

## 欧盟环境标准物质

本目录以欧盟委员会联合研究中心标准物质与测量研究院 ( The Institute for Reference Materials and Measurements ) 为核心研发的环境类标准物质 ( Certified Reference Materials ) , 样品基质涉及到水、大气、土壤、动植物 , 分析项目主要为金属元素、环境污染物( 如二恶英、呋喃、多环芳烃等 ) , 依据 ISO 导则 34 和 35 生产制备。

| 编号          | 描述  | 规格  |
|-------------|---|-----|
| C-BCR-142R  | 轻沙质土壤 -- 重金属元素 : 砷 , 镉 , 钴 , 铜 , 汞 , 锰 , 镍 , 铅 , 锌 Light sandy soil - Trace elements As,Cd,Co,Cu,Hg,Mn,Ni,Pb,Zn   | 40g |
| C-ERM-CC141 | 土壤--重金属元素 : 砷 , 镉 , 钴 , 铬 , 铜 , 汞 , 锰 , 镍 , 铅 , 锌 Loam soil - Trace elements As,Cd,Co,Cr,Cu,Hg,Mn,Ni,Pb,Zn  | 24g |
| C-BCR-143R  | 污泥处理过的土壤 -- 重金属元素 : 砷 , 镉 , 钴 , 铜 , 汞 , 锰 , 镍 , 铅 , 锌 ( Sewage sludge amended soil - trace elements As,Cd,Co,Cu,Hg,Mn,Ni,Pb,Zn )  | 40g |
| C-BCR-667   | 河口沉积泥沙 -- 重金属元 : 镉 , 溴 , 镉 , 铊 , 钴 , 铬 , 铔 , 铜 , 镉 , 钝 , 铅 , 铁 , 钇 , 何鲁 , 锰 , 钫 , 镍 , 铅 , 镍 , 铂 , 铑 , 硒 , 钫 , 钨 , 钻 , 钨 , 钇 , 镧 , 锌 ( Estuarine sediment - Trace elements Br,Cd,Ce,Co,Cr,Cs,Cu,Dy,Eu,Fe,Gd, Ho,La,Lu,Mn,Nd,Ni,Pb,Pr,Sb,Sc,Se,Sm,Ta,Tb,Th,Tm,U,Yb,Zn ) | 40g |
| C-ERM-CC690 | 石灰质土壤 -- 微量元素 : 铬 , 镉 , 钇 , 钫 , 铊 , 钇 , 银 , 钇 , 钨 , 镧 , 钇 , 镧 , 铥 ( Calcareous soil - Trace elements Ce,Dy,Gd,La,Nd,Sc,Sm,Tb,Th,Tm,U,Yb )   | 70g |
| C-BCR-277R  | 河口沉积泥沙 -- 微量元素 : 砷 , 镉 , 钴 , 铬 , 铜 , 汞 , 镍 , 锌 ( Estuarine sediment - Trace elements As,Cd,Co,Cr,Cu,Hg,Ni,Zn )  | 40g |
| C-BCR-280R  | 湖泊沉积泥沙 -- 微量元素 : 砷 , 镉 , 钴 , 铬 , 铜 , 汞 , 镍 , 锌 ( Lake sediment - Trace elements As,Cd,Co,Cr,Cu,Hg,Ni,Zn )   | 30g |
| C-BCR-320R  | 海峡沉积泥沙 -- 微量元素 : 砷 , 镉 , 钴 , 铬 , 铜 , 铁 , 汞 , 锰 , 镍 , 铅 , 钇 , 钇 , 钇 , 铊 , 铕 , 铕 , 钇 , 锌 ( Channel sediment - Trace elements As,Cd,Co,Cr,Cu,Fe,Hg,Mn, Ni,Pb,Sc,Th,Tl,U,V,Zn )   | 40g |
| C-BCR-145R  | 污水污泥 ( 混合 ) -- 微量元素 : 汞 , 镉 , 钴 , 铜 , 锰 , 镍 , 铅 , 锌 , 铬 , 铜 , 镍 , 铅 , 锌 ( Sewage sludge (mixed origin) - Trace elements Cd,Co,Cu,Hg,Mn, Ni,Pb,Zn,Cr,Cu,Ni,Pb,Zn )   | 40g |
| C-BCR-146R  | 污水污泥 ( 工业 ) -- 微量元素 : 镉 , 铜 , 镍 , 钴 , 汞 , 铅 , 铬 , 锰 , 锌 Sewage sludge (industrial origin) - Trace elements : Cd , Cu , Ni , Co , Hg , Pb , Cr , Mn , Zn   | 40g |
| C-BCR-597   | 污水污泥 -- 铬 Sewage sludge - Chromium  | 40g |
