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(54) Title: PROCESS TO SEPARATE A RHODIUM/PHOSPHITE LIGAND COMPLEX AND FREE PHOSPHITE LIGAND COMPLEX FROM A HYDROFORMYLATION MIXTURE

(57) Abstract: Process to separate a rhodium/phosphite ligand complex and free phosphite ligand from a hydroformylation mixture also containing high boiling hydroformylation compounds by contacting said mixture with a polymeric membrane, wherein said mixture is diluted with at least one diluent compound having a solubility parameter such that the absolute difference in relation to the solubility parameter of the polymeric membrane lies between 0 and $400\sqrt{kJ / m^3}$ and the ratio of the molar volume of the phosphite ligand and said diluent compound is ≥1.5, to such an extent that the a mount of high boiling compounds in said mixture is ≤50 wt.% ( relative to the total amount of the mixture) and the amount of compounds with a molecular weight of between x±200 is ≤20 wt.% (relative to the total amount of the mixture) whereby x is the cut-off of the membrane (g/mole).