

禁止化學武器公約 貿易量大的列管化學品手冊

聯合國禁止化學武器公約 (CWC) 列管化學品中 49 項
貿易量大的乙、丙類化學品手冊

2017 版

貿易量大的列管化學品清單 (依 CWC 分類排序)
 Most Traded Scheduled Chemicals ordered by Schedule

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B04	129788-86-9	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,3,5-Triazine-2,4,6-triamine	1
2B04	170836-68-7	2931.90.40.80-6	3824.91.00.00-8	Mixture of (5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate (CAS RN 41203-81-0) and bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate (CAS RN 42595-45-9)	2
2B04	18755-43-6	2931.90.40.80-6	2931.32.00.00-2	Dimethyl propylphosphonate	3
2B04	294675-51-7	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560 TP)	4
2B04	3001-98-7	2931.90.40.80-6	2931.39.00.80-8	3,9-Dimethyl-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane 3,9-dioxide	5
2B04	363626-50-0	2931.90.40.80-6	3907.20.90.00-5	Bis(polyoxyethylene) methylphosphonate	6
2B04	41203-81-0	2931.90.40.80-6	2931.36.00.00-8	(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate	7
2B04	42595-45-9	2931.90.40.80-6	2931.37.00.00-7	Bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate	8
2B04	4708-04-7	2931.90.40.80-6	2931.39.00.80-8	Propylphosphonic dichloride	9
2B04	63747-58-0	2931.90.40.80-6	3911.90.90.00-4	Poly(1,3-phenylene methyl phosphonate)	10
2B04	663176-00-9	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560)	11
2B04	676-97-1	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic dichloride	12

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B04	68957-94-8	2931.90.40.80-6	2931.35.00.00-9	2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide	13
2B04	70715-06-9	2931.90.40.80-6	3824.99.99.90-3	Dimethylmethylphosphonate, polymer with oxirane and phosphorus oxide	14
2B04	7526-26-3	2931.90.40.80-6	2931.39.00.80-8	Diphenyl methylphosphonate	15
2B04	756-79-6	2931.90.40.80-6	2931.31.00.00-3	Dimethyl methylphosphonate	16
2B04	78-38-6	2931.90.40.80-6	2931.33.00.00-1	Diethyl ethylphosphonate	17
2B04	84402-58-4	2931.90.40.80-6	2931.38.00.00-6	Salt of methylphosphonic acid and (aminoiminomethyl)urea (1:1)	18
2B04	849-29-6	2931.90.40.80-6	2931.39.00.80-8	O-(3-chloropropyl) O-[4-nitro-3-(trifluoromethyl)phenyl] methylphosphonothionate	19
2B04	84962-98-1	2931.90.40.80-6	2931.34.00.00-0	Sodium 3-(trihydroxysilyl)propyl methylphosphonate	20
2B04	993-13-5	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic acid	21
2B04	99580-93-5	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,2-Ethanediamine	22
2B08	76-93-7	2918.19.90.10-5	2918.17.00.10-6	2,2-Diphenyl-2-hydroxyacetic acid	23
2B09	1619-34-7	2933.99.90.40-3	2933.99.90.40-3	Quinuclidine-3-ol	24
2B09	25333-42-0	2933.99.90.40-3	2933.99.90.40-3	R-(-)-3-Quinuclidinol	25
2B10	4261-68-1	2921.19.00.20-7	2921.14.00.00-6	2-(N,N-Diisopropylamino)ethylchloride hydrochloride	26
2B10	4584-46-7	2921.19.00.20-7	2921.12.00.10-6	2-(N,N-Dimethylamino)ethylchloride hydrochloride	27
2B10	869-24-9	2921.19.00.20-7	2921.13.00.00-7	2-(N,N-Diethylamino)ethylchloride hydrochloride	28
2B11	96-80-0	2922.19.00.19-9	2922.18.00.00-1	2-(N,N-Diisopropylamino)ethanol	29
2B12	100-38-9	2930.90.90.30-7	2930.60.00.00-8	2-(N,N-Diethylamino)ethanethiol	30

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B12	108-02-1	2930.90.90.30-7	2930.90.90.30-7	2-(N,N-Dimethylamino)ethanethiol	31
2B13	111-48-8	2930.90.90.40-5	2930.70.00.00-6	Bis(2-hydroxyethyl)sulfide (Thiodiglycol)	32
3A01	75-44-5	2812.10.90.10-1	2812.11.00.00-1	Carbonyl dichloride (phosgene)	33
3A02	506-77-4	2853.00.90.40-7	2853.10.00.00-2	Cyanogen chloride (chlorcyan)	34
3A03	74-90-8	2811.19.90.10-3	2811.12.00.00-1	Hydrogen cyanide (hydrocyanic acid)	35
3A04	76-06-2	2904.90.00.10-2	2904.91.00.00-3	Trichloronitromethane (Chloropicrin)	36
3B05	10025-87-3	2812.10.90.30-7	2812.12.00.00-0	Phosphorus oxychloride	37
3B06	7719-12-2	2812.10.10.00-0	2812.13.00.00-9	Phosphorus trichloride	38
3B07	10026-13-8	2812.10.20.00-8	2812.14.00.00-8	Phosphorus pentachloride	39
3B08	121-45-9	2920.90.49.10-5	2920.23.00.00-6	Trimethyl phosphite	40
3B09	122-52-1	2920.90.49.20-3	2920.24.00.00-5	Triethyl phosphite	41
3B10	868-85-9	2920.90.49.30-1	2920.21.00.00-8	Dimethyl phosphite	42
3B11	762-04-9	2920.90.49.40-9	2920.22.00.00-7	Diethyl phosphite	43
3B12	10025-67-9	2812.10.90.40-5	2812.15.00.00-7	Sulfur monochloride	44
3B13	10545-99-0	2812.10.90.50-2	2812.16.00.00-6	Sulfur dichloride	45
3B14	7719-09-7	2812.10.90.60-0	2812.17.00.00-5	Thionyl chloride	46
3B15	139-87-7	2922.19.00.20-6	2922.17.00.20-8	Ethyldiethanolamine	47
3B16	105-59-9	2922.19.00.30-4	2922.17.00.10-0	Methyldiethanolamine	48
3B17	102-71-6	2922.13.00.10-4	2922.15.00.00-4	Triethanolamine	49

貿易量大的列管化學品清單 (依 CAS 登錄碼排序)

Most Traded Scheduled Chemicals ordered by CAS RN

CAS RN	Schedule	CCC Code 2016	CCC Code 2017	Chemical Name	Page
10025-67-9	3B12	2812.10.90.40-5	2812.15.00.00-7	Sulfur monochloride	44
10025-87-3	3B05	2812.10.90.30-7	2812.12.00.00-0	Phosphorus oxychloride	37
10026-13-8	3B07	2812.10.20.00-8	2812.14.00.00-8	Phosphorus pentachloride	39
100-38-9	2B12	2930.90.90.30-7	2930.60.00.00-8	2-(N,N-Diethylamino)ethanethiol	30
102-71-6	3B17	2922.13.00.10-4	2922.15.00.00-4	Triethanolamine	49
10545-99-0	3B13	2812.10.90.50-2	2812.16.00.00-6	Sulfur dichloride	45
105-59-9	3B16	2922.19.00.30-4	2922.17.00.10-0	Methyldiethanolamine	48
108-02-1	2B12	2930.90.90.30-7	2930.90.90.30-7	2-(N,N-Dimethylamino)ethanethiol	31
111-48-8	2B13	2930.90.90.40-5	2930.70.00.00-6	Bis(2-hydroxyethyl)sulfide (Thiodiglycol)	32
121-45-9	3B08	2920.90.49.10-5	2920.23.00.00-6	Trimethyl phosphite	40
122-52-1	3B09	2920.90.49.20-3	2920.24.00.00-5	Triethyl phosphite	41
129788-86-9	2B04	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,3,5-Triazine-2,4,6-triamine	1
139-87-7	3B15	2922.19.00.20-6	2922.17.00.20-8	Ethyldiethanolamine	47
1619-34-7	2B09	2933.99.90.40-3	2933.99.90.40-3	Quinuclidine-3-ol	24
170836-68-7	2B04	2931.90.40.80-6	3824.91.00.00-8	Mixture of (5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate (CAS RN 41203-81-0) and bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl]methylphosphonate (CAS RN 42595-45-9)	2

