

# Sports Doping Control

## Catalogue

**December 2023**

*Quality reference materials for identification and calibration are essential to making accurate chemical measurements in sports doping control*

| **Category** | **Description** | **NMI reference** | **Unit of issue (mg)** | Domestic Cost (A$) (excl GST) | International  Cost (A$) |
| --- | --- | --- | --- | --- | --- |
| Androstan-4,6-dienes | Androstan-4,6-diene-17-ol-3-one | S007 | 1 (ampoule) | 121 | 169 |
| Bolasterone metabolites | 7α,17α-Dimethyl-5β-androstane-3α,17β-diol | D614 | 1 | 155 | 218 |
| Bolasterone metabolites | 7α,17α-Dimethyl-5β-androstane-3α,17β-diol glucuronide | D628 | 1 | 188 | 264 |
| Boldenone and metabolites | Boldenone (1,4-Androstadiene-17-ol-3-one) | S008b | 10 | 121 | 169 |
| Boldenone and metabolites | Boldenone cypionate | S032 | 5 | 155 | 218 |
| Boldenone and metabolites | d3-17β-Boldenone | D581b | 1 (ampoule) | 155 | 218 |
| Boldenone and metabolites | 17β-Boldenone sulfate (Et3N salt) | D931 | 5 | 155 | 218 |
| Boldenone and metabolites | 17β-Boldenone glucuronide (K+ salt) | D862 | 1 | 228 | 319 |
| Boldenone and metabolites | d3-17β-Boldenone sulfate (Et3N salt) | S013 | 1 (ampoule) | 188 | 264 |
| Boldenone and metabolites | 17α-Boldenone (Epiboldenone) | D582b | 1 (ampoule) | 121 | 169 |
| Boldenone and metabolites | 5β-Androst-1-en-17β-ol-3-one | D564 | 1 (ampoule) | 121 | 169 |
| Boldenone and metabolites | 5β-Androst-1-en-17β-ol-3-one glucuronide (free acid) | D935 | 1 (ampoule) | 155 | 218 |
| Boldenone and metabolites | 5β-Androst-1-en-3-ol-17-one | S022 | 1 (ampoule) | 121 | 169 |
| Calusterone and metabolites | Calusterone | D618 | 1 | 155 | 218 |
| Calusterone and metabolites | 7β,17α-Dimethyl-5β-androstane-3α,17β-diol | D624 | 1 (ampoule) | 155 | 218 |
| Calusterone and metabolites | 7β,17α-Dimethyl-5β-androstane-3α,17β-diol glucuronide | D629 | 1 | 188 | 264 |
| Clostebol metabolite | 4-Chloro-4-androsten-3α-ol-17-one | D563 | 1 (ampoule) | 121 | 169 |
| Danazol metabolites | 2-Hydroxymethylethisterone\* | D920b | 1 | 121 | 169 |
| Drostanolone, esters, and metabolites | Drostanolone | S026b | 1 | 121 | 169 |
| Drostanolone, esters, and metabolites | Drostanolone enanthate | S027 | 40 | 121 | 169 |
| Drostanolone, esters, and metabolites | Drostanolone propionate | S025 | 20 | 121 | 169 |
| Drostanolone, esters, and metabolites | 2α-Methyl-5α-androstan-3α-ol-17-one | D567 | 1 | 121 | 169 |
| Drostanolone, esters, and metabolites | 2α-Methyl-5α-androstan-3α-ol-17-one-3-D-glucuronide (Na salt) | D601 | 1 | 155 | 218 |
| Finasteride metabolites | Carboxy finasteride\* | S045 | 1 | 121 | 169 |
| Fluoxymesterone metabolites | 9α-Fluoro-17,17-dimethyl-18-nor-androstan-4,13-diene-11-ol-3-one | D571 | 1 (ampoule) | 121 | 169 |
| Fluoxymesterone metabolites | 9α-Fluoro-17α-methyl-4-androsten-3α, 6β,11β,17β-tetra-ol | D616 | 1 (ampoule) | 121 | 169 |
| Fluoxymesterone metabolites | 6β-Hydroxyfluoxymesterone | D617 | 1 (ampoule) | 121 | 169 |
| Formebolone metabolite | 2-Hydroxymethyl-17α-methylandrostadiene-11,17-diol-3-one | D622 | 1 (ampoule) | 155 | 218 |