| C-ERM-CC580 | 入海河口沉积物 -- 汞和甲基汞 Estuarine sediment - Mercury and methylmercury : Total Hg , CH <sub>3</sub> Hg <sup>+</sup>  | 40g |
| C-BCR-038   | 煤炭扬尘 -- 微量元素 : 砷 , 铜 , 钠 , 镉 , 氟 , 铅 , 氯 , 铁 , 锌 , 钴 , 汞 , 铬 , 锰 , 镍 , 钇 , 钇 , 钇 Fly ash from pulverised coal - Trace elements : As , Cu , Na , Cd , F , Pb , Cl , Fe , Zn , Co , Hg , Cr , Mn , Ni , Th , V  | 5g  |



欧盟环境标准物质目录

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| C-BCR-612   | 地下水 - 溴化物 (高含量) : 溴 Ground water - Bromide (High level) : Br  | 4X25ml |
| C-BCR-609   | 地下水 -- 微量元素 (低含量) : 铅, 镉, 铬, 砷, 铜 Ground water - Trace elements,low level : Al,Cd,Pb,As,Cu  | 500ml  |
| C-BCR-610   | 地下水 -- 微量元素 (高含量) : 铅, 镉, 铬, 砷, 铜 Ground water - Trace elements,High level : Al,Cd,Pb,As,Cu   | 500ml  |
| C-ERM-CA616 | 地下水 -- 钙, 氯, 镁, 正磷酸盐, 钾, 钠, 电导率, pH值 (20°C) Ground water - Calcium, Chloride, Magnesium, Ortho-phosphate, Potassium, Sodium, Conductivity, pH (20°C)  | 95ml   |
| C-BCR-617   | 人工地下水 - 微量元素, 低含量碳酸盐 : 钙, 镁, 硝酸盐, 氯, 锰, 硫酸盐, 钾, 钠 Artificial ground water - Trace elements, low carbonate content : Ca,Mg,NO3,Cl,Mn,SO4,K,Na  | 75ml   |
| C-ERM-CA615 | 地下水 -- 砷, 镉, 铁, 汞, 锰, 镍, 铅 Ground water - Trace elements,As, Cd, Fe, Hg, Mn, Ni, Pb   | 95ml   |
| C-BCR-483   | 污泥处理过的土壤 -- 可提取态微量元素 EDTA-extractable/Acetic acid-extractable:镉,铬,铜,镍,铅,锌( Sewage sludge amended soil - Extractable trace elements:EDTA-extractable/Acetic acid-extractable:Cd, Cr, Cu, Ni, Pb, Zn )  | 70g    |
| C-BCR-484   | 污泥处理过的土壤 (红土) -- 可提取态微量元素 : 镉, 铜, 铅, 铬, 镍, 锌, 氯化钙可提取含量, 硝酸钠可提取含量, 硝酸铵可提取含量 Sewage sludge amended (terra rossa) soil - Extractable trace elements :Cd ,Cu ,Pb ,Cr ,Ni ,Zn ,the calcium chloride extractable content, the sodium nitrate extractable content , the ammonium nitrate extractable content | 70g    |
| C-BCR-700   | 有机营养土壤 -- 可提取态微量元素 EDTA-extractable/Acetic acid-extractable: 镉, 铬, 铜, 镍, 铅, 锌( Organic rich soil - Extractable trace elements: Cd, Cr, Cu, Ni, Pb, Zn )   | 40g    |
| C-BCR-684   | 河水沉积物 -- 磷 (遵循 5 步提取过程) NaOH-extractable P, HCl-extractable P, Inorganic P, Organic P, Conc.HCl-extract. P  | 35g    |
