1,000 AU
292 nm	50 %	0,301 AU
305 nm	80 %	0,097 AU
317 nm	90 %	0,046 AU
350 nm	98 %	0,009 AU

Microfiltered through membranes of pore diameter 0,22 µm

Physical data

- Density: 0,87 g/cm3
- Solub. in water: (20 ºC): 0,52 g/l
- Melting point: -95 ºC
- Boiling point: 111 ºC
- Flash point: 4 ºC
- Ignition temperature: 535 ºC
- Vapour pressure: (20 ºC) 29 hPa
- Viscosity: (20 ºC) 0,58 mPas
- Dipolar moment: (20 ºC) 0,36 Debye
- Dielectric const.: (25 ºC) 2,3
- Saturation conc.: (20 ºC) 110 g/m^3
- Expl. limit (upper): 8 Vol%
- Expl. limit (lower): 1,2 Vol%

Safety - GHS

Signal Word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.

Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P370+P378: In case of fire: Use ... for extinction.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 3 F1 II • UN 1294 • TOLUENE
- IMDG: 3 II • UN 1294 • TOLUENE
- IATA/ICAO: 3 II • UN 1294 • TOLUENE
- PAX: 353
- CAO: 364
- 10°C - 30°C