| Company: | Ancap |
| :--- | :--- |
| Unit: | R2R - Vapor recovery |
| Item: | $408-E$ |
| Service: | Butane caustic extraction treater |

Column characteristics (1)

| Existing or in design: | mm | Existing, to be replaced <br> Inside diameter <br> Internal type: <br> Packing type and material <br> Number of beds |
| :--- | :--- | :--- |

Packing characteristics

| Location Theoretical plates |  |  | Bottom of bed |
| :---: | :---: | :---: | :---: |
|  |  |  | 1, minimum (1) |
| Bed height |  | mm | (1) |
| Pressure <br> LPG temperature |  | $\begin{aligned} & \mathrm{kg} / \mathrm{cm} 2 \mathrm{~g} \\ & { }^{\circ} \mathrm{C} \end{aligned}$ | $\begin{aligned} & 16.5 \\ & 35.0 \end{aligned}$ |
| $\begin{gathered} \mathrm{B} \\ \mathrm{U} \\ \mathrm{~T} \\ \mathrm{~A} \\ \mathrm{~N} \\ \mathrm{E} \end{gathered}$ | Mass rate <br> MW <br> Molal rate <br> Density (PT) <br> Volume rate (PT) <br> Surface tension <br> H2S content <br> Mercaptan content | kg/h <br> kg/kmol <br> kmol/h <br> kg/m3 <br> $\mathrm{m} 3 / \mathrm{h}$ <br> dyne/cm <br> wppm <br> wppm | $\begin{gathered} \hline 9137 \\ 56.95 \\ 160.4 \\ 568.9 \\ 16.06 \\ 10.40 \\ \text { nil } \\ 175(2) \\ \hline \end{gathered}$ |
| N a O H | Density (PT) Surface tension | kg/m3 dyne/cm | $\begin{aligned} & 939.6 \\ & 77.74 \end{aligned}$ |
| Overall column pressure drop |  | kg/cm2 g | 0.1 |

## Notes

(1) By vendor. Packing vendor to guarantee satisfactory operation of the packing bed and distributors between $50 \%$ and $100 \%$ of the above flowrates.
(2) Reference values. Vendor is asked to advise.

Design case IR 2018

| Company: | Ancap |
| :--- | :--- |
| Unit: | R2R - Vapor recovery |
| Item: | 409-E |
| Service: | Propane caustic extraction treater |

Column characteristics (1)

| Existing or in design: | mm | Existing, to be replaced <br> 813 <br> Inside diameter <br> Internal type: |
| :--- | :--- | :--- |
| Packing <br> Random |  |  |
| Number of beds |  | CS (1) |

Packing characteristics

| Location Theoretical plates |  |  | Bottom of bed |
| :---: | :---: | :---: | :---: |
|  |  |  | 1, minimum (1) |
| Bed height |  | mm | (1) |
| Pressure <br> LPG temperature |  | $\begin{aligned} & \mathrm{kg} / \mathrm{cm} 2 \mathrm{~g} \\ & { }^{\circ} \mathrm{C} \end{aligned}$ | $\begin{aligned} & 21.0 \\ & 35.0 \end{aligned}$ |
| $\begin{gathered} P \\ R \\ O \\ P \\ A \\ N \\ \text { E } \end{gathered}$ | Mass rate <br> MW <br> Molal rate <br> Density (PT) <br> Volume rate (PT) <br> Surface tension <br> H2S content <br> Mercaptan content | kg/h <br> kg/kmol <br> kmol/h <br> kg/m3 <br> m3/h <br> dyne/cm <br> wppm <br> wppm | 6247 45.87 136.2 507.8 12.30 6.52 $<50(2)$ $65(2)$ |
| Na O H | Density (PT) Surface tension | kg/m3 dyne/cm | $\begin{aligned} & 939.6 \\ & 77.74 \end{aligned}$ |
| Overall column pressure drop |  | $\mathrm{kg} / \mathrm{cm} 2 \mathrm{~g}$ | 0.1 |

## Notes

(1) By vendor. Packing vendor to guarantee satisfactory operation of the packing bed and distributors between $50 \%$ and $100 \%$ of the above flowrates.
(2) Reference values. Vendor is asked to advise.