CAS RN	Schedule	CCC Code 2016	CCC Code 2017	Chemical Name	Page
18755-43-6	2B04	2931.90.40.80-6	2931.32.00.00-2	Dimethyl propylphosphonate	3
25333-42-0	2B09	2933.99.90.40-3	2933.99.90.40-3	R-(-)-3-Quinuclidinol	25
294675-51-7	2B04	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560 TP)	4
3001-98-7	2B04	2931.90.40.80-6	2931.39.00.80-8	3,9-Dimethyl-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane 3,9-dioxide	5
363626-50-0	2B04	2931.90.40.80-6	3907.20.90.00-5	Bis(polyoxyethylene) methylphosphonate	6
41203-81-0	2B04	2931.90.40.80-6	2931.36.00.00-8	(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl phosphonate	7
42595-45-9	2B04	2931.90.40.80-6	2931.37.00.00-7	Bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate	8
4261-68-1	2B10	2921.19.00.20-7	2921.14.00.00-6	2-(N,N-Diisopropylamino)ethylchloride hydrochloride	26
4584-46-7	2B10	2921.19.00.20-7	2921.12.00.10-6	2-(N,N-Dimethylamino)ethylchloride hydrochloride	27
4708-04-7	2B04	2931.90.40.80-6	2931.39.00.80-8	Propylphosphonic dichloride	9
506-77-4	3A02	2853.00.90.40-7	2853.10.00.00-2	Cyanogen chloride (chlorcyan)	34
63747-58-0	2B04	2931.90.40.80-6	3911.90.90.00-4	Poly(1,3-phenylene methyl phosphonate)	10
663176-00-9	2B04	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560)	11
676-97-1	2B04	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic dichloride	12
68957-94-8	2B04	2931.90.40.80-6	2931.35.00.00-9	2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide	13
70715-06-9	2B04	2931.90.40.80-6	3824.99.99.90-3	Dimethylmethylphosphonate, polymer with oxirane and phosphorus oxide	14
74-90-8	3A03	2811.19.90.10-3	2811.12.00.00-1	Hydrogen cyanide (hydrocyanic acid)	35

CAS RN	Schedule	CCC Code 2016	CCC Code 2017	Chemical Name	Page
7526-26-3	2B04	2931.90.40.80-6	2931.39.00.80-8	Diphenyl methylphosphonate	15
75-44-5	3A01	2812.10.90.10-1	2812.11.00.00-1	Carbonyl dichloride (phosgene)	33
756-79-6	2B04	2931.90.40.80-6	2931.31.00.00-3	Dimethyl methylphosphonate	16
76-06-2	3A04	2904.90.00.10-2	2904.91.00.00-3	Trichloronitromethane (Chloropicrin)	36
762-04-9	3B11	2920.90.49.40-9	2920.22.00.00-7	Diethyl phosphite	43
76-93-7	2B08	2918.19.90.10-5	2918.17.00.10-6	2,2-Diphenyl-2-hydroxyacetic acid	23
7719-09-7	3B14	2812.10.90.60-0	2812.17.00.00-5	Thionyl chloride	46
7719-12-2	3B06	2812.10.10.00-0	2812.13.00.00-9	Phosphorus trichloride	38
78-38-6	2B04	2931.90.40.80-6	2931.33.00.00-1	Diethyl ethylphosphonate	17
84402-58-4	2B04	2931.90.40.80-6	2931.38.00.00-6	Salt of methylphosphonic acid and (aminoiminomethyl)urea (1:1)	18
849-29-6	2B04	2931.90.40.80-6	2931.39.00.80-8	O-(3-chloropropyl) O-[4-nitro-3-(trifluoromethyl)phenyl] methylphosphonothionate	19
84962-98-1	2B04	2931.90.40.80-6	2931.34.00.00-0	Sodium 3-(trihydroxysilyl)propyl methylphosphonate	20
868-85-9	3B10	2920.90.49.30-1	2920.21.00.00-8	Dimethyl phosphite	42
869-24-9	2B10	2921.19.00.20-7	2921.13.00.00-7	2-(N,N-Diethylamino)ethylchloride hydrochloride	28
96-80-0	2B11	2922.19.00.19-9	2922.18.00.00-1	2-(N,N-Diisopropylamino)ethanol	29
993-13-5	2B04	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic acid	21
99580-93-5	2B04	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,2-Ethanediamine	22

名稱: **Product from the reaction of Methylphosphonic acid and 1,3,5-Triazine-2,4,6-triamine**

CAS RN: 129788-86-9

CWC 分類: 2B04

CCC Code: 2931.39.00.80-8

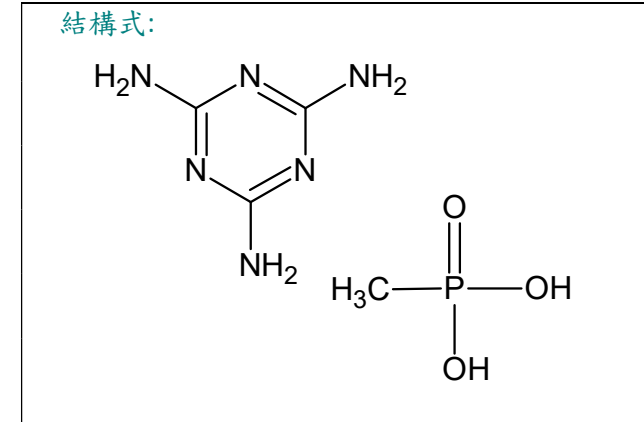
分子式: C₃H₆N₆.CH₅O₃P

CAS 名稱: Phosphonic acid, P-methyl-, compd. with 1,3,5-triazine-2,4,6-triamine (1:1)

IUPAC 名稱:

Synonyms:

結構式:



民生用途:

Flame retardant

名稱: Mixture of (5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl) methyl methyl methylphosphonate (CAS RN 41203-81-0) and Bis[(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl) methyl] methylphosphonate (CAS RN 42595-45-9)

CAS RN: 170836-68-7

CWC 分類: 2B04

CCC Code: 3824.91.00.00-8

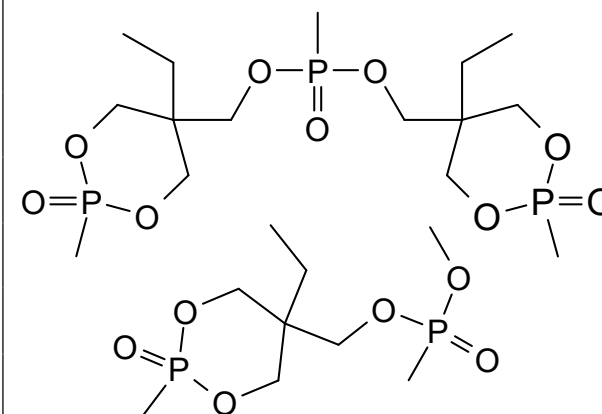
分子式: C₁₅H₃₁O₉P₃.C₉H₂₀O₆P₂

CAS 名稱: Mixture of (5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl) methyl methyl methylphosphonate (CAS RN 41203-81-0) and Bis[(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl) methyl] methylphosphonate (CAS RN 42595-45-9)

IUPAC 名稱:

Synonyms: Preflam
Pekoflam PES CN Liquid Concentrate
Mixture of CAS RN 41203-81-0 and CAS RN 42595-45-9
Flacavon
Antiblact
Antiblance U
Amgard CT
Amgard 1045
Aflammit

結構式:



民生用途:

Used as flame retardant for polyester fabrics and in textile coating applications.

名稱: **Dimethyl propylphosphonate**

CAS RN: 18755-43-6

CWC 分類: 2B04

CCC Code: 2931.32.00.00-2

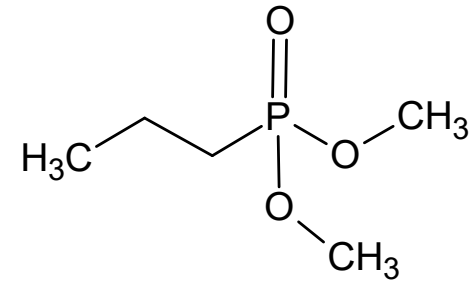
分子式: C₅H₁₃O₃P

CAS 名稱: Phosphonic acid, propyl-, dimethyl ester

IUPAC 名稱: Dimethyl propylphosphonate

Synonyms: 丙膦酸二甲酯

結構式:

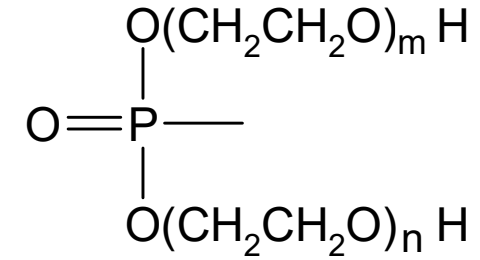


民生用途:

Flame retardant for rigid Polyurethane (PU) and Polyisocyanurate foams.