| Furazabol metabolite | 16β-Hydroxyfurazabol | D602 | 1 | 121 | 169 |
| 4-Hydroxysteroids | 4-Hydroxytestosterone | D851b | 1 (ampoule) | 155 | 218 |
| 4-Hydroxysteroids | 4-Hydroxyandrostendione (Formestane) | D852b | 1 (ampoule) | 155 | 218 |
| 4-Hydroxysteroids | 4-Hydroxynandrolone (Oxabolone) | D853c | 1 (ampoule) | 121 | 169 |
| 4-Hydroxysteroids | 1,6,7-d3-4-Hydroxyandrostendione - **PCC** | S046 | 0.2 (ampoule) | 121 | 169 |
| Mesterolone and metabolites | Mesterolone | S037 | 20 | 121 | 169 |
| Mesterolone and metabolites | 1α-Methyl-5α-androstan-3α-ol-17-one | D557 | 1 (ampoule) | 121 | 169 |
| Mesterolone and metabolites | 1α-Methyl-5α-androstan-3α-ol-17-one glucuronide | D598 | 1 (ampoule) | 155 | 218 |
| Mesterolone and metabolites | 1α-Methyl-5α-androstan-3α,17-diol | D556 | 1 (ampoule) | 121 | 169 |
| Mesterolone and metabolites | 1α-Methyl-5α-androstan-3α,17-diol glucuronide | D599 | 1 (ampoule) | 155 | 218 |
| Metenolone metabolites | 1-Methylene-5α-androstan-3α-ol-17-one | D619 | 1 (ampoule) | 121 | 169 |
| Metenolone metabolites | 1-Methylene-5α-androstan-3α-ol-17-one glucuronide | D597 | 1 (ampoule) | 155 | 218 |
| Methandienone and metabolites | Methandienone | D630 | 10 | 121 | 169 |
| Methandienone and metabolites | 17-Epimethandienone | D562 | 1 (ampoule) | 121 | 169 |
| Methandienone and metabolites | 6β-Hydroxymethandienone | D565 | 1 (ampoule) | 121 | 169 |
| Methandienone and metabolites | Epimetendiol | D638 | 1 (ampoule) | 188 | 264 |
| Methandienone and metabolites | 17,17-Dimethyl-18-nor-5-androsta-1,13-diene-3α-ol | D639 | 1 (ampoule) | 188 | 264 |
| Methandienone and metabolites | 17,17-Dimethyl-18-norandrosta-1,4,13-trien-3-one | D576 | 5 | 155 | 218 |
| Methasterone | Methasterone | S021 | 20 | 121 | 169 |
| Methyltestosterone metabolites | 17α-Methyl-5α-androstane-3α,17β-diol | D560 | 1 (ampoule) | 121 | 169 |
| Methyltestosterone metabolites | 17α-Methyl-5β-androstane-3α,17β-diol | D561 | 1 (ampoule) | 121 | 169 |
| Methyltestosterone metabolites | d3-17-Methyl-5-androstan-3,17-diol | D928 | 1 (ampoule) | 121 | 169 |
| 17-Methyl-1-testosterone | 17-Hydroxy-17-methyl-5-androst-1-ene-3-one | D904 | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | Nandrolone | S038 | 10 | 121 | 169 |
| Nandrolone and metabolites | d3-17β-Nandrolone | D583 | 5 | 228 | 319 |
| Nandrolone and metabolites | d3-17β-Nandrolone sulfate (Et3N salt) | D782b | 1 (ampoule) | 155 | 218 |
| Nandrolone and metabolites | 13C2-17β-Nandrolone | D679 | 5 | 188 | 264 |
| Nandrolone and metabolites | 17β-Nandrolone decanoate | D684b | 10 | 121 | 169 |
| Nandrolone and metabolites | 17β-Nandrolone glucuronide (K+ salt) | D861 | 1 | 228 | 319 |
| Nandrolone and metabolites | 17β-Nandrolone phenylpropionate | S029 | 20 | 121 | 169 |
| Nandrolone and metabolites | 17β-Nandrolone sulfate (Na+ salt) | D809b | 1 | 121 | 169 |
| Nandrolone and metabolites | 17α-Nandrolone (epi-nandrolone) | D722e | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | 17α-Nandrolone sulfate | D783b | 5 | 121 | 169 |
| Nandrolone and metabolites | d4-19-Noretiocholanolone | D742 | 1 (ampoule) | 155 | 218 |
