

GPC E40

Liquid-liquid extraction with recovery

DESCRIPTION

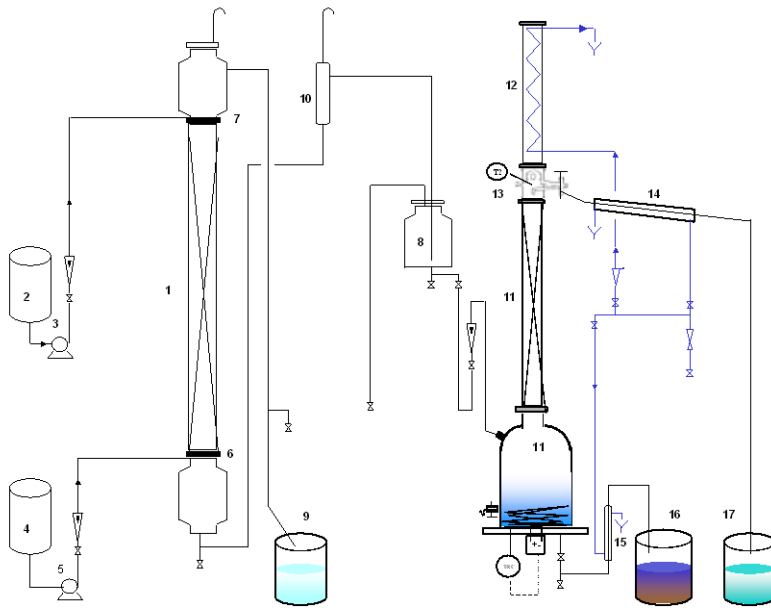
- Process of separating the components of a liquid mixture based on differences in their solubility in a specific solvent.
- This unit is designed for liquid-liquid extraction, a process commonly used in industry. It can also be used to determine the feasibility of a process.
- The extraction column is coupled with a rectification column in order to recycle or recover the solvent.
- A user manual is provided.



SUGGESTED APPLICATIONS

- Study of a process
- Experimental determination of the liquid-liquid balance
- Determination of the number of theoretical stages.
- Efficiency of the column
- Mass balance : matter transmission
- Effect of the action of the agitator (comparative study with or without any agitation)
- Industrial application

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1. Extraction column

- Borosilicate glass
- Ø 50 mm – height : 1200 mm

2. Solvent Supply Tank

- Borosilicate glass 3.3

3. Solvent Supply Diaphragm Pump

- Stainless steel head 316 L
- Flow rate : 0-50 L/h to 10 bar (145 psi)

4. Mixture Supply Tank

- Polyethylene

5. Mixture Supply Diaphragm Pump

- Stainless steel head 316 L
- Flow rate : 0-22 L/h to 10 bar (145 psi)

6. Dispatching supply plates for the substructure

- Stainless steel 316 L

7. Dispatching supplying plates of the top of the column

- Stainless steel 316 L

8. Extract Receiver

- Borosilicate glass 3.3

9. Raffinate Receiver

- Borosilicate glass 3.3

10. Barometric leg

- Permits adjustment of the phase at the top of the column

11. Rectification column

- Glass substructure 5 L
- Ø 50 mm – height : 1000 mm
- Borosilicate glass
- Heater- 1500 W – stainless steel
- Temperature regulation
- 2 Pt 100 probes

12. Condenser

- Borosilicate glass – 0.3 m²

13. Manual reflux head

14. Distillate exchanger

- Borosilicate glass – area: 0.05 m²

15. Extract exchanger

- Borosilicate glass – area:0.05m²

16. Substructure extract tank

- High density polyethylene V = 20 L

17. Distillate tank

- High density polyethylene V = 20 L

DIMENSIONS

Length : 1200 mm

Width : 500 mm

Height : 2500 mm

Weight : 500 kg

UTILITIES

Electricity : 230 VAC – 50 Hz – 3000 W

Network water and drainage