名稱:	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560 TP)
CAS RN:	294675-51-7
CWC 分類:	2B04
CCC Code:	3824.99.99.90-3
分子式:	Unspecified
CAS 名稱:	Phosphonic acid, methyl-, polyglycol ester
IUPAC 名稱:	
Synonyms:	Exolit OP 560 TP (Test Product)

結構式:



民生用途:

Flame retardant in the manufacture of Polyurethane (PU) foams.

名稱: **3,9-Dimethyl-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane 3,9-dioxide**

CAS RN: 3001-98-7

CWC 分類: 2B04

CCC Code: **2931.39.00.80-8**

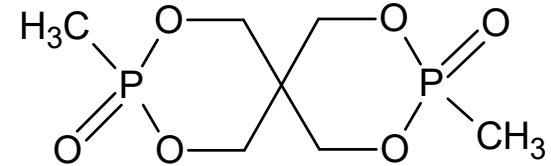
分子式: C7H14O6P2

CAS 名稱: 2,4,8,10-Tetraoxa-3,9-diphosphaspiro[5.5]undecane, 3,9-dimethyl-, 3,9-dioxide

IUPAC 名稱: 3,9-Dimethyl-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane 3,9-dioxide

Synonyms: Phosphonic acid, methyl-, cyclic neopentetetrayl ester
Phosphonic acid, methyl-, cyclic diester with pentaerythritol
Pentaerythritol spirobis(methylphosphonate)
Pentaerythritol bis(methanephosphonate)
3,9-Dimethyl-3,9-dioxa-2,4,8,10-tetraoxa-3,9-diphosphaspiro-5,5 undecane

結構式:



民生用途:

Used as a flame retardant and molding material

名稱: **Bis(polyoxyethylene) methylphosphonate**

CAS RN: 363626-50-0

CWC 分類: 2B04

CCC Code: 3907.20.90.00-5

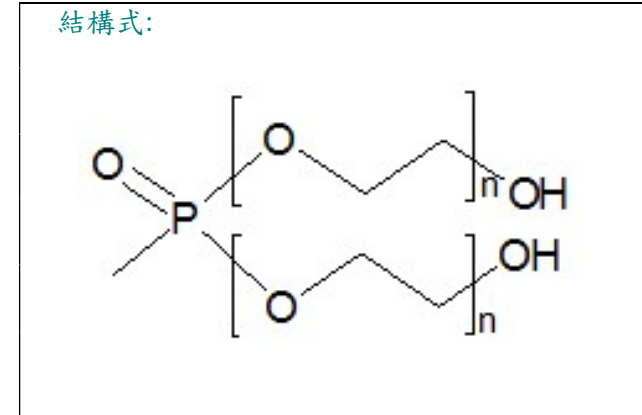
分子式: $(C_2H_4O)_n (C_2H_4O)_n CH_5O_3P$

CAS 名稱: Poly(oxy-1,2-ethanediyl), α, α' -(methylphosphinylidene)bis[ω -hydroxy-

IUPAC 名稱:

Synonyms: Polyethylene glycol methylphosphonate (2:1)

結構式:

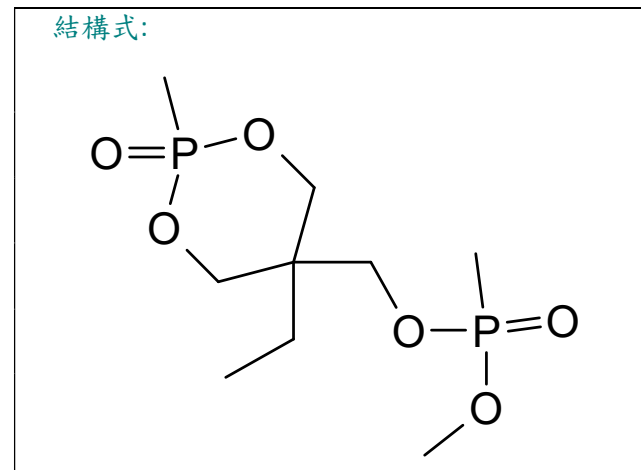


民生用途:

Flame retardant for use in the production of Polyurethane (PU) foams.

名稱:	(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl phosphonate
CAS RN:	41203-81-0
CWC 分類:	2B04
CCC Code:	2931.36.00.00-8
分子式:	C ₉ H ₂₀ O ₆ P ₂
CAS 名稱:	Phosphonic acid, methyl-, (5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphorinan-5-yl) methyl ester
IUPAC 名稱:	(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl
Synonyms:	Phosphonic acid, methyl-, (5-ethyl-2-methyl-1,3,2-dioxaphosphorinan-5-yl) methyl methyl ester, P-oxide 甲磷酸甲基(5-乙基-2-甲基-2-氧代-1,3,2-二氧磷雜環己-5-基)甲酯

結構式:



民生用途:

Flame retardant for polyester fabrics used in furnishing, curtaining, building and automotive applications

名稱: **Bis[(5-Ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate**

CAS RN: 42595-45-9

CWC 分類: 2B04

CCC Code: 2931.37.00.00-7

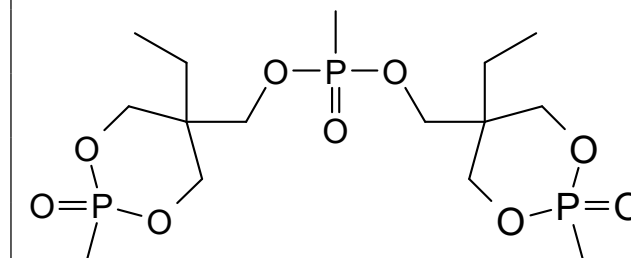
分子式: C₁₅H₃₁O₉P₃

CAS 名稱: Phosphonic acid, methyl-, bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphorinan-5-yl)methyl] ester

IUPAC 名稱: Bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate

Synonyms: Phosphonic acid, methyl-, bis[(5-ethyl-2-methyl-1,3,2-dioxaphosphorinan-5-yl)methyl] ester, P,P'-dioxide
 甲磷酸雙[(5-乙基-2-甲基-2-氧代-1,3,2-二氧磷雜環己-5-基)甲基]酯

結構式:

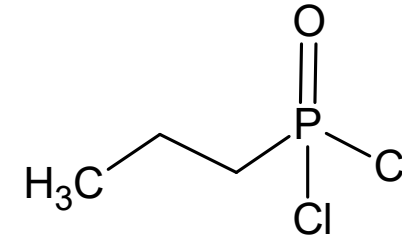


民生用途:

Flame retardant

名稱:	Propylphosphonic dichloride
CAS RN:	4708-04-7
CWC 分類:	2B04
CCC Code:	2931.39.00.80-8
分子式:	C ₃ H ₇ Cl ₂ OP
CAS 名稱:	Phosphonic dichloride, propyl-
IUPAC 名稱:	Propylphosphonic dichloride
Synonyms:	Propylphosphonyl dichloride Propanephosphonyl chloride Dichloropropylphosphine oxide 丙基磷醯二氯

結構式:



民生用途:

Used as pharmaceutical intermediates and for biochemical research

名稱: **Poly(1,3-phenylene methyl phosphonate)**

CAS RN: 63747-58-0

CWC 分類: 2B04

CCC Code: 3911.90.90.00-4

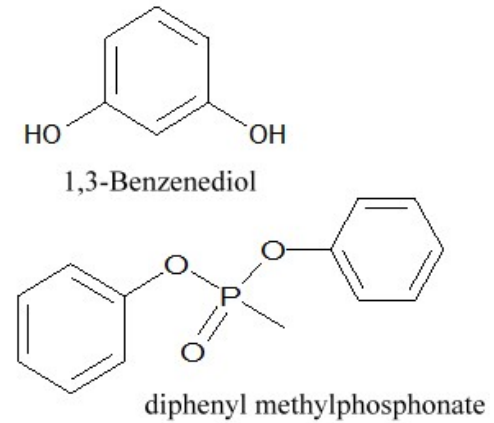
分子式: $(C_{13}H_{13}O_3P.C_6H_6O_2)_x$

CAS 名稱: Phosphonic acid, P-methyl-, diphenyl ester, polymer with 1,3-benzenediol

IUPAC 名稱:

