

INVENTORY OF EXISTING TUNGSTEN SUBSTANCES

✓: Listed ✗: Not Listed

Substance	EINECS No.	CAS No.	Australia (AICS)	Canada (DSL)	China (IECS)	EU (ESIS)	REACH	Japan (ENCS)	Taiwan	USA	Korea	Philippines	New Zealand
Tungsten (W)	231-143-9	7440-33-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tungsten Carbide (WC)	235-123-0	12070-12-1 11130-73-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ditungsten Carbide (W ₂ C)	235-124-6 915-093-1	12070-13-2	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗
Tritungsten carbide (W ₃ C)	N/A	12012-18-9	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten carbide (W ₂ C ₃)	N/A	12543-81-6	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten carbide (WC ₃)	N/A	95142-05-5	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₂₅ O ₇₃)	N/A	60383-51-9	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten carbide (W ₂₃ C ₆)	N/A	12079-48-0	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₂₀ O ₅₉)	N/A	12202-40-3	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₁₈ O ₄₉)	N/A	12037-57-9	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₁₇ O ₄₇)	N/A	12777-15-0	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₁₂ O ₃₅)	N/A	80302-45-0	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₁₀ O ₂₉)	N/A	12037-58-0	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₈ O ₂₃)	N/A	80302-43-8	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₆ O ₁₇)	N/A	77537-40-7	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₅ O ₁₄)	N/A	12440-31-2	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tetratungsten undecaoxide (W ₄ O ₁₁)	235-718-5	12608-26-3	✗	✓	✗	✓	✗	✓	✓	✓	✓	✗	✗
Tungsten oxide (W ₃ O ₈)	N/A	12165-25-2	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Ditungsten pentaoxide (W ₂ O ₅)	234-854-2	12036-84-9	✗	✓	✗	✓	✗	✓	✓	✓	✓	✗	✗
Tungsten oxide (W ₂ O ₃)	N/A	12259-68-6	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten trioxide (WO ₃)	215-231-4	1314-35-8 11105-11-6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tungsten blue oxide (WO _{3-x})	254-413-8	39318-18-8	✗	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗
Tungsten dioxide (WO ₂)	234-842-7	12036-22-5	✗	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗
Tungsten oxide (W ₃ O)	N/A	39368-90-6	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (W ₂ O)	N/A	12439-75-7	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungsten oxide (WO)	N/A	12035-99-3	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Tungstic Acid (H ₂ WO ₄)	231-975-2	7783-03-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
Ammonium tungsten oxide ((NH ₄) ₂ W ₂ O ₇ , (NH ₄) ₂ WO ₄)	N/A	57665-60-8 15855-70-6	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗
Diammonium tetratungsten tridecaoxide (H ₄ N.1/2O ₁₃ W ₄)	235-638-0	12398-61-7	✗	✓	✗	✓	✗	✓	✓	✓	✗	✗	✗
Ammonium metatungstate (H ₄ N.1/6H ₂ O ₄₀ W ₁₂)	234-733-4	12028-48-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗

