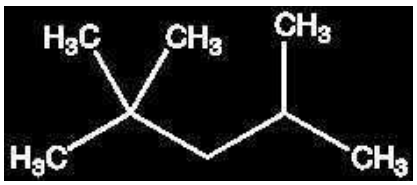
Scharlau
The wise choice

2,2,4-TRIMETHYLPENTANE



- Synonyms: Isooctane, Isobutyltrimethylmethane, iso-Octane
- C_8H_{18}
- M = 114,26 g/mol
- CAS [540-84-1]
- EINECS-No.: 208-759-1
- Density: 0,69 g/cm³
- Solub. in water: (25 °C): 0,56 mg/l
- Melting point: -107 °C
- Boiling point: 99 °C
- Flash pt. -12 °C
- Ignition temp.: 410 °C
- Vapour pressure: (20 °C) 51 hPa
- Dielectric const.: (20 °C) 1,9
- LD 50 (oral, rat): > 2000 mg/kg
- EC-Index-No.: 601-009-00-8
- ADR: 3 F1 II UN 1262
- IMDG: 3 II UN 1262
- IATA/ICAO: 3 II UN 1262
- GHS-signal word: Danger
- GHS-H sentences: H225 - H304 - H400 - H410 - H315 - H336
- GHS-P sentences: P210 - P241 - P303 + P361 + P353 - P321 - P405 - P501a
- Tariff number: 2901 10 00 00
- Applications: analytical chemistry, solvent for fat and oil extractions; in determining octane numbers of fuels.

IS0153 2,2,4-Trimethylpentane, EssentQ®

assay (G.C.) . . . . . min. 99 %
identity (IR-spectrum) . . . . . .passes test
density (20°/4°). . . . . 0,691 - 0,693
acidity . . . . . max. 0,001 meq/g
copper (Cu) . . . . . .max. 0,2 ppm
iron (Fe) . . . . . .max. 0,5 ppm
lead (Pb). . . . . .max. 0,2 ppm
nickel (Ni) . . . . . .max. 0,2 ppm
sulfur compounds (as S) . . . . . .max. 0,002 %
residue on evaporation . . . . . .max. 0,001 %
water (K.F.). . . . . .max. 0,02 %

ART. NO.	VOLUME	CONTAINER
IS01531000	1 l	
IS01532500	2,5 l	
IS0153005P	5 l	
IS0153025A	25 l	

IS0154 2,2,4-Trimethylpentane, ExpertQ®, for analysis, ACS, Reag. Ph Eur

assay (G.C.) . . . . . min. 99,5 %
identity (IR-spectrum) . . . . . .passes test
density (20°/4°). . . . . 0,691 - 0,693
density (20°/20°) . . . . . 0,691 - 0,696
boiling range (min. 95 %). . . . . .98 - 100 °C
colour (Hazen) . . . . . max. 10
refractive index n20/D . . . . . 1,391 - 1,393
acidity . . . . . max. 0,0003 meq/g
aluminium (Al) . . . . . .max. 0,5 ppm
barium (Ba) . . . . . .max. 0,1 ppm
boron (B) . . . . . .max. 0,02 ppm
cadmium (Cd) . . . . . .max. 0,05 ppm
calcium (Ca). . . . . .max. 0,5 ppm
chromium (Cr) . . . . . .max. 0,02 ppm
cobalt (Co) . . . . . .max. 0,02 ppm
copper (Cu) . . . . . .max. 0,02 ppm
iron (Fe) . . . . . .max. 0,1 ppm
lead (Pb). . . . . .max. 0,1 ppm
magnesium (Mg) . . . . . .max. 0,1 ppm
manganese (Mn) . . . . . .max. 0,02 ppm
nickel (Ni) . . . . . .max. 0,02 ppm
tin (Sn) . . . . . .max. 0,1 ppm
zinc (Zn) . . . . . .max. 0,1 ppm
sulfur compounds (as S) . . . . . .max. 0,005 %
substances darkened by H_2SO_4 . . . . . .passes test
min. transmission in a 1 cm cell
between 250 and 420 nm . . . . . .98 %
residue on evaporation . . . . . .max. 0,001 %
water (K.F.). . . . . .max. 0,01 %

ART. NO.	VOLUME	CONTAINER
IS01541000	1 l	
IS01542500	2,5 l	

IS0156 2,2,4-Trimethylpentane, HPLC grade

assay (G.C.) . . . . . min. 99,5 %
identity (IR-spectrum) . . . . . .passes test
density (20°/4°). . . . . 0,691 - 0,693
acidity . . . . . max. 0,0002 meq/g
alkalinity. . . . . max. 0,0002 meq/g
residue on evaporation . . . . . .max. 0,0002 %
water (K.F.). . . . . .max. 0,01 %
min. transmission/max. absorbance in a 1,0 cm cell at
wavelength T(%) A (AU)
210 nm. . . . . .50 % 0,301 AU
220 nm . . . . . .80 % 0,097 AU
245 nm. . . . . .98 % 0,009 AU
Microfiltered through membranes of pore diameter 0,22 µm

ART. NO.	VOLUME	CONTAINER
IS01561000	1 l	
IS01562500	2,5 l	

IS0157 2,2,4-Trimethylpentane, for GC residue analysis

assay (G.C.) . . . . . min. 99,5 %
identity (IR-spectrum) . . . . . .passes test
density (20°/4°). . . . . 0,691 - 0,693
residue on evaporation . . . . . .max. 0,0001 %
water (K.F.). . . . . .max. 0,01 %
Suitable for organohalogenated pesticide and dioxins, furans and PCBs residue analysis. ECD, from 1,2,4-trichlorobenzene to decachlorobiphenyl, no peaks are obtained greater than 3 pg/ml as lindane. No peaks are obtained in vicinity of 2,4,5-trichlorobiphenyl. Suitable for highly volatile halogenated hydrocarbons trace analysis. ECD, from dichloromethane to 1,2,4-trichlorobenzene, no peaks are obtained greater than 1 ng/ml as tetrachloromethane.
Suitable for pesticide and polycyclic aromatic hydrocarbons residue analysis. FID, from 1-octanol to 1-tetradecanol, no peaks are obtained greater than 5 ng/ml as 1-tetradecanol. No peaks are obtained in vicinity of pyrene.

ART. NO.	VOLUME	CONTAINER
IS01571000	1 l	
IS01572500	2,5 l	

IS0167 2,2,4-Trimethylpentane, GC-MS

assay (G.C.) . . . . . min. 99,5 %
colour (Hazen) . . . . . max. 10
identity (IR-spectrum) . . . . . .passes test
residue on evaporation . . . . . max. 3 ppm
water (K.F.) . . . . . max . 0,05 %
GC/MSD (retention range n-undecane to n-tetracontane, scaning area 30 - 600 amu, individual signals
(n- tetradecane standard)) . . . . . max. 3,0 ng/ml (ppb)
Suitable for residue analysis

ART. NO.	VOLUME	CONTAINER
IS01671000	1 l	
IS01672500	2,5 l	