Synonyms: Phosphonic acid, methyl-, diphenyl ester, polymer with 1,3-benzenediol
Diphenyl methylphosphonate-resorcinol copolymer
1,3-Benzenediol, polymer with diphenyl methylphosphonate

結構式:



民生用途:

Flame retardant, curing agent for epoxy resin

名稱: **Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560)**

CAS RN: 663176-00-9

CWC 分類: 2B04

CCC Code: 3824.99.99.90-3

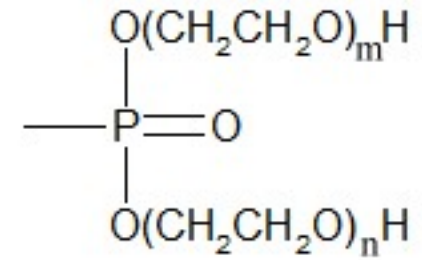
分子式: Unspecified

CAS 名稱: Phosphonic acid, methyl-, polyglycol ester

IUPAC 名稱:

Synonyms: Exolit OP 560

結構式:

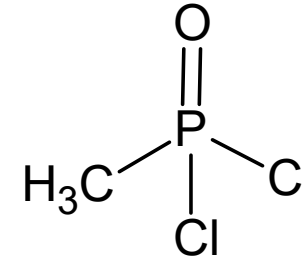


民生用途:

Flame retardant

名稱:	Methylphosphonic dichloride
CAS RN:	676-97-1
CWC 分類:	2B04
CCC Code:	2931.39.00.80-8
分子式:	CH ₃ Cl ₂ OP
CAS 名稱:	Phosphonic dichloride, methyl-
IUPAC 名稱:	Methylphosphonic dichloride
Synonyms:	Methylphosphonyl dichloride Methylphosphonyl chloride Methylphosphonodichloridic acid Methylphosphonic acid dichloride Methanephosphonyl dichloride Methanephosphonyl chloride Methanephosphonodichloridic acid Dichloromethylphosphine oxide 甲基磷醯二氯

結構式:



民生用途:

Chlorinating agent, chemical intermediate; Raw material to produce Phosdiol-A and Phospolyol-2, hydroxylated esters of methyl phosphonic acid in oligomeric forms used as fire retardants in self-extinguish mixtures in aircraft industry.

名稱: **2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide**

CAS RN: 68957-94-8

CWC 分類: 2B04

CCC Code: 2931.35.00.00-9

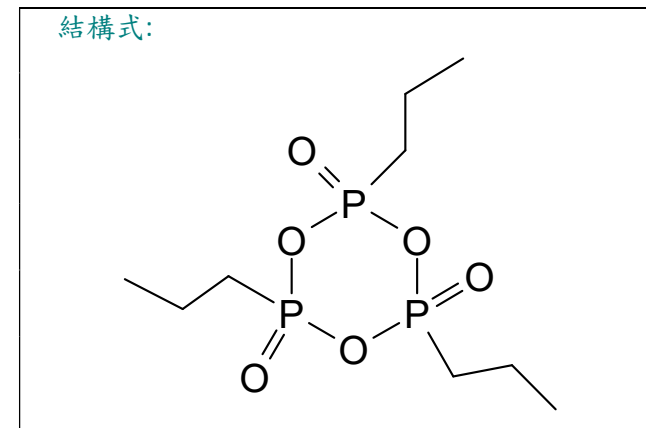
分子式: C₉H₂₁O₆P₃

CAS 名稱: 1,3,5,2,4,6-Trioxatriphosphorinane, 2,4,6-tripropyl-, 2,4,6-trioxide

IUPAC 名稱: 2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide

Synonyms: Propylphosphonic anhydride
n-Propylphosphonic cyclic anhydride
1-Propanephosphonic acid cyclic anhydride, 50% in ethyl acetate
1-Propanephosphonic acid cyclic anhydride
2,4,6-三丙基-1,3,5,2,4,6-三氧三磷雜環己烷 2,4,6-三氧化物

結構式:



民生用途:

Used in paper industry, pharmaceutical industry, plastics and synthetic resin industries. Used in peptide synthesis, Also used as flame retardants and paper making auxiliaries.

名稱: **Dimethylmethylphosphonate, polymer with oxirane and phosphorus oxide**

CAS RN: 70715-06-9

CWC 分類: 2B04

CCC Code: 3824.99.99.90-3

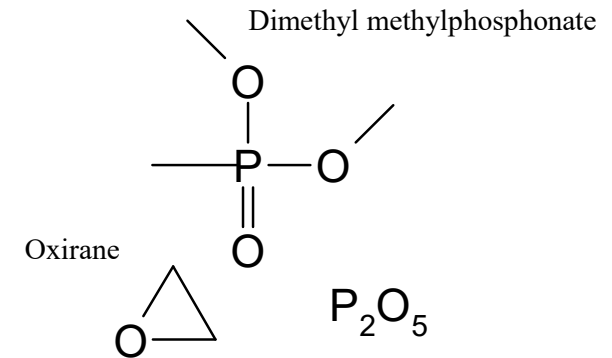
分子式: $(C_3H_9O_3P.C_2H_4O.O_5P_2)_X$

CAS 名稱: Phosphonic acid, methyl-, dimethyl ester, polymer with oxirane and phosphorus oxide(P2O5)

IUPAC 名稱:

Synonyms: Phosphorus oxide, polymer with dimethyl methylphosphonate and oxirane
Fyroltex HP
Fyrol 51

結構式:



民生用途:

Flame retardant

Components: Phosphorus Pentoxide (P2O5),
Dimethyl methylphosphonate and Oxirane

名稱: **Diphenyl methylphosphonate**

CAS RN: 7526-26-3

CWC 分類: 2B04

CCC Code: 2931.39.00.80-8

分子式: C₁₃H₁₃O₃P

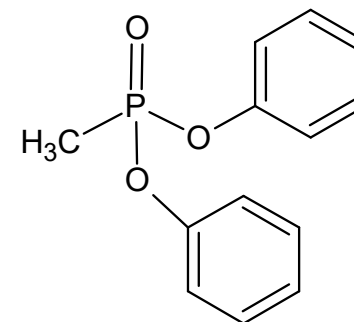
CAS 名稱: Phosphonic acid, methyl-, diphenyl ester

IUPAC 名稱: Diphenyl methylphosphonate

Synonyms: Diphenyl methanephosphonate

甲基膦酸二苯基酯

結構式:

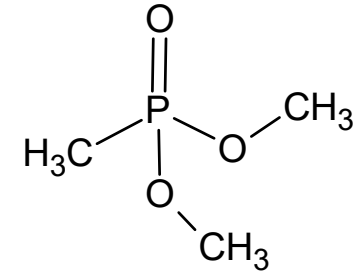


民生用途:

Flame retardant

名稱:	Dimethyl methylphosphonate
CAS RN:	756-79-6
CWC 分類:	2B04
CCC Code:	2931.31.00.00-3
分子式:	C3H9O3P
CAS 名稱:	Phosphonic acid, methyl-, dimethyl ester
IUPAC 名稱:	Dimethyl methylphosphonate
Synonyms:	Reoflam DMMP O,O-Dimethyl methylphosphonate NSC 62240 Methylphosphonic acid dimethyl ester Methanephosphonic acid dimethyl ester Metaran Fyrol DMMP Fran TF 2000 DMMP Dimethyl methanephosphonate Dimethoxymethyl phosphine oxide 甲磷酸二甲酯

結構式:



民生用途:

Used in manufacture of flame retardants for resins, with application in: building materials, furnishings, transportation equipment and fittings, electrical industry (cables, housing), upholstery; lubricant additive.