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Ammonium paratungstate (H ₄ N ₁ /10H ₂ O ₄₂ W ₁₂)	234-364-9	11120-25-5 12208-54-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	x	x
Ammonium tungsten oxide ((NH ₄) ₂ W ₁₂ O ₃₇)	N/A	82391-74-0 107763-82-6	x	x	x	x	x	✓	x	x	x	x	x
Ammonium tungstate (H ₄ N ₁ /6O ₂₄ W ₇)	234-732-9	12028-06-7 11140-77-5	x	x	x	✓	x	✓	✓	x	x	x	x
Sodium tungstate (Na ₂ WO ₄ , NaW(OH)O ₃)	236-743-4	13472-45-2 10213-10-2 11120-01-7 98499-43-5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sodium tungsten oxide (Na ₂ WO ₃ , Na ₂ W ₂ O ₇ , Na ₃ W ₄ O ₁₂ , NaW ₂ O ₆ , Na ₂ W ₄ O ₁₃ , Na ₂ W ₃ O ₁₀ , Na ₂ W ₆ O ₁₉ , Na ₃ WO ₄ , Na ₄ WO ₅ , Na ₆ WO ₆ , Na ₆ W ₇ O ₂₄ , Na ₁₀ W ₁₂ (OH) ₂ O ₄₀)	N/A	12209-99-3 13721-35-2 12502-94-2 12503-04-7 12326-03-3 12339-25-2 15070-38-9 12411-58-4 19402-40-5 19402-41-6 51682-45-2 76050-06-1 12059-48-2	x	x	x	x	x	✓	x	x	x	x	x
Tungsten boride	235-731-6	12627-39-3	x	x	x	✓	x	✓	x	x	✓	x	x
Tungsten boride (WB)	234-498-8	12007-09-9 12007-10-2	✓	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten boride (WB ₂)	235-445-1	12228-69-2	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten boride (WB ₄)	N/A	12045-94-2	x	x	x		x	✓				x	x
Ditungsten pentaboride (W ₂ B ₅)	234-524-8	12007-98-6	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten boride (WB ₁₂)	N/A	12046-89-8	x	x	x	x	x	✓	x	x	x	x	x
Tungsten dichloride (WCl ₂)	N/A	13470-12-7	x	x	x	x	x	✓	x	x	x	x	x
Tungsten tetrachloride (WCl ₄)	N/A	13470-13-8	x	x	x	x	x	✓	✓	x	x	x	x
Tungsten pentachloride (WCl ₅)	N/A	13470-14-9	x	x	x	x	x	✓	x	x	x	x	x
Tungsten hexachloride (WCl ₆)	236-293-9	13283-01-7	✓	✓	✓	✓	x	✓	✓	✓	✓	x	✓
Tungsten dichloride dioxide (Cl ₂ O ₂ W)	236-862-1	13520-76-8	x	x	x	✓	x	✓	x	x	✓	x	x
Tungsten tetrachloride oxide (Cl ₄ OW)	236-863-7	13520-78-0	x	x	x	✓	x	✓	✓	x	✓	x	x
Tungsten Carbonyl (W(CO) ₆)	237-880-2	14040-11-0	✓	✓	✓	✓	x	✓	✓	x	x	x	✓

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Tungsten sulfide	235-734-2	12627-71-3	x			✓	x	✓	x	x	✓	x	x
Tungsten disulfide (WS ₂)	235-243-3	12138-09-9	✓	✓	✓	✓	x	✓	✓	✓	✓	x	x
Tungsten trisulfide (WS ₃)	N/A	12125-19-8	x	x	x	x	x	✓	x	x	x	x	x
Tungsten sulfide (W ₃ S ₄)	N/A	55352-68-6	x	x	x	x	x	✓	x	x	x	x	x
Sodium metatungstate (H ₂ O ₄₀ W ₁₂ .6Na)	412-770-9	12141-67-2	✓	✓	x	✓	x	✓	✓	✓	x	x	✓
Calcium tungstate (CaWO ₄)	232-219-4	7790-75-2	✓	✓	x	✓	x	✓	✓	✓	✓	x	✓
Calcium tungstate oxide (Ca ₃ WO ₆)	N/A	12789-67-2 14835-95-1	x	x	x	x	x	✓	x	x	x	x	x
Decaammonium tungstate tetrahydrate (H ₄ N.1/10H ₂ O ₄₂ W ₁₂ .2/5H ₂ O)	N/A	1311-93-9	✓	x	x	x	x	✓	✓	x	x	x	x
Tungsten fluoride (WF)	N/A	51621-16-0	x	x	x	x	x	✓	x	x	x	x	x
Tungsten fluoride (WF ₂)	N/A	33963-15-4	x	x	x	x	x	✓	x	x	x	x	x
Tungsten fluoride (WF ₃)	N/A	51621-17-1	x	x	x	x	x	✓	x	x	x	x	x
Tungsten tetrafluoride (WF ₄)	N/A	12673-95-9 13766-47-7	x	x	x	x	x	✓	x	x	x	x	x
Tungsten pentafluoride (WF ₅)	N/A	19357-83-6	x	x	x	x	x	✓	x	x	x	x	x
Tungsten hexafluoride (WF ₆)	232-029-1	7783-82-6	x	✓	✓	✓	x	✓	✓	✓	✓	✓	x
Potassium tungstate (K ₂ WO ₄)	232-215-2	7790-60-5 37349-36-3	x	✓	✓	✓	x	✓	✓	✓	x	x	x
Potassium tungsten oxide (K ₂ W ₄ O ₁₃ , K ₆ W ₁₂ (OH) ₂ O ₃₈)	N/A	12311-19-2 12141-66-1	x	x	x	x	x	✓	x	x	x	x	x
Potassium tungsten oxide (K ₂ W ₂ O ₇)	N/A	15593-45-0 15571-93-4	x	x	x	x	x	✓	x	x	x	x	x
Cadmium tungstate (CdWO ₄)	232-226-2	7790-85-4	x	✓	x	✓	x	✓	x	✓	✓	x	x
Lead tungstate (PbWO ₄)	231-849-7	7759-01-5	x	✓	x	✓	x	✓	x	✓	✓	x	x
Lead tungsten oxide	235-792-9	12737-98-3	x	x	x	x	x	✓	x	x	✓	x	x
Tritungsten diyttrium dodecaoxide (W ₃ O ₁₂ Y ₂)	234-087-3	10527-41-0	x	x	x	✓	x	✓	x	x	✓	x	x
Tungsten nitride (WN)	N/A	12058-38-7	x	✓	x	x	x	✓	x	✓	✓	x	x
Ditungsten nitride (W ₂ N)	234-792-6	12033-72-6	x	✓	x	✓	x	✓	x	✓	✓	x	x
Tungsten nitride	253-484-2	37359-53-8	x	x	x	x	x	✓	✓	x	x	x	x
Tungsten phosphide (PW, WP ₂)	234-864-7	12037-70-6 12037-78-4	x	✓	x	✓	x	✓	x	✓	x	x	x
Tungsten hydroxide oxide phosphate(H ₃ PO ₄ ?12(WO ₃)?H ₂ O)	235-087-6	12067-99-1	x	✓	x	✓	x	✓	✓	✓	✓	✓	✓