| Nandrolone and metabolites | 19-Noretiocholanolone | D554 | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | 19-Noretiocholanolone glucuronide (Na salt) | D595a | 1 (ampoule) | 155 | 218 |
| Nandrolone and metabolites | d4-19-Norandrosterone | D584c | 1 (ampoule) | 155 | 218 |
| Nandrolone and metabolites | d4-19-Norandrosterone glucuronide (Na+ salt)\* | D898b | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | 19-Norandrosterone | D555a | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | 19-Norandrosterone glucuronide (Na+ salt) | D596a | 1 (ampoule) | 155 | 218 |
| Nandrolone and metabolites | 19-Norandrosterone sulfate (Et3N salt) | D841b | 1 (ampoule) | 121 | 169 |
| Nandrolone and metabolites | 5(10)-Estrene-3,17-diol | D926 | Exhausted | N/A | N/A |
| Norbolethone and metabolites | Norbolethone (13β,17-diethyl-gonan-4-ene-17-ol-3-one)  Norbolethone (13β,17-diethyl-gonan-4-ene-17-ol-3-one) – **WADA** | D825b  D825c | 1  1 | 188  121 | 264  169 |
| Norbolethone and metabolites | 13β,17-Diethyl-5-gonane-3, 17-diol (major metabolite)\*- **WADA** | D818b | 1 (ampoule) | 121 | 169 |
| Norbolethone and metabolites | 13β,17-Diethyl-5-gonane-3, 17-diol (minor metabolite)\* - **WADA** | D820b | 1 (ampoule) | 121 | 169 |
| Norethandrolone metabolite | 17-Ethyl-5-estrane-3, 17-diol | D558 | 1 (ampoule) | 121 | 169 |
| Norethandrolone metabolite | 17-Ethyl-5-estrane-3, 17-diol | D559 | 1 (ampoule) | 121 | 169 |
| Norethandrolone metabolite | 17-Hydroxyethyl-5-estrane-3, 17-diol **†** | S015 | 1 (ampoule) | 121 | 169 |
| Oral turinabol and metabolites (dehydrochloromethyltestosterone) | Oral turinabol | D613 | 1 (ampoule) | 121 | 169 |
| Oxandrolone and metabolite | 17-Epioxandrolone | D620 | 1 (ampoule) | 121 | 169 |
| Oxandrolone and metabolite | Oxandrolone | S040 | 20 | 121 | 169 |
| Prostanozol metabolites | 3'-Hydroxy-5-androstan[3,2-c]pyrazol-17-one **†** | S016 | Exhausted | N/A | N/A |
| Prostanozol metabolites | 3'-Hydroxy-5-androstan[3,2-c]pyrazol-17-one **†** | S016b | In progress |  |  |
| Prostanozol metabolites | 4/4-Hydroxy-5-androstan[3,2-c]pyrazol-17-one **†** | S019 | 1 (ampoule) | 121 | 169 |
| Prostanozol metabolites | 16-Hydroxy-5-androstan[3,2-c]pyrazol-17-one **†** | S017 | 1 (ampoule) | 121 | 169 |
| Stanozolol and metabolites | Stanozolol | D646 | 10 | 121 | 169 |
| Stanozolol and metabolites | 3’-Hydroxystanozolol | D577 | 1 (ampoule) | 121 | 169 |
| Stanozolol and metabolites | 3’-Hydroxystanozolol glucuronide | D640 | 1 (ampoule) | 188 | 264 |
| Stanozolol and metabolites | 4α-Hydroxystanozolol | D642 | 1 | 121 | 169 |
| Stanozolol and metabolites | 4β-Hydroxystanozolol | D641 | 0.5 (ampoule) | 121 | 169 |
| Stanozolol and metabolites | 16β-Hydroxystanozolol | D621 | 1 | 155 | 218 |
| 1-Testosterone | 1-Testosterone (5α-Androst-1-en-3-one-17β-ol) | D767c | 1 (ampoule) | 228 | 319 |
| 1-Testosterone | 5α-Androst-1-ene-3β,17β-diol | D871b | 1 (ampoule) | 121 | 169 |
| Tetrahydrogestrinone and precursors | Gestrinone | D860b | 10 | 121 | 169 |