| C-BCR-701   | 沉积物 -- 萃取微量元素 : 镉, 铬, 铜, 镍, 铅, 锌 ( 3 步萃取-3 step extraction : Cd, Cr, Cu, Ni, Pb, Zn)  | 20g    |
| C-BCR-462   | 沿海沉积物 -- 有机锡化合物 Organotin compounds : Tributyltin (TBT), Dibutyltin (DBT)   | 25g    |
| C-BCR-646   | 淡水沉积物 -- 丁基和苯基 ( Freshwater sediment--Butyltin and phenyltin : TBT, DBT, MBT, TPhT, DPhT, MPhT )  | 40g    |
| C-ERM-CC580 | 入海河口沉积物 -- 汞和甲基汞 ( Estuarine sediment - Mercury and methylmercury )   | 40g    |
| C-BCR-605   | 城市灰尘 -- 三甲基铅 ( Urban dust - Trimethyllead )   | 15g    |
| C-BCR-545   | 玻璃纤维过滤器 - 铬 ( Glass fibre filter - Chromium (Welding dust loaded on a filter) )   | filter |
| C-ERM-CE477 | 贻贝组织-丁基锡化合物-Butyltin compounds-Tributyltin (TBT),Dibutyltin (DBT),Monobutyltin (MBT)  | 14 g   |
| C-BCR-463   | 鲔鱼-总汞和甲基汞-Tuna fish--Total mercury and methyl-mercury   | 15 g   |
| C-ERM-CE464 | 鲔鱼-总汞和甲基汞-Total mercury and methyl-mercury  | 15 g   |
| C-BCR-627   | 金枪鱼组织-砷甜菜碱,二甲基胂酸,总砷-Arsenobetaine,Dimethylarsinic acid,total As   | 10 g   |
| C-ERM-BC211 | 大米--总砷, 二甲基胂酸, 亚砷酸盐和砷酸盐总和 Rice - As species ( Total arsenic, As species )   | 10 g   |

欧盟环境标准物质目录

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|             | Dimethylarsinic acid, The sum of arsenite and arsenate )   |      |
| C-ERM-CZ100 | 细粉尘 ( 如 PM10 ) --多环芳烃 Fine dust (PM10-like) - PAHs   | 0.5g |
| C-BCR-524   | 污染的工业土壤 -- 多环芳烃 Contaminated industrial soil - PAHs : Pyrene , Benzo(a)anthracene , Benzo(a)pyrene , Benzo(e)pyrene , Benzo(b)fluoranthene , Benzo(k)fluoranthene , Benzo(b)naphtho(2,1-d)thiophene , Indeno(1,2,3-cd)pyrene , Pentachlorophenol   | 40g  |
| C-BCR-535   | 淡水港沉积物 -- 多环芳烃 Freshwater harbour sediment - PAHs : Pyrene , Benzo(a)anthracene , Benzo(a)pyrene , Benzo(e)pyrene , Benzo(b)fluoranthene , Benzo(k)fluoranthene , Indeno(1,2,3-cd)pyrene   | 40g  |
| C-BCR-481   | 工业土壤 -- 多氯联苯 Industrial soil - PCBs : PCB 101 , PCB 118 , PCB 128 , PCB 149 , PCB 153 , PCB 156 , PCB 170 , PCB 180  | 25g  |