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Tungsten disilicidide (WSi ₂)	234-909-0	12039-88-2	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten trisilicidide (W ₃ Si ₃)	234-912-7	12039-95-1	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten diselenide (WSe ₂)	235-078-7	12067-46-8	x	✓	x	✓	x	✓	x	✓	x	x	x
Tungsten ditelluride (WTe ₂)	235-086-0	12067-76-4	x	✓	x	✓	x	✓	x	✓	✓	x	x
Strontium tungstate (SrWO ₄)	236-617-9	13451-05-3	x	✓	x	✓	x	✓	x	✓	x	x	x
Cerium tungsten oxide (Ce ₂ W ₃ O ₁₂)	236-639-9	13454-74-5	x	✓	x	✓	x	✓	x	✓	✓	x	x
Silver tungstate (Ag ₂ WO ₄)	236-708-3	13465-93-5	x	x	x	✓	x	✓	x	x	✓	✓	x
Tungsten dibromide (WBr ₂)	N/A	13470-10-5	x	x	x	✓	x	✓	x	x	x	x	x
Tungsten pentabromide (WBr ₅)	N/A	13470-11-6	x	x	x	✓	x	✓	x	x	x	x	x
Tungsten iodide (WI ₂)	N/A	13470-17-2	x	x	x	x	x	✓	x	x	x	x	x
Didysprosium tritungsten dodecaoxide (Dy ₂ O ₁₂ W ₃)	236-929-5	13550-52-2	x	x	x	✓	x	✓	x	x	x	x	x
Lithium tungsten oxide (Li ₂ WO ₄)	236-978-2	13568-45-1	x	✓	x	✓	x	✓	✓	✓	x	x	x
Dilutetium tritungsten dodecaoxide (Lu ₂ O ₁₂ W ₃)	236-978-2	13568-59-7	x	x	x	✓	x	✓	x	x	x	x	x
Magnesium tungstate (MgWO ₄)	236-999-7	13573-11-0	x	✓	x	✓	x	✓	✓	✓	x	x	x
Magnesium tungsten oxide	N/A	61331-76-8	x	✓	x	x	x	✓	x	✓	✓	x	x
Cesium tungstate (Cs ₂ WO ₄)	237-019-0	13587-19-4	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Cesium tungsten oxide	N/A	52350-17-1	x	✓	x	x	x	✓	✓	✓	✓	x	x
Copper tungstate (CuWO ₄)	237-022-7	13587-35-4	x	✓	x	✓	x	✓	✓	✓	x	x	x
Bismuth tungsten oxide (Bi ₂ W ₃ O ₁₂)	237-033-7	13595-87-4	x	✓	x	✓	x	✓	x	✓	✓	x	x
Dirubidium tungstate (Rb ₂ WO ₄)	237-049-4	13597-52-9	x	✓	x	✓	x	✓	x	✓	✓	x	x
Discandium tritungsten dodecaoxide (Sc ₂ W ₃ O ₁₂)	237-227-1	13701-71-8	x	x	x	✓	x	✓	x	x	✓	x	x
Disamarium tritungsten dodecaoxide (Sm ₂ W ₃ O ₁₂)	237-229-2	13701-73-0	x	x	x	✓	x	✓	x	x	✓	x	x
Diterbium tritungsten dodecaoxide (Tb ₂ W ₃ O ₁₂)	237-230-8	13701-74-1	x	x	x	✓	x	✓	x	x	x	x	x
Iron tungstate (FeWO ₄)	237-622-9	13870-24-1	x	✓	x	✓	x	✓	x	✓	✓	x	x
Dilanthanum tritungsten dodecaoxide (La ₂ W ₃ O ₁₂)	237-718-0	13939-41-8	x	x	x	✓	x	✓	x	x	✓	x	x
Dineodymium tritungsten dodecaoxide (Nd ₂ W ₃ O ₁₂)	237-828-9	14014-27-8	x	x	x	✓	x	✓	x	x	x	x	x
Hexacarbonyltungsten (C ₆ WO ₆)	237-880-2	14040-11-0	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Manganese tungstate (MnWO ₄)	N/A	14177-46-9	x	✓	x	✓	x	✓	x	✓	✓	x	x
Nickel tungsten oxide (NiWO ₄)	238-032-4	14177-51-6	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Aluminum tungsten oxide (Al ₂ W ₃ O ₁₂)	239-184-4	15123-82-7	x	✓	x	✓	x	✓	✓	✓	✓	x	x
Tungsten zirconium oxide (ZrW ₂ O ₈)	240-876-3	16853-74-0	x	✓	x	✓	x	✓	x	✓	✓	x	x