| Tetrahydrogestrinone and precursors | Tetrahydrogestrinone (THG) | D872e | 1 | 228 | 319 |
| Trenbolone and metabolite | Trenbolone acetate | S024 | 20 | 121 | 169 |
| Trenbolone and metabolite | Trenbolone enanthate | S028 | 5 | 121 | 169 |
| Trenbolone and metabolite | 17α-Trenbolone (Epitrenbolone) | D708b | 1 | TBA | TBA |
| **ENDOGENOUS STEROIDS AND METABOLITES** |  |  |  |  |  |
| Testosterone and metabolites | 16,16,17-d3-Testosterone | D546 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 16,16,17-d3-Testosterone glucuronide (sodium salt) | S036 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | 16,16,17-d3-Testosterone sulfate | D506b | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 19-d3-Testosterone | D644 | Exhausted | N/A | N/A |
| Testosterone and metabolites | Testosterone | M914c | 10 | 121 | 169 |
| Testosterone and metabolites | Testosterone glucuronic acid | D507d | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | Testosterone sulfate (Et3N salt) | D508 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | Testosterone acetate | S042 | 10 | 121 | 169 |
| Testosterone and metabolites | Testosterone cypionate | S018 | 20 | 121 | 169 |
| Testosterone and metabolites | Testosterone decanoate | D683 | 10 | 121 | 169 |
| Testosterone and metabolites | Testosterone enanthate | D773d | 1 | 121 | 169 |
| Testosterone and metabolites | Testosterone isocaproate (4-methylpentanoate) | D688b | 10 | 121 | 169 |
| Testosterone and metabolites | Testosterone phenylpropionate | S030 | 20 | 121 | 169 |
| Testosterone and metabolites | Testosterone propionate | D710b | 25 | 121 | 169 |
| Testosterone and metabolites | d3-Epitestosterone | D548 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d4-Epitestosterone | S001 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d3-Epitestosterone glucuronide | D604 | Exhausted |  |  |
| Testosterone and metabolites | d3-Epitestosterone sulfate | D591 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | Epitestosterone | D547b | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | Epitestosterone glucuronide (Na salt) | S035 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | Epitestosterone sulfate | D605 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | d4-Androsterone | D549 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d4-Androsterone glucuronide | D829g | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d4-Androsterone sulfate | D587 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | Androsterone | D550d | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | Androsterone glucuronide | D572b | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | Androsterone sulfate (Na+ salt) | D610b | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | d5-Etiocholanolone | D528d | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | d5-Etiocholanolone sulfate | D606 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | Etiocholanolone | D551c | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | Etiocholanolone glucuronide (Na+ salt) | D607b | 1 | 155 | 218 |