名稱: **Diethyl ethylphosphonate**

CAS RN: 78-38-6

CWC 分類: 2B04

CCC Code: 2931.33.00.00-1

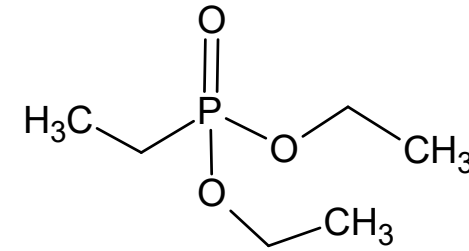
分子式: C₆H₁₅O₃P

CAS 名稱: Phosphonic acid, ethyl-, diethyl ester

IUPAC 名稱: Diethyl ethylphosphonate

Synonyms: Diethyl ethanephosphonate
Diethoxyethylphosphine oxide
DEEP
Amgard V 490
Antiblaze V 490
NSC 2671
乙膦酸二乙酯

結構式:



民生用途:

Used as flame retardant, gasoline additive, raw material for insecticides. Used as stabiliser and antioxidant for plastics.

名稱: **Methylphosphonic acid with (aminoiminomethyl)urea (1:1)**

CAS RN: 84402-58-4

CWC 分類: 2B04

CCC Code: 2931.38.00.00-6

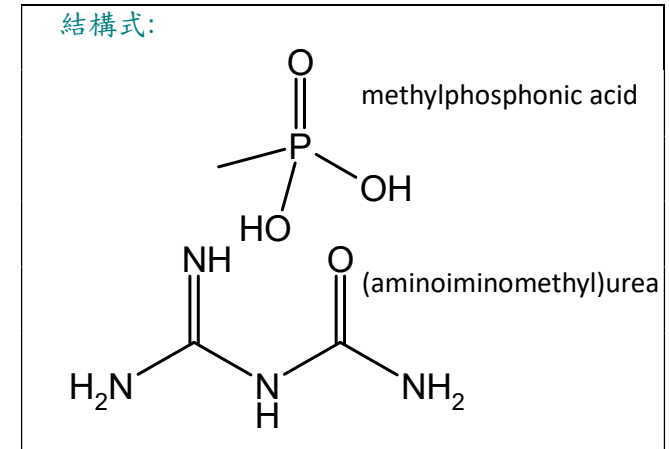
分子式: C₂H₆N₄O·CH₅O₃P

CAS 名稱: Phosphonic acid, P-methyl-, compd. with N-(aminoiminomethyl)urea (1:1)

IUPAC 名稱:

Synonyms: Methylphosphonic acid/aminoiminomethyl)urea (1:1)
Methylphosphonic acid compound with (aminoiminomethyl)urea (1:1)
Flammentin MSG
甲磷酸及甲脒基(1:1)鹽

結構式:



民生用途:

Flame retardant (specifically for polyesters, polyurethane (PU) foams). Used for manufacture of cleaning agents, emulsifiers, textile improver and anticorrosion agents.

名稱: **O-(3-chloropropyl) O-[4-nitro-3-(trifluoromethyl)phenyl] methylphosphonothionate**

CAS RN: 849-29-6

CWC 分類: 2B04

CCC Code: **2931.39.00.80-8**

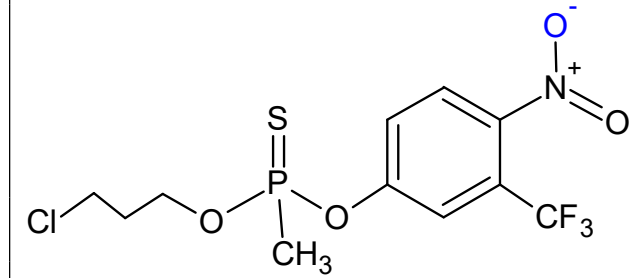
分子式: C₁₁H₁₂ClF₃NO₄PS

CAS 名稱: Phosphonothioic acid, methyl-, O-(3-chloropropyl) O-(.alpha.,.alpha.,.alpha.-trifluoro-4-nitro-m-tolyl) ester

IUPAC 名稱:

Synonyms:

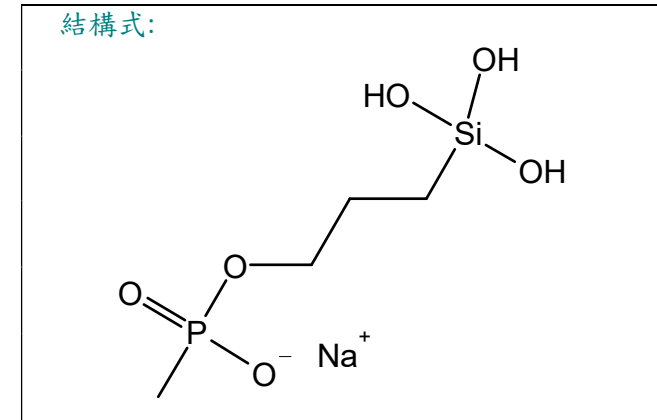
結構式:



民生用途:

Insecticide

名稱:	Sodium 3-(trihydroxysilyl)propyl methylphosphonate
CAS RN:	84962-98-1
CWC 分類:	2B04
CCC Code:	2931.34.00.00-0
分子式:	C ₄ H ₁₂ NaO ₆ PSi
CAS 名稱:	Phosphonic acid, methyl-, mono[3-(trihydroxysilyl)propyl] ester, monosodium salt
IUPAC 名稱:	Sodium 3-(trihydroxysilyl)propyl methylphosphonate
Synonyms:	Methylphosphonic acid mono[3-(trihydroxysilyl)propyl] ester, monosodium salt 3-(三羟基矽基)丙基甲磷酸酯鈉鹽

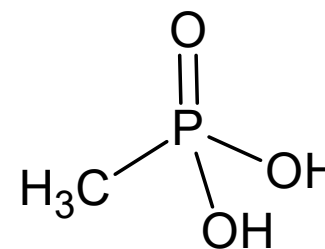


民生用途:

Antifreeze additive

名稱:	Methylphosphonic acid
CAS RN:	993-13-5
CWC 分類:	2B04
CCC Code:	2931.39.00.80-8
分子式:	CH ₅ O ₃ P
CAS 名稱:	Phosphonic acid, methyl-
IUPAC 名稱:	Methylphosphonic acid
Synonyms:	Methanephosphonic acid Dihydrogen methylphosphonate 甲基膦酸

結構式:



民生用途:

Used in production of flame retardants

名稱: **Product from the reaction of Methylphosphonic acid and 1,2-Ethanediamine**

CAS RN: 99580-93-5

CWC 分類: 2B04

CCC Code: 2931.39.00.80-8

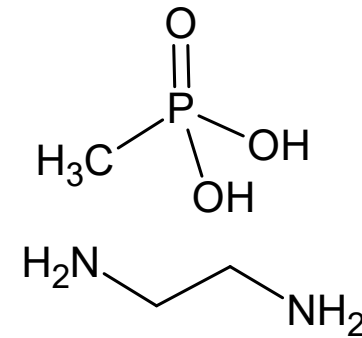
分子式: C₂H₈N₂.CH₅O₃P

CAS 名稱: Phosphonic acid, methyl-, compd. with 1,2-ethanediamine (1:1)

IUPAC 名稱:

Synonyms: Ethylenediammonium(2+) methylphosphonate
1,2-Ethanediamine, methylphosphonate (1:1)

結構式:

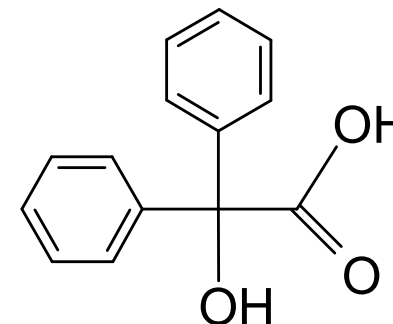


民生用途:

Flame retardant

名稱:	2,2-Diphenyl-2-hydroxyacetic acid
CAS RN:	76-93-7
CWC 分類:	2B08
CCC Code:	2918.17.00.10-6
分子式:	C ₁₄ H ₁₂ O ₃
CAS 名稱:	Benzeneacetic acid, α -hydroxy- α -phenyl-
IUPAC 名稱:	2,2-Diphenyl-2-hydroxyacetic acid
Synonyms:	NSC 2830 Hydroxydiphenylacetic acid Hydroxy(diphenyl)acetic acid Diphenylhydroxyacetic acid Diphenylglycolic acid Benzilic acid α -Hydroxydiphenylacetic acid α -Hydroxy- α -phenylbenzeneacetic acid α -Hydroxy-2,2-diphenylacetic acid α, α -Diphenylglycolic acid α, α -Diphenyl- α -hydroxyacetic acid 2-Hydroxy-2,2-diphenylacetic acid 2,2-二苯基-2-羥基乙酸 二苯基乙醇酸

結構式:



民生用途:

Used in broad spectrum of organic synthesis, especially used as an intermediate in preparation of pharmaceuticals.

