

NOW

**NORDISCHE OELWERKE
WALTHER CARROUX GMBH & CO KG**

Industriestr. 61 - 65, D-21107 Hamburg
P.O.B. 93 02 47 D-21082 Hamburg

Glycerin PH. EUR. 86,5% PF

Vegetable based

Chemical Designation: 1,2,3-Trihydroxipropane

Physical description: Clear, colourless, odourless liquid (viscous)

| Parameter | Method according to PH. EUR. | Specification |
|---|-------------------------------------|----------------------|
| *Identity | 2002:0496 | meets test A |
| *Acidity / alkalinity (ml) | 2002:0496 | max. 0,2 |
| *Aldehydes, reducing substances (ppm) | 2002:0496 | max. 5 |
| Appearance | 2.2.1/2.2.2 method 2 | meets test |
| *Chloride (ppm) | 2.4.4 | max. 10 |
| *Colour APHA | ISO 2211 | max. 10 |
| *Content chemically (%) | 2002:0496 | 85,0-88,0 |
| *Content physical (%) | 2.2.6 | 85,0-88,0 |
| Density 20°C (g/cm ³) | 2.2.5 | 1,2218-1,2300 |
| *Esters (ml) | 2002:0496 | min. 8 |
| *Halogenated compounds (ppm) | 2002:0496 | max. 30 |
| *Heavy metals (ppm) | 2.4.8 | max. 5 |
| Impurity A, similar compounds(%) | 2.2.28 | |
| Impurity A (diethylene glycol) (%) | 2.2.28 | max. 0,1 |
| Any other impurities R(t)< Glycerol (%) | 2.2.28 | max. 0,1 |
| Any other impurities R(t)> Glycerol (%) | 2.2.28 | max. 0,5 |
| *Refractive index | 2.2.6 | 1,449-1,455 |
| *Saponification equivalent (%Na ₂ O) | 2002:0496 | max. 0,0248 |
| *Sugar | 2002:0496 | negative |
| *Sulphate ash (%) | 2.4.14 | max. 0,01 |
| *Water (%) | 2.5.12 | 12,0-15,0 |

(* Analysed for each batch)

Ph. Eur. = European Pharmacopeia, 4th Edition 2002

Hamburg

30.11.2003

Dr. Christoph Gurriss