| Testosterone and metabolites | Etiocholanolone sulfate | D608 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | d3-5α-Dihydrotestosterone | D552 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d3-5α-Dihydrotestosterone glucuronide free acid | D573b | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d3-5α-Dihydrotestosterone sulfate | D590 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 5α-Dihydrotestosterone | D680 | 10 | 121 | 169 |
| Testosterone and metabolites | 5α-Dihydrotestosterone glucuronide free acid | S006 | 1 | 155 | 218 |
| Testosterone and metabolites | 5α-Dihydrotestosterone sulfate | D609 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | 5α-Androstane-3α,17β-diol | D634b | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | d3-5α-Androstane-3α,17β-diol | D593 | 1 | 155 | 218 |
| Testosterone and metabolites | 5α-Androstane-3α,17β-diol-17--glucuronic acid | S002 | 1 | 121 | 169 |
| Testosterone and metabolites | 5α-Androstane-3α,17β-diol-3-O--glucuronide Na+ salt | S051 | 1 | 155 | 218 |
| Testosterone and metabolites | 5α-Androstane-3β,17β-diol | D635 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d3-5α-Androstane-3β,17β-diol | D594 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 5β-Androstane-3α,17β-diol | D636 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | 5-Androstane-3α,17β-diol-17--glucuronic acid | S005 | Exhausted | N/A | N/A |
| Testosterone and metabolites | 5-Androstane-3α,17β-diol-3--glucuronic acid - **WADA** | S003b | 1 | 155 | 218 |
| Testosterone and metabolites | d5-5β-Androstane-3α,17β-diol | D580 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 5β-Androstane-3β,17-diol | D637 | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | d5-5β-Androstane-3β,17-diol | S014 | 1 (ampoule) | 121 | 169 |
| Testosterone and metabolites | 5α-Androstane-3β,17β-diol-3--glucuronic acid | D678b | 1 (ampoule) | 155 | 218 |
| Testosterone and metabolites | 5α-Androstane-3β-ol-17-one-3-glucuronide Na+ salt | S031 | 1 | 121 | 169 |
| Prohormones and metabolites | 19-d3-Androstendione (no longer available) | D645 | 1 (ampoule) | 207 | 290 |
| Prohormones and metabolites | Androstendione | M955 | 10 | 121 | 169 |
| Prohormones and metabolites | 1,4-Androstadiene-3,17-dione (Boldendione) | D878 | 1(ampoule) | 121 | 169 |
| Prohormones and metabolites | Dehydroepiandrosterone (DHEA) | D796b | 10 | 121 | 169 |
| Prohormones and metabolites | 6-Hydroxyandrosterone | D886b | 1 (ampoule) | 188 | 264 |
| Prohormones and metabolites | 7-Hydroxy DHEA - **WADA** | D865b | 1 (ampoule) | 121 | 169 |
| Prohormones and metabolites | 19-Norandrostendione (Estrendione) | D721 | 10 | 121 | 169 |
| **HORMONE ANTAGONISTS AND MODULATORS** |  |  |  |  |  |
| Aromatase inhibitors | Bis-(4-cyanophenyl)methanol (Letrazole metabolite)\* | D909c | 1 (ampoule) | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | Andarine | D1074 | 1 | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | Cardarine | D1077 | 1 | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | Ligandrol (LGD-4033) | D1073 | 1 | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | MK-677 | D1078 | 1 | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | Ostarine | D1075 | 5 | 121 | 169 |