Precursor for Schedule 2 A* chemical BZ (3-Quinclidinyl benzilate).

Used in the preparation of pharmaceuticals: Treatment of urinary incontinence and their preparations, anticholinergics, antidepressants, antispasmodic drugs, bronchodilator including preparation of Clinidinium bromide via the S2A* chemical BZ used in treatment of peptic ulcers. ALSO used in dyestuff industry, and acaricides. Aluminium benzilic acid is an ingredient of the toner.

名稱: **3-Quinuclidinol**

CAS RN: 1619-34-7

CWC 分類: 2B09

CCC Code: 2933.99.90.40-3

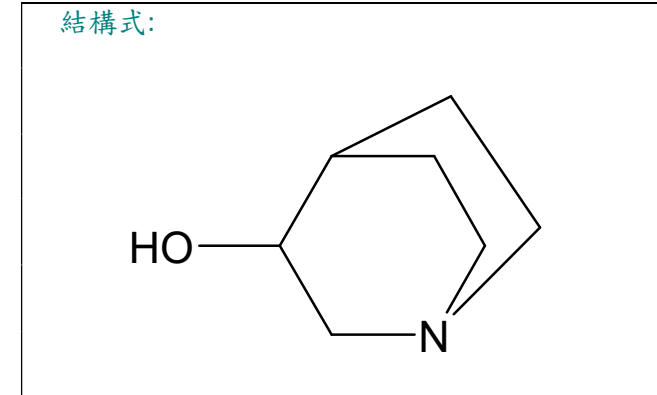
分子式: C₇H₁₃NO

CAS 名稱: 1-Azabicyclo[2.2.2]octan-3-ol

IUPAC 名稱: 1-Azabicyclo[2.2.2]octan-3-ol

Synonyms: Quinuclidin-3-ol
NSC-93905
DL-3-Quinuclidinol
3-Hydroxyquinuclidine
3-羥基奎寧環

結構式:



民生用途:

Used in production of pharmaceuticals including synthesis of drugs with wide range of applications such as production of Quinupramine (antidepressant), Quinupristin (antibacterial) and Clidinium bromide via the Schedule 2A* chemical BZ.

Used as corrosion inhibitor.

名稱: **R-(-)-3-Quinuclidinol**

CAS RN: 25333-42-0

CWC 分類: 2B09

CCC Code: 2933.99.90.40-3

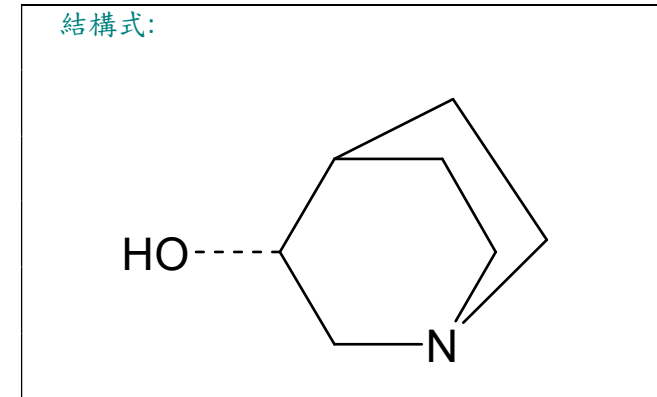
分子式: C₇H₁₃NO

CAS 名稱: 1-Azabicyclo[2.2.2]octan-3-ol, (3R)-

IUPAC 名稱: (3R)-1-Azabicyclo[2.2.2]octan-3-ol

Synonyms: (R)-3-Quinuclidinol
(R)-3-Hydroxyquinuclidine
(R)-1-Azabicyclo[2.2.2]octan-3-ol
(R)-(-)-3-Quinuclidinol
(R)-(-)-1-Azabicyclo[2.2.2]octan-3-ol
(3R)-Quinuclidin-3-ol
(3R)-3-Quinuclidol
(3R)-3-Quinuclidinol

結構式:



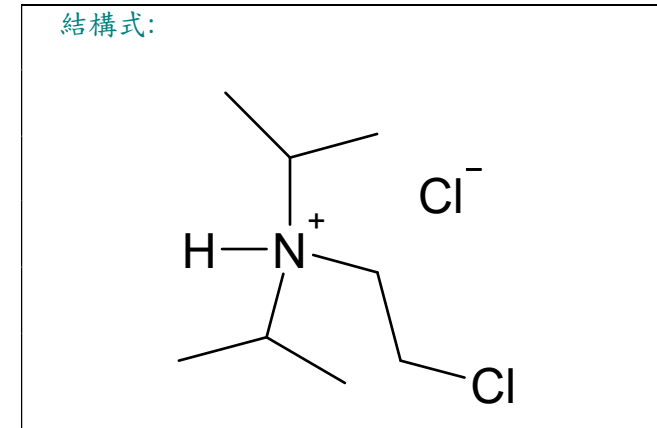
民生用途:

Used in production of pharmaceuticals including synthesis of drugs with wide range of applications such as production of Quinupramine (antidepressant), Quinupristin (antibacterial) and Clidinium bromide via the Schedule 2A* chemical BZ.

Used as corrosion inhibitor.

名稱:	2-(N,N-Diisopropylamino)ethylchloride hydrochloride
CAS RN:	4261-68-1
CWC 分類:	2B10
CCC Code:	2921.14.00.00-6
分子式:	C ₈ H ₁₈ ClN.HCl
CAS 名稱:	2-Propanamine, N-(2-chloroethyl)-N-(1-methylethyl)-, hydrochloride
IUPAC 名稱:	N-(2-Chloroethyl)-N-isopropylpropan-2-aminium chloride
Synonyms:	Triethylamine, 2"-chloro-1,1'-dimethyl-, hydrochloride N-(2-Chloroethyl)diisopropylamine hydrochloride N,N-Diisopropylaminoethyl-2-chloride hydrochloride 2-(Diisopropylamino)ethyl chloride hydrochloride (β-Chloroethyl)diisopropylamine hydrochloride 2-(N,N-二異丙基胺基) 氯乙烷鹽酸鹽

結構式:



民生用途:

Used for the synthesis of pharmaceutical intermediates such as anticancer flavanoneanalogue preparations

名稱: **2-(N,N-Dimethylamino)ethylchloride hydrochloride**

CAS RN: 4584-46-7

CWC 分類: 2B10

CCC Code: 2921.12.00.10-6

分子式: C₄H₁₁Cl₂N

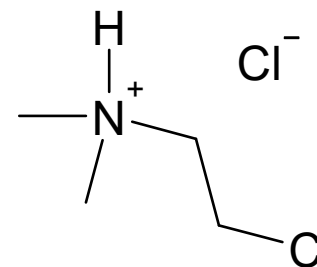
CAS 名稱: Ethanamine, 2-chloro-N,N-dimethyl-, hydrochloride

IUPAC 名稱: 2-Chloro-N,N-dimethylethanaminium chloride

Synonyms: Chloroethyldimethylamine hydrochloride
 (β-Chloroethyl)dimethylamine-hydrochloride
 1-Chloro-2-(dimethylamino)ethane hydrochloride
 2-(Dimethylamino)chloroethane hydrochloride
 2-(Dimethylamino)ethyl chloride hydrochloride
 2-Chloro-N,N-dimethylethanamine hydrochloride
 2-Chloro-N,N-dimethylethylamine hydrochloride
 2-Chloroethyl dimethyl ammonium chloride
 (2-Chloroethyl)d imethylamine hydrochloride
 Chloro(dimethylamino)ethane hydrochloride
 β-Dimethylaminoethyl chloride hydrochloride
 Dimethylaminoethyl chloride hydrochloride
 Ethylamine, 2-chloro-N,N-dimethyl-, hydrochloride
 N,N-Dimethyl-2-chloroethylamine hydrochloride
 N,N-Dimethyl-N-(2-chloroethyl)amine hydrochloride
 N,N-Dimethylaminoethyl-2-chloride hydrochloride
 N-(2-Chloroethyl)-N,N-dimethylammonium chloride
 N-(2-Chloroethyl)dimethylamine hydrochloride
 2-Chloroethyldimethylamine monohydrochloride
 2-(N,N-二甲基胺基) 氯乙烷鹽酸鹽

名稱: **2-(N,N-Diethylamino)ethylchloride hydrochloride**

結構式:



民生用途:

Used to produce speciality surfactants, flocculants, agricultural chemicals, pharmaceuticals such as production of Iltiazem, and Pyrrolopyridine (antiinflammatory), Brompheniramine aleate (antihistaminic), Chlorphenoxamine HCl (anticholinergic), Doxilamine sucoinate antihistaminic), Orphenadrine hydrochloride (muscle relaxant), Orphenadrine citrate (muscle relaxant), Phenyltoloxamine citrate ntihistaminic), Chlorpiramine hydrochloride antipsychotic).

