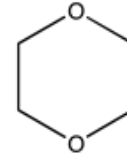


**1,4-Dioxane, dried (max. 0,005% H<sub>2</sub>O), for analysis, ExpertQ®, stabilized with 2,5 ppm of 2,6-Di-tert-butyl-4-methylphenol (BHT)****Identification**

C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>  
M = 88,11 g/mol  
CAS [123-91-1]  
EC number: 204-661-8  
Taric code: 2932 99 00

**Synonyms**

Glycolethylether, 1,4-Diethylene dioxide, 1,4-Dioxacyclohexane

**Applications**

solvents, analytical chemistry.

**Specifications**

|                             |                   |  |               |
|-----------------------------|-------------------|--|---------------|
| assay (G.C.).....           | min. 99,5 %       | copper (Cu).....                                   | max. 0,02 ppm |
| identity (IR-spectrum)..... | passes test       | iron (Fe).....                                     | max. 0,1 ppm  |
| density (20°/4°).....       | 1,032 - 1,034     | lead (Pb).....                                     | max. 0,1 ppm  |
| colour (Hazen).....         | max. 10           | magnesium (Mg).....                                | max. 0,1 ppm  |
| acidity.....                | max. 0,0008 meq/g | manganese (Mn).....                                | max. 0,02 ppm |
| melting point.....          | min. 11,0 °C      | nickel (Ni).....                                   | max. 0,02 ppm |
| aluminium (Al).....         | max. 0,5 ppm      | tin (Sn).....                                      | max. 0,1 ppm  |
| barium (Ba).....            | max. 0,1 ppm      | zinc (Zn).....                                     | max. 0,1 ppm  |
| boron (B).....              | max. 0,02 ppm     | acetaldehyde (G.C.).....                           | max. 0,005 %  |
| cadmium (Cd).....           | max. 0,05 ppm     | formaldehyde (G.C.).....                           | max. 0,05 %   |
| calcium (Ca).....           | max. 0,5 ppm      | peroxides (as H <sub>2</sub> O <sub>2</sub> )..... | max. 0,005 %  |
| chromium (Cr).....          | max. 0,02 ppm     | carbonyl compounds (as HCHO).....                  | max. 0,01 %   |
| cobalt (Co).....            | max. 0,02 ppm     | residue on evaporation.....                        | max. 0,001 %  |
|                             |                   | water (K.F.).....                                  | max. 0,005 %  |

**Physical data**

- Density: 1,03 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Melting point: 12 °C
- Boiling point: 101,5 °C
- Flash point: 11 °C
- Ignition temperature: 300 °C
- Vapour pressure: (20 °C) 41 hPa
- Viscosity: (25 °C) 1,2 mPas
- Dipolar moment: (20 °C) 0,4 Debye
- Dielectric const.: (25 °C) 2,2
- Evap. heat: (101 °C) 413 KJ/kg
- Saturation conc.: (20 °C) 149 g/m<sup>3</sup>
- Expl. limit (upper): 25,2 Vol%
- Expl. limit (lower): 1,7 Vol%
- pH(500 g/l H<sub>2</sub>O, 20 °C) 6 - 8

**Safety - GHS**

Signal Word: Danger

**Hazard Statements:**

- H225: Highly flammable liquid and vapour.  
H351: Suspected of causing cancer.  
H319: Causes serious eye irritation.  
H335: May cause respiratory irritation.  
EUH019: May form explosive peroxides.  
EUH066: Repeated exposure may cause skin dryness or cracking.

**Precautionary Statements:**

- P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.  
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
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.



**1,4-Dioxane, dried (max. 0,005% H<sub>2</sub>O), for analysis, ExpertQ<sup>®</sup>,  
stabilized with 2,5 ppm of 2,6-Di-tert-butyl-4-methylphenol (BHT)**

**Transport/storage**

- ADR: 3 F1 II • UN 1165 • DIOXANE
- IMDG: 3 II • UN 1165 • DIOXANE
- IATA/ICAO: 3 II • UN 1165 • DIOXANE
- PAX: 305
- CAO: 307
- 10°C - 30°C