



## Catalyst portfolio of ThalesNano Inc.\*

| Catalyst type |                                                     | THS Codes for ordering |                |                |           |
|---------------|-----------------------------------------------------|------------------------|----------------|----------------|-----------|
|               |                                                     | MicroCart              | 30x4mm CatCart | 70x4mm CatCart | MidiCart  |
| Inert         | Quartz sand                                         | THS-01049              | THS-01010      | THS-01030      | THS-D1040 |
|               | Titanium                                            | -                      | THS-01110      | THS-01130      | THS-D1140 |
| Palladium     | 10% Pd/C                                            | THS-01141              | THS-01111      | THS-01131      | THS-D1141 |
|               | 20% Pd(OH) <sub>2</sub> /C                          | THS-01145              | THS-01115      | THS-01135      | THS-D1145 |
|               | 5% Pd/Al <sub>2</sub> O <sub>3</sub>                | THS-01148              | THS-01118      | THS-01138      | THS-D1148 |
|               | 10% Pd/CaCO <sub>3</sub>                            | -                      | THS-01511      | THS-01531      | -         |
|               | 5% Pd/CaCO <sub>3</sub>                             | -                      | THS-01512      | THS-01532      | -         |
|               | 5% Pd/BaCO <sub>3</sub>                             | -                      | THS-01513      | THS-01533      | -         |
|               | 5% Pd/C (sulfided)                                  | THS-01841              | THS-01811      | THS-01831      | -         |
|               | 5% Pd/C                                             | THS-02141              | THS-02111      | THS-02131      | THS-D2141 |
|               | 5% Pd/CaCO <sub>3</sub> (Pb) / Lindlar's            | THS-02144              | THS-02114      | THS-02134      | -         |
|               | 5% Pd/BaSO <sub>4</sub>                             | THS-03142              | THS-03112      | THS-03132      | THS-D3142 |
|               | 1% Pd/Al <sub>2</sub> O <sub>3</sub>                | THS-03148              | THS-03118      | THS-03138      | THS-D3148 |
|               | 10% Pd/Al <sub>2</sub> O <sub>3</sub>               | THS-03149              | THS-03119      | THS-03139      | -         |
|               | Pd/C-ethylenediamine                                | THS-04142              | THS-04112      | THS-04132      | -         |
|               | 5% Pd/SiO <sub>2</sub>                              | THS-04144              | THS-04114      | THS-04134      | THS-D4144 |
|               | 1% Pd/C                                             | THS-04145              | THS-04115      | THS-04135      | -         |
|               | 2% Pd/SrCO <sub>3</sub>                             | THS-04146              | THS-04116      | THS-04136      | -         |
| PdO           | THS-04148                                           | THS-04118              | THS-04138      | THS-D4148      |           |
| Pd black      | THS-04149                                           | THS-04119              | THS-04139      | THS-D4149      |           |
| Platinum      | 10% Pt/C                                            | THS-01143              | THS-01113      | THS-01133      | THS-D1143 |
|               | 1% Pt/SiO <sub>2</sub>                              | THS-01444              | THS-01414      | THS-01434      | THS-D1444 |
|               | 1% Pt/SiO <sub>2</sub> - polyethyleneimine          | THS-01445              | THS-01415      | THS-01435      | THS-D1445 |
|               | 5% Pt/C (doped with Bi)                             | THS-01446              | THS-01416      | THS-01436      | THS-D1446 |
|               | 1% Pt/C (doped with V)                              | THS-01449              | THS-01419      | THS-01439      | THS-D1449 |
|               | 5% Pt/CaCO <sub>3</sub>                             | -                      | THS-01519      | THS-01539      | -         |
|               | 1% Pt/SBA                                           | -                      | THS-01617      | THS-01637      | -         |