| Selective Androgen Receptor Modulators (SARMs) | RAD 140 | D1076 | 1 | 121 | 169 |
| Selective Estrogen Receptor Modulators (SERMs) | 3-Hydroxy-4-methoxytamoxifen\* | D921 | 1 | 121 | 169 |
| Other anti-estrogenic substances | 4-Hydroxycyclofenil\* | D930 | 1 (ampoule) | 121 | 169 |
| Growth promotants and metabolites | Zearalenone | P1787b | 10 | 188 | 264 |
| Growth promotants and metabolites | -Zearalenol | P1795 | 5 | 275 | 385 |
| Growth promotants and metabolites | -Zearalenol | P1796 | 5 | 275 | 385 |
| Growth promotants and metabolites | -Zearalanol | P1801 | 5 | 121 | 169 |
| Growth promotants and metabolites | -Zearalanol | P1802 | 5 | 121 | 169 |
| Stimulants | Carphedon | D891b | 10 | 121 | 169 |
| Stimulants | Etilephrine hydrochloride | M880b | 10 | 121 | 169 |
| Stimulants | Propylhexedrine | M394 | 50 | 121 | 169 |
| Stimulants | Terbutaline sulfate | M647b | 20 | 121 | 169 |
| Stimulants | Crotethamide\* (currently not available) | M450 | 50 | 110 | 154 |
| Stimulants | Cropropamide\* (currently not available) | M451 | 25 | 110 | 154 |
| Stimulants | Cyclazadone**†** | D914 | 10 | 155 | 218 |
| Stimulants | Famprofazone | D893 | 20 | 121 | 169 |
| Stimulants | Fenbutrazate hydrochloride**†** | D915 | 1 (ampoule) | 155 | 218 |
| Stimulants | Fencamine**†** | D913 | 10 | 155 | 218 |
| Stimulants | Fenproporex hydrochloride | D500b | 25 | 121 | 169 |
| Stimulants | Fenethylline hydrochloride | D543b | 20 | 155 | 218 |
| Stimulants | Heptaminol hydrochloride\* | M299 | 50 | 121 | 169 |
| Stimulants | 6-Hydroxybromantan\* (currently not available) | D889 | 10 | N/A | N/A |
| Stimulants | Isometheptene mucate | D940 | 20 | 155 | 218 |
| Stimulants | Mefenorex hydrochloride | D283b | 50 | 121 | 169 |
| Stimulants | (±)-4-Methylamphetamine hydrochloride | D895b | 10 | 188 | 264 |
| Stimulants | dl-Norephedrine hydrochloride (Phenylpropanolamine) | M296 | 100 | 121 | 169 |
| Stimulants | (+)-Norpseudoephedrine hydrochloride (Cathine) | M297 | 50 | 121 | 169 |
| Stimulants | Ortetamine hydrochloride**†** | D912b | 10 | 228 | 319 |
| Stimulants | Oxilofrine hydrochloride | D892b | 5 | 121 | 169 |
| Stimulants | Salbutamol | M898c | 10 | 155 | 218 |
| Stimulants | d3-Salbutamol | D939b | 1 | 155 | 218 |
| Stimulants | Salmeterol hydroxynaphthoate (exhausted) | M904 | 50 | N/A | N/A |
| Stimulants | Selegiline hydrochloride | D822 | 50 | 155 | 218 |
| Synthetic cannabinoids | AM1220 1-[(1-Methylpiperidin-2-yl)methyl]-3-(1-naphthoyl)-indole | D982 | 20 | 121 | 169 |
| Synthetic cannabinoids | AM2201 [1-(5-Fluoropentyl)-3-(1-napthoyl)-indole] | D983 | 20 | 121 | 169 |
| Synthetic cannabinoids | JWH-018 [*N*-Pentyl-3-(1-naphthoyl)indole] | D955 | 20 | 155 | 218 |
| Synthetic cannabinoids | JWH-210 [*N*-Pentyl-3-(4-ethyl-1-naphthoyl)indole] | D984 | 5 | 121 | 169 |
| Synthetic cannabinoids | XLR-11 [1-(5-Fluoro-pentyl)-3-(2,2,3,3-tetramethylcyclopropoyl)indole] | D1000 | 25 | 121 | 169 |
| PDE-5 inhibitors | Tadalafil | D941 | 20 | 155 | 218 |