結構式:

CAS RN: 869-24-9

CWC 分類: 2B10

CCC Code: 2921.13.00.00-7

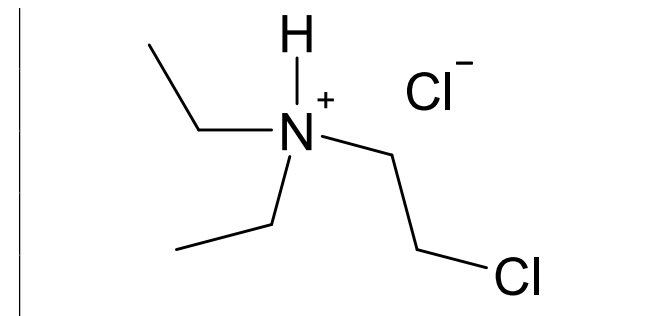
分子式: C₆H₁₅Cl₂N

CAS 名稱: Ethanamine, 2-chloro-N,N-diethyl-, hydrochloride

IUPAC 名稱: 2-Chloro-N,N-diethylethanaminium chloride

Synonyms: N,N-Diethyl-2-chloroethylamine hydrochloride
 1-Chloro-2-(diethylamino)ethane hydrochloride
 2-(Diethylamino)ethyl chloride hydrochloric acid salt
 2-(Diethylamino)ethyl chloride hydrochloride
 2-(N,N-Diethylamino)ethyl chloride hydrochloride
 2-Chloro-N,N-diethylethylamine hydrochloride
 2-Chloroethyl-N,N-diethylamine hydrochloride
 (2-Chloroethyl)diethylamine monohydrochloride
 2-Chlorotriethylamine hydrochloride
 Triethylamine, 2-chloro-, hydrochloride
 N,N-Diethyl-β-chloroethylamine hydrochloride
 N,N-Diethylaminoethyl chloride hydrochloride
 N-(2-Chloroethyl)diethylamine hydrochloride
 N-2-Chloroethyl-N,N-diethylammonium hydrochloride
 β-(Diethylamino)ethyl chloride hydrochloride
 β-Chloroethyldiethylamine hydrochloride
 2-Chloroethyldiethylammonium chloride
 2-(N,N-二乙基胺基) 氯乙烷鹽酸鹽

名稱: 2-(N,N-Diisopropylamino)ethanol



民生用途:

Gasoline additive with application in removal of acids from solutions.

Used in production of cationic modified starch.

Used in manufacturing of pharmaceuticals including: product DEAE-Dextran, active ingredient for a cardiovascular medicament, Tiamulin derivatives for veterinarian purposes, Nafronil Oxalate and Drofenine hydrochloride.

結構式:

CAS RN: 96-80-0

CWC 分類: 2B11

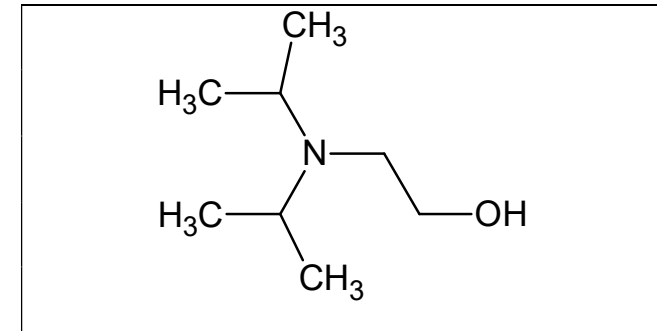
CCC Code: 2922.18.00.00-1

分子式: C₈H₁₉NO

CAS 名稱: Ethanol, 2-[bis(1-methylethyl)amino]-

IUPAC 名稱: 2-Diisopropylaminoethanol

Synonyms: N,N-Diisopropylethanolamine
N,N-Diisopropylaminoethane-2-ol
N,N-Diisopropyl-2-aminoethanol
Ethanol, 2-(diisopropylamino)-
2-(Diisopropylamino)ethyl alcohol
2-(Diisopropylamino)ethanol
(N,N-Diisopropylamino)ethanol
2-(N,N-二異丙基胺基)乙醇

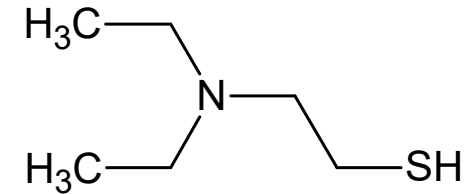


民生用途:

Used in manufacturing of pharmaceuticals:
Preparation of substituted Benzamides and
treatment of digestive tract disorder.

名稱:	2-(N,N-Diethylamino)ethanethiol
CAS RN:	100-38-9
CWC 分類:	2B12
CCC Code:	2930.60.00.00-8
分子式:	C ₆ H ₁₅ NS
CAS 名稱:	Ethanethiol, 2-(diethylamino)-
IUPAC 名稱:	2-(Diethylamino)ethanethiol
Synonyms:	N,N-Diethylcysteamine N,N-Diethylaminoethane-2-thiol Diethylcysteamine Diethyl(2-mercaptoethyl)amine 2-N,N-(Diethylamino)ethanethiol 2-(Diethylamino)ethyl mercaptan 2-(Diethylamino)ethyl hydrosulfide 2-(N,N-二乙基胺基)乙硫醇

結構式:

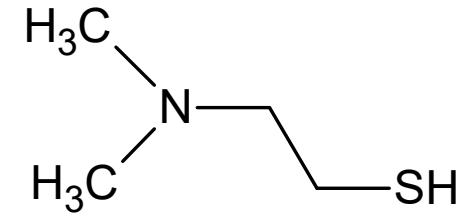


民生用途:

Used in manufacturing of pharmaceuticals such as Tiamulin hydrogen fumarate and an antibiotic used for veterinarian application.

名稱:	2-(N,N-Dimethylamino)ethanethiol
CAS RN:	108-02-1
CWC 分類:	2B12
CCC Code:	2930.90.90.30-7
分子式:	C ₄ H ₁₁ NS
CAS 名稱:	Ethanethiol, 2-(dimethylamino)-
IUPAC 名稱:	2-(Dimethylamino)ethanethiol
Synonyms:	N-(2-Mercaptoethyl)-N,N-dimethylamine N,N-Dimethylcysteamine N,N-Dimethylaminoethane-2-thiol Captamine 2-Mercapto-N,N-dimethylaminoethane (Dimethylamino)ethyl mercaptan (2-Mercaptoethyl)dimethylamine N,N-二甲基氨基乙硫醇

結構式:

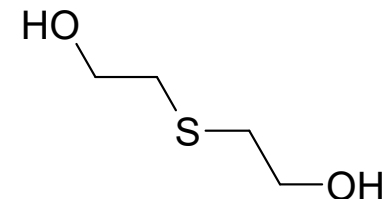


民生用途:

Used in manufacturing of Drugs, Food
Flavourings and Antibacterials

名稱:	Bis(2-hydroxyethyl)sulfide
CAS RN:	111-48-8
CWC 分類:	2B13
CCC Code:	2930.70.00.00-6
分子式:	C ₄ H ₁₀ O ₂ S
CAS 名稱:	Ethanol, 2,2'-thiobis-
IUPAC 名稱:	2,2'-Thiodiethanol
Synonyms:	Ethanol, 2,2'-thiodi- 2,2'-Thiodiglycol 3-Thiapentane-1,5-diol Bis(2-hydroxyethyl) sulfide Bis(2-hydroxyethyl) thioether Bis(β -hydroxyethyl) sulfide 2,2'-Thiobisethanol Diethanol sulfide Thiodiglycol Kromfax Solvent β, β' -Dihydroxydiethyl sulfide β, β -Dihydroxyethyl sulphide β -Thiodiglycol Tedegyl Thiodiethylene glycol Di(2-hydroxyethyl) sulphide 硫二甘醇 硫代雙乙醇

結構式:



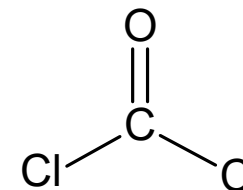
民生用途:

Used in textile industry (dye carrier and fabric softener).