| C-BCR-536   | 淡水港沉积物 -- 多氯联苯 Freshwater harbour sediment - PCBs : PCB 28 , PCB 52 , PCB 101 , PCB 105 , PCB 128 , PCB 138 , PCB 149 , PCB 153 , PCB 156 , PCB 163 , PCB 170 , PCB 180  | 40g  |
| C-BCR-529   | 砂质工业土壤 -- 二恶因类化合物和多氯代二苯并呋喃 Industrial sandy soil - PCDDs and PCDFs : 1,2,3-Trichlorobenzene ; 3,4-Dichlorophenol ; 2,4,5-Trichlorophenol ; Pentachlorophenol ; 2,3,7,8-TCDD ; 1,2,3,7,8-PeCDD ; 1,2,3,4,7,8-HxCDD ; 1,2,3,6,7,8-HxCDD ; 1,2,3,7,8,9-HxCDD ; 2,3,7,8-TCDF ; 1,2,3,7,8-PeCDF ; 2,3,4,7,8-PeCDF ; 1,2,3,4,7,8-HxCDF ; 1,2,3,6,7,8-HxCDF ; 1,2,3,7,8,9-HxCDF ; 2,3,4,6,7,8-HxCDF   | 50g  |
| C-BCR-530   | 粘性工业土壤 -- 二恶因和呋喃 Industrial clay soil - Dioxins and furans   | 50g  |
| C-BCR-677   | 污水污泥 -- 二恶因类化合物/多氯代二苯并呋喃 Sewage sludge - PCDD/PCDFs  | 40g  |
| C-BCR-490   | 飞灰 -- 二恶因和呋喃 Fly ash - Dioxins and furans--2,3,7,8-TCDD; 1,2,3,7,8-PeCDD; 1,2,3,4,7,8-HxCDD; 1,2,3,6,7,8-HxCDD; 1,2,3,7,8,9-HxCDD; 2,3,7,8-TCDF; 1,2,3,7,8-PeCDF; 2,3,4,7,8-PeCDF; 1,2,3,4,7,8-HxCDF; 1,2,3,6,7,8-HxCDF; 1,2,3,7,8,9-HxCDF; 2,3,4,6,7,8-HxCDF  | 30g  |
| C-BCR-615   | 飞灰 -- 二恶因和呋喃 Fly ash - Dioxins and furans--2,3,7,8-T4CDD (D48); 1,2,3,7,8-P5CDD (D54); 1,2,3,4,7,8-H6CDD (D66); 1,2,3,6,7,8-H6CDD (D67); 1,2,3,7,8,9-H6CDD (D70); 1,2,3,4,6,7,8-H7CDD (D73); O8CDD (D75); 2,3,7,8-T4CDF (F83); 1,2,3,7,8-P5CDF (F94); 2,3,4,7,8-P5CDF (F114); 1,2,3,4,7,8-H6CDF (F118); 1,2,3,6,7,8-H6CDF (F121); 1,2,3,7,8,9-H6CDF (F124); 2,3,4,6,7,8-H6CDF (F130); 1,2,3,4,6,7,8-H7CDF (F131); 1,2,3,4,7,8,9-H7CDF (F134); O8CDF (F135) | 50g  |
| C-BCR-683   | 榉木叶 -- 五氯酚和多环芳烃 Beech wood - PCP and PAHs: Pentachlorophenol, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(e)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene   | 60g  |
| C-BCR-682   | 贻贝组织-多氯联苯-PCBs: PCB 28, PCB 52, PCB 118, PCB 138, PCB 149, PCB 153, PCB 170, PCB 180   | 70 g |
| C-BCR-718   | 鲜鲱鱼罐头-多氯联苯-PCBs: PCB 28, PCB 52, PCB 101, PCB 105, PCB 118, PCB 128, PCB 138, PCB 149, PCB 153, PCB 156, PCB 170, PCB 180  | 70 g |
| C-BCR-719   | 鲜鲱鱼罐头-多氯联苯-PCBs: PCB 77, PCB 81, PCB 126, PCB 169  | 70 g |
| C-BCR-420   | 废矿物油--多氯联苯 (低含量) Waste mineral oil - PCBs (low level): PCB 28, PCB 101, PCB 118, PCB 153, PCB 180  | 7.5g |

