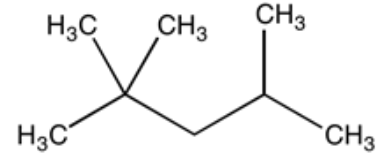


## 2,2,4-Trimethylpentane, ASTM

**Identification**

C<sub>8</sub>H<sub>18</sub>  
M = 114,26 g/mol  
CAS [540-84-1]  
EC number: 208-759-1  
Taric code: 2901 10 00

**Synonyms**

Isooctane, Isobutyltrimethylmethane, iso-Octane

**Applications**

analytical chemistry, solvent for fat and oil extractions; in determining octane numbers of fuels.

**Specifications**

|                             |              |                        |                  |
|-----------------------------|--------------|------------------------|------------------|
| assay (G.C.).....           | min. 99,75 % | density (20°/4°).....  | 0,691 - 0,693    |
| identity (IR-spectrum)..... | passes test  | n-heptane (G.C.) ..... | max. 0,1 %       |
|                             |              | lead (Pb).....         | max. 0,002 g/gal |

**Physical data**

- Density: 0,69 g/cm<sup>3</sup>
- Solub. in water: (25 °C): 0,56 mg/l
- Melting point: -107 °C
- Boiling point: 99 °C
- Flash point: -12 °C
- Ignition temperature: 410 °C
- Vapour pressure: (20 °C) 51 hPa
- Viscosity: (22 °C) 0,51 mPas
- Dielectric const.: (20 °C) 1,9
- Evap. heat: (99 °C) 334 KJ/kg
- Saturation conc.: (20 °C) 239 g/m<sup>3</sup>
- Expl. limit (upper): 6 Vol%
- Expl. limit (lower): 1 Vol%
- pH~ 7

**Safety - GHS**

Signal Word: Danger

**Hazard Statements:**

- H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.  
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 1262 • OCTANES
- IMDG: 3 II • UN 1262 • OCTANES
- IATA/ICAO: 3 II • UN 1262 • OCTANES
- PAX: 305
- CAO: 307
- 10°C - 30°C