|               | 5% Pt/Al <sub>2</sub> O <sub>3</sub>                | THS-02143              | THS-02113      | THS-02133      | THS-D2143 |
|               | 5% Pt/C (sulfided)                                  | THS-02147              | THS-02117      | THS-02137      | -         |
|               | 1% Pt/Al <sub>2</sub> O <sub>3</sub>                | THS-04147              | THS-04117      | THS-04137      | -         |
| Nickel        | 1% Pt/C                                             | THS-06145              | THS-06115      | THS-06135      | THS-D6145 |
|               | 5% Pt/C                                             | THS-08142              | THS-08112      | THS-08132      | THS-D8142 |
|               | Raney Nickel                                        | THS-01142              | THS-01112      | THS-01132      | THS-D1142 |
|               | Nickel Sponge                                       | -                      | THS-01417      | THS-01437      | THS-D1447 |
|               | PriCat® Ni 55/5P                                    | THS-03143              | THS-03113      | THS-03133      | -         |
|               | Nickel Sponge (1% Mo)                               | THS-03144              | THS-03114      | THS-03134      | THS-D3144 |
| Rhodium       | Ni/SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> | THS-04143              | THS-04113      | THS-04133      | -         |
|               | 5% Rh/C                                             | THS-01144              | THS-01114      | THS-01134      | THS-D1144 |
|               | 1% Rh/SiO <sub>2</sub> - polyethyleneimine          | -                      | THS-01412      | THS-01432      | -         |
| Ruthenium     | 5% Rh/Al <sub>2</sub> O <sub>3</sub>                | THS-02148              | THS-02118      | THS-02138      | THS-D2148 |
|               | Ru Black                                            | -                      | THS-01518      | THS-01538      | -         |
|               | 5% Ru/Al <sub>2</sub> O <sub>3</sub>                | THS-02142              | THS-02112      | THS-02132      | THS-D2142 |
|               | 5% Ru/C                                             | THS-02145              | THS-02115      | THS-02135      | THS-D2145 |
|               | RuO <sub>2</sub>                                    | THS-05148              | THS-05118      | THS-05138      | -         |
| Gold          | 1% Au/Fe <sub>2</sub> O <sub>3</sub>                | -                      | THS-01616      | THS-01636      | -         |
|               | 1% Au/C                                             | -                      | THS-01618      | THS-01638      | -         |
|               | 1% Au/TiO <sub>2</sub>                              | -                      | THS-01619      | THS-01639      | THS-D1649 |
| Copper        | Raney Copper                                        | THS-01147              | THS-01117      | THS-01137      | THS-D1147 |
|               | CuO/Al <sub>2</sub> O <sub>3</sub>                  | -                      | THS-01311      | THS-01331      | -         |
| Cobalt        | Copper powder in graphite                           | -                      | THS-01819      | THS-01839      | -         |
|               | Raney Cobalt                                        | THS-01146              | THS-01116      | THS-01136      | THS-D1146 |
| Iridium       | 0.5% Ir/C                                           | -                      | THS-01413      | THS-01433      | -         |
|               | 1% Ir/C                                             | THS-04141              | THS-04111      | THS-04131      | -         |
|               | IrO <sub>2</sub>                                    | THS-05149              | THS-05119      | THS-05139      | -         |
| Zinc          | 5% Ir/CaCO <sub>3</sub>                             | THS-06146              | THS-06116      | THS-06136      | -         |
|               | Zinc powder                                         | -                      | THS-08112      | THS-08132      | -         |
| Rhenium       | 5% Re/C                                             | THS-02146              | THS-02116      | THS-02136      | -         |