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| C-BCR-449   | 废矿物油--多氯联苯 (高含量) Waste mineral oil - PCBs (high level): PCB 28, PCB 52, PCB 101, PCB 105, PCB 118, PCB 128, PCB 153, PCB 156, PCB 170, PCB 180  | 50g    |
| C-IRMM443-1 | EUROSOIL 1 (经空气干燥的, 小于 2mm 的土壤颗粒) : K <sub>f</sub> of atrazine ; 1/n of atrazine ; K <sub>f</sub> of 2,4-D ; 1/n of 2,4-D ; pH in water ; pH in 0.01 M CaCl <sub>2</sub>  | 200g   |
| C-IRMM443-2 | EUROSOIL 2 (经空气干燥的, 小于 2mm 的土壤颗粒) : 1/n of 2,4-D;1/n of atrazine;1/n of lindane;K <sub>f</sub> of 2,4-D;K <sub>f</sub> of atrazine;K <sub>f</sub> of lindane;pH in 0.01M CaCl <sub>2</sub> ;pH in water   | 200g   |
| C-IRMM443-3 | EUROSOIL 3 (经空气干燥的, 小于 2mm 的土壤颗粒) : 1/n of 2,4-D;1/n of atrazine;K <sub>f</sub> of 2,4-D;K <sub>f</sub> of atrazine;pH in 0.01M CaCl <sub>2</sub> ;pH in water  | 200g   |
| C-IRMM443-4 | EUROSOIL 4 (经空气干燥的, 小于 2mm 的土壤颗粒) : 1/n of 2,4-D;1/n of atrazine;1/n of lindane;K <sub>f</sub> of 2,4-D;K <sub>f</sub> of atrazine;K <sub>f</sub> of lindane;pH in 0.01M CaCl <sub>2</sub> ;pH in water   | 200g   |
| C-IRMM443-5 | EUROSOIL 5 (经空气干燥的, 小于 2mm 的土壤颗粒) : 1/n of 2,4-D;1/n of atrazine;K <sub>f</sub> of 2,4-D;K <sub>f</sub> of atrazine;pH in 0.01M CaCl <sub>2</sub> ;pH in water  | 200g   |
| C-IRMM443-7 | EUROSOIL 7 (经空气干燥的, 小于 2mm 的土壤颗粒) : 1/n of 2,4-D;1/n of atrazine;K <sub>f</sub> of 2,4-D;K <sub>f</sub> of atrazine;pH in 0.01M CaCl <sub>2</sub> ;pH in water  | 200g   |
| NAMI(1)/A-3 | 纤维素酯膜过滤器(空气滤膜, 可以过滤 23 种金属元素) - : 铝, 砷, 钡, 镉, 镍, 钴, 铬, 铜, 铁, 镁, 锰, 钼, 镍, 铅, 钯, 铑, 锡, 锶, 钛, 钆, 钇, 钨, 锌, 钨 Cellulose ester membrane filter - Metals : Al, As, Ba, Be, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Pt, Sb, Sn, Sr, Ti, Tl, V, Zn, Zr   | filter |
| NAMI(1)/B-4 | 纤维素酯膜过滤器(空气滤膜, 可以过滤 23 种金属元素) - 金属 : 铝, 砷, 钡, 镉, 镍, 钴, 铬, 铜, 铁, 镁, 锰, 钼, 镍, 铅, 钯, 铑, 锡, 锶, 钛, 钆, 钇, 钨, 锌, 钨 Cellulose ester membrane filter - Metals : Al, As, Ba, Be, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Pt, Sb, Sn, Sr, Ti, V, W, Zn, Zr | filter |