

# SELECTIVE HYDROGENATION CATALYST AND METHOD FOR PREPARING SAME

## ABSTRACT

The invention concerns a catalyst comprising nickel on an aluminium oxide support. The aluminium oxide support has, in the calcined state, a diffractogram obtained by X ray diffractometry comprising peaks which correspond to the following interplanar spacings and relative intensities:

| Interplanar spacings<br>$d (10^{-10} \text{ m})$ | Relative intensities<br>$I/I_0 (\%)$ |
|--------------------------------------------------|--------------------------------------|
| 5.03 to 5.22                                     | 1-5                                  |
| 4.56 to 4.60                                     | 1-10                                 |
| 4.06 to 4.10                                     | 1-5                                  |
| 2.80 to 2.85                                     | 5-20                                 |
| 2.73                                             | 15-35                                |
| 2.60                                             | 5-10                                 |
| 2.43                                             | 35-40                                |
| 2.29                                             | 30-40                                |
| 1.99                                             | 60-95                                |
| 1.95                                             | 25-50                                |
| 1.79                                             | 1-10                                 |
| 1.53                                             | 5-10                                 |
| 1.51                                             | 5-10                                 |
| 1.41                                             | 40-60                                |
| 1.39                                             | 100                                  |
| 1.23 to 1.26                                     | 1-5                                  |
| 1.14                                             | 5-10                                 |
| 1.11                                             | 1-5                                  |
| 1.04                                             | 1-5                                  |
| 1.00                                             | 5-10                                 |
| 0.97                                             | 1-5                                  |