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| **Description** | **NMI reference** | **Unit of issue (mg)** | Domestic Cost (A$) (excl GST) | International  Cost (A$) |
| **SUPPLIED WITH THE MANUFACTURER’S CERTIFICATE OF ANALYSIS**  **(These materials have not been certified by NMI)** |  |  |  |  |
| Bupranolol hydrochloride (exhausted) | M558 | 20 | N/A | N/A |
| Dextromoramide tartrate (exhausted) | D529 | 50 | N/A | N/A |
| Dipipanone hydrochloride (exhausted) | M642 | 20 | N/A | N/A |
| Trimeperidine hydrochloride | M605 | 20 | 121 | 169 |

\*Production funded by the US Anti-Doping Agency.

†Production funded by the Australian Government through the Anti-Doping Research Program.

## 

### Restrictions on Issue

The steroid and steroid metabolite reference materials are generally available to WADA accredited laboratories. Laboratories which **do not have** WADA accreditation must provide documented evidence, signed by the company manager, that these materials will not be used for unethical purposes related to commercial human sports drug analysis and that they will not be provided to other laboratories who may be engaged in this analysis.

### NMI Reference Materials

Reference Materials (RMs) produced by NMI are NATA accredited to ISO 17034:2016(E) and prepared in accordance with our accreditation.

RMs have demonstrated homogeneity and stability and are supplied with:

* Product information sheet
* Safety Data Sheet (SDS)

### NMI Certified Reference Materials

Certified Reference Materials (CRMs) produced by NMI have established metrological traceability to the SI unit for mass (kg).

CRMs have certified purity values, stated as a mass fraction with associated uncertainty and are supplied with:

* Certificate of Analysis (CoA)

### Candidate materials

All care is taken in the storage and handling of these materials however they are not independently certified by NMI.

Individual unit issue size varies depending on the amount available and the difficulty of obtaining the replacement compound. They can be provided with the analytical information available.

### Ampouled Materials

For each ampouled reference material the product information sheet / certificate of analysis will state the mass of analyte dispensed into each ampoule.

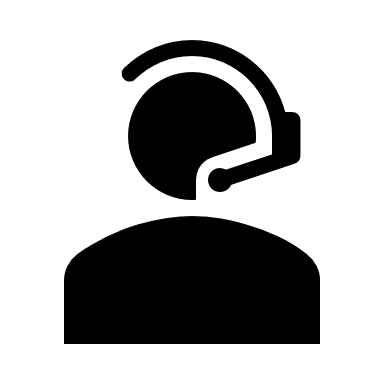
### GST charges (Australian customers only)

The prices quoted are EXCLUSIVE of Goods and Services Tax (GST). The current GST rate is 10%. Upon delivery of the requested reference materials NMI will issue valid tax invoices and, if required, adjustment notes as per the requirements of the GST legislation.

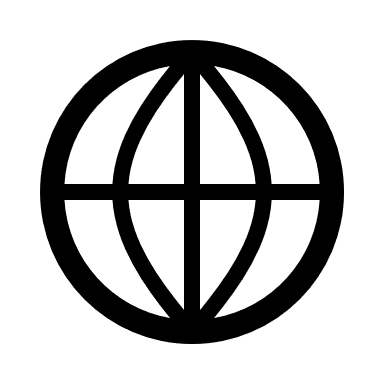
### Delivery Fee

Delivery and handling fees apply for all orders and vary with destination. Please check the applicable rates when ordering.

### For further information

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[www.measurement.gov.au/chemref](http://www.measurement.gov.au/chemref)

NMI reference materials available globally through our international partner:

LGC Standards

Web: [www.lgcstandards.com](http://www.lgcstandards.com)



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