\*Custom cartridges are available on request!



## Catalyst portfolio of ThalesNano Inc.\*

| Catalyst type                  |                                                                  | THS Codes for ordering              |                |                |           |
|--------------------------------|------------------------------------------------------------------|-------------------------------------|----------------|----------------|-----------|
|                                |                                                                  | MicroCart                           | 30x4mm CatCart | 70x4mm CatCart | MidiCart  |
| Mixed Metals                   | 1% Pd - 0.3% Cu/Al <sub>2</sub> O <sub>3</sub>                   | -                                   | THS-01514      | THS-01534      | -         |
|                                | PriCat® CZ 30/18T (Cu+Zn)                                        | THS-01943                           | THS-01913      | THS-01933      | THS-D1943 |
|                                | 5% Pd - 1% Fe/C                                                  | THS-03145                           | THS-03115      | THS-03135      | -         |
|                                | 2.5% Pd - 2.5% Pt/C                                              | THS-03146                           | THS-03116      | THS-03136      | -         |
|                                | 0.5% Pd - 4.5% Ru/C                                              | THS-03147                           | THS-03117      | THS-03137      | -         |
| Complex Catalysts              | Pt(O) EnCat*                                                     | -                                   | THS-01515      | THS-01535      | -         |
|                                | Rh(COD)(dppf)/SiO <sub>2</sub>                                   | -                                   | THS-01615      | THS-01635      | -         |
|                                | Pd(O) EnCat® NP30                                                | THS-03141                           | THS-03111      | THS-03131      | -         |
|                                | Pd(II) EnCat® 30                                                 | THS-05141                           | THS-05111      | THS-05131      | -         |
|                                | Pd(II) EnCat® TPP30                                              | THS-05142                           | THS-05112      | THS-05132      | -         |
|                                | Pd(II) EnCat® BINAP30                                            | THS-05143                           | THS-05113      | THS-05133      | -         |
|                                | Pd(PPh <sub>3</sub> ) <sub>2</sub> - DVB bounded                 | THS-05144                           | THS-05114      | THS-05134      | -         |
|                                | Pd(II) EnCat® TOTP30                                             | THS-05145                           | THS-05115      | THS-05135      | -         |
|                                | RhCl(PPh <sub>3</sub> ) <sub>4</sub>                             | THS-05147                           | THS-05117      | THS-05137      | -         |
|                                | PdCl <sub>2</sub> (PPh <sub>3</sub> ) <sub>2</sub> - DVB bounded | -                                   | THS-06117      | THS-06137      | -         |
|                                | SiliaCat® - DPP-Pd                                               | -                                   | THS-08818      | THS-08838      | -         |
|                                | Scavengers                                                       | Triamine tetraacetate, silica-suppo | -              | THS-01312      | -         |
| Quadrapure® TU                 |                                                                  | -                                   | THS-01313      | -              | -         |
| Quadrapure®-AEA                |                                                                  | -                                   | THS-01314      | -              | -         |
| Quadrapure®-AMPA               |                                                                  | -                                   | THS-01315      | -              | -         |
| Quadrapure®-IDA                |                                                                  | -                                   | THS-01316      | -              | -         |
| Quadrapure®-IMDAZ              |                                                                  | -                                   | THS-01317      | -              | -         |
| Quadrapure®-MPA                |                                                                  | -                                   | THS-01318      | -              | -         |
| Quadrasil®-AP                  |                                                                  | -                                   | THS-01319      | -              | -         |
| Quadrasil®-TA                  |                                                                  | -                                   | THS-01320      | -              | -         |
| Quadrasil®-MTU                 |                                                                  | -                                   | THS-01321      | -              | -         |
| Quadrasil®-MP                  |                                                                  | -                                   | THS-01322      | -              | -         |
| Quadrasil®-PHI                 |                                                                  | -                                   | THS-01323      | -              | -         |
| Quadrapure®-PHE                |                                                                  | -                                   | THS-01324      | -              | -         |
| Mercaptopropyl modified silica |                                                                  | -                                   | THS-01710      | THS-01730      | -         |
| Amberlite® IR-120              |                                                                  | -                                   | THS-01716      | -              | -         |
| Amberlyst® 36 resin            |                                                                  | -                                   | THS-08113      | THS-08133      | -         |
| Amberlite® IRA-910             |                                                                  | -                                   | THS-08114      | -              | -         |
| Amberlyst® 35 Dry resin        |                                                                  | -                                   | THS-08117      | THS-08137      | -         |
| QuadraPure™-BZA                | -                                                                | -                                   | THS-X1164      | -              |           |
| Other                          | NaIO <sub>4</sub>                                                | -                                   | THS-01813      | THS-01833      | -         |
|                                | n-Bu <sub>4</sub> NIO <sub>4</sub>                               | -                                   | THS-01814      | THS-01834      | -         |

\*Custom cartridges are available on request!