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Bismuth tungsten oxide	253-406-7	37220-39-6	x	x	x	✓	x	✓	x	x	✓	x	x
Chromium tungsten oxide	254-462-5	39455-56-6	x	x	x	✓	x	✓	x	x	✓	x	x
Cesium tungsten oxide	N/A	52350-17-1	x	✓	x	x	x	✓	✓	x	x	x	x
Tungstosilicic acid (H.1/4O ₄₀ SiW ₁₂)	234-719-8	12027-38-2	✓	✓	x	✓	x	✓	x	✓	x	x	x
Cobalt tungsten oxide (CoWO ₄)	233-254-8	10101-58-3	x	✓	x	✓	x	✓	✓	✓	x	x	x
Zinc tungstate (ZnWO ₄)	237-053-6	13597-56-3	x	✓	x	✓	x	✓	x	✓	✓	x	x
Molybdenum tungstate (MoWO ₄)	N/A	71888-83-0	x	✓	x	x	x	x	x	✓	x	x	x
Dieuropium tritungsten dodecaoxide (Eu ₂ W ₃ O ₁₂)	239-190-7	15126-31-5	x	x	x	✓	x	✓	x	x	✓	x	x
Lanthanum tungsten oxide	253-491-0	37382-36-8	x	x	x	✓	x	x	x	x	✓	x	x
Titanium tungsten carbide	254-435-8	39377-63-4	x	✓	x	✓	x	x	x	x	✓	x	x
Barium tungstate (BaWO ₄)	232-114-3	7787-42-0	x	✓	x	✓	x	✓	x	✓	x	x	x

Data sources:

AUSTRALIA	http://www.nicnas.gov.au/regulation-and-compliance/aics/aics-search-page
CANADA	http://www.ec.gc.ca/lcpe-cepa/eng/substance/chemicals_polymers.cfm
CHINA	http://cciss.cirs-group.com/
EUROPEAN UNION	http://esis.jrc.ec.europa.eu/index.php?PGM=ein
REACH REGISTERED SUBSTANCES	http://echa.europa.eu/information-on-chemicals/registered-substances
JAPAN	http://www.safe.nite.go.jp/english/db.html
TAIWAN	http://csnn.cla.gov.tw/content/Substance_Query_Q.aspx
USA	http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html
KOREA	http://ncis.nier.go.kr/main/Main.jsp
PHILIPPINES	http://emb.gov.ph/internal/CasREgistry.aspx
NEW ZEALAND	http://www.epa.govt.nz/search-databases/Pages/site-results.aspx?k=New%20Zealand%20Inventory%20of%20Chemicals%20(NZIoC)