Used in production of solvents, cosmetics, plastics, elastomers, lubricants, stabilizers, antioxidants, inks, dyes, photography, copying, antistatic agent, epoxides, coatings, cosmetics, metal plating and pharmaceuticals (anti-arthritis drugs)

名稱:	Carbonyl dichloride
CAS RN:	75-44-5
CWC 分類:	3A01
CCC Code:	2812.11.00.00-1
分子式:	CCl ₂ O
CAS 名稱:	Carbonic dichloride
IUPAC 名稱:	Carbonyl dichloride
Synonyms:	UN1076 Phosgene Phosgen Dichloroformaldehyde Chloroformyl chloride CG Carbonyl chloride Carbon oxychloride Carbon dichloride oxide 光氣 二氯化羰

結構式:



民生用途:

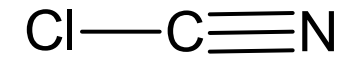
Used in production of intermediates and products in many branches of large-scale industrial chemistry.

Used in production of di-isocyanates as starting materials of Polyurethane chemistry, polycarbonate resins, Polyurethane coatings, cholinergic medicines and chloroformates. Reaction of Phosgene with alcohols to form Chloroformic esters is very important for industrial applications. These esters are exceptionally versatile intermediates for the production of e.g. carbonic esters, as well as for many other applications (e.g. used in the pharmaceutical industry and in the production of carbamate insecticides).

Used in inorganic chemistry, e.g. Phosgene is used as an intermediate for the large-scale production of Aluminium chloride.

名稱:	Cyanogen chloride
CAS RN:	506-77-4
CWC 分類:	3A02
CCC Code:	2853.10.00.00-2
分子式:	CCIN
CAS 名稱:	Cyanogen chloride ((CN)Cl)
IUPAC 名稱:	Cyanogen chloride
Synonyms:	UN1589 (Cyanogen chloride stabilized) Cyanochloride Chlorocyanogen Chlorocyanide Chlorocyan Chlorine cyanide 氯化氰

結構式:

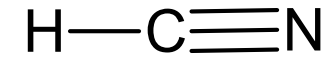


民生用途:

Used in chemical synthesis, metal cleaners, ore refining, in production of Triazine herbicides (e.g. Atrazine), insecticides (e.g. Menazon), optical brighteners, dyestuffs and synthetic rubber. Used in production of Diphenylguanidine.

名稱:	Hydrogen cyanide
CAS RN:	74-90-8
CWC 分類:	3A03
CCC Code:	2811.12.00.00-1
分子式:	HCN
CAS 名稱:	Hydrocyanic acid
IUPAC 名稱:	Nitrilomethane
Synonyms:	UN1614 Hydrogen cyanide (STABILIZED) Prussic acid Formonitrile Formic anammonide Evercyn Carbon hydride nitride (CHN) 氰化氫 氫氰酸

結構式:



民生用途:

Major end uses of Hydrogen cyanide include production of Adiponitrile, Methyl methacrylate, Cyanuric chloride, Sodium cyanide and Methionine.

Used in manufacturing of metal polishes, Acrylates, Cyanide salts, dyes, rodenticides, pesticides, synthetic fibers, plastics and electroplating solutions.

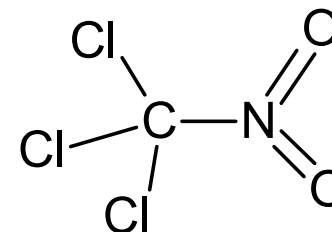
Used in metallurgical and photographic processes, and to produce Cyanuric acid.

Used as a starting material for nylon 66. Used to fumigate ships and warehouses, and in oreextracting processes.

Intermediate for Aminopolycarboxylic and acid chelating agents, and a raw material for nitriloacids.

名稱:	Trichloronitromethane
CAS RN:	76-06-2
CWC 分類:	3A04
CCC Code:	2904.91.00.00-3
分子式:	CCl ₃ NO ₂
CAS 名稱:	Methane, trichloronitro-
IUPAC 名稱:	Trichloro(nitro)methane
Synonyms:	UN1580 PS Picfume Nitrotrichloromethane Nitrochloroform Microlysin Larvacide G 25 Chlorpicrin Chloropicrin Acquinite 三氯硝基甲烷 氯化苦

結構式:

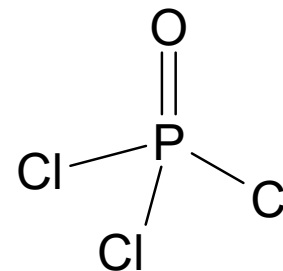


民生用途:

Mainly used as a soil disinfectant for control of nematodes, soil insects, soil fungi and weed seeds. Is also used for fumigation of stored grain to control insects and rodents, and for glass houses and mushroom house fumigation. Often used in combination with methyl bromide and other fumigants. Has been used as a tear gas because of its lachrymatory properties, but this use is prohibited under the CWC because no Scheduled chemical can be used as Riot Control Agent. It is used in the chemical industry as a raw material in organic synthesis, i.e. in manufacturing dyes.

名稱:	Phosphorus oxychloride
CAS RN:	10025-87-3
CWC 分類:	3B05
CCC Code:	2812.12.00.00-0
分子式:	Cl ₃ OP
CAS 名稱:	Phosphoric trichloride
IUPAC 名稱:	Phosphoric trichloride
Synonyms:	UN1810 Trichlorophosphorus oxide Trichlorophosphine oxide Phosphoryl trichloride Phosphorus trichloride oxide Phosphorus oxytrichloride Phosphorus oxide trichloride Phosphorus monoxide trichloride Phosphorus chloride oxide Phosphoroxytrichloride Phosphoroxychloride Phosphorous oxychloride Phosphonyl trichloride 氧氯化磷 磷醯氯

結構式:

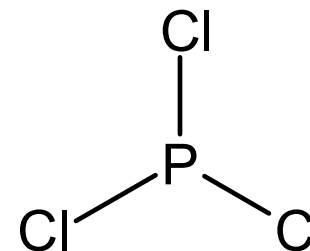


民生用途:

Precursor for organophosphorous pesticides, catalyst phosphates, plasticizers, flame retarding agents and medicines, dye intermediates;
Used as chlorinating agent and catalyst in organic synthesis: to manufacture alkyl and aryl orthophosphate tri-esters, which are used in the production of: hydraulic fluids, plastic and elastomeric additives, flame retardants, oil stabilisers, pesticides, pharmaceutical intermediates and metal extraction solvents.

名稱:	Phosphorus trichloride
CAS RN:	7719-12-2
CWC 分類:	3B06
CCC Code:	2812.13.00.00-9
分子式:	Cl ₃ P
CAS 名稱:	Phosphorus trichloride
IUPAC 名稱:	Phosphorous trichloride
Synonyms:	UN1809 Trichlorophosphine Phosphorus chloride (PCl ₃) Phosphorus chloride (Cl ₃ P) Phosphorous chloride Phosphine, trichloro- 三氯化磷

結構式:



民生用途:

Used as chlorinating agent and catalyst.

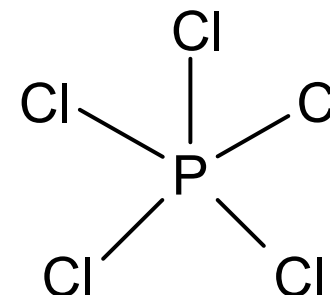
Used as starting material in production of organophosphorus and inorganic phosphorus compounds such as: phosphoryl chloride, phosphorus pentachloride, phosphonic acid.

Reacts with pure oxygen to produce another Schedule 3 chemical phosphorus oxychloride.

Used as an important intermediate for the production of: synthetic colourants, pharmaceutical products (Sulfadiazine and Sulfamethoxy-diazine;), organic phosphates (insecticides, fireretardants, plasticisers, metal extraction solvents), pesticides such as Trichlorfon, Methamidophos, Acephate and EBP.

名稱:	Phosphorus pentachloride
CAS RN:	10026-13-8
CWC 分類:	3B07
CCC Code:	2812.14.00.00-8
分子式:	Cl ₅ P
CAS 名稱:	Phosphorane, pentachloro-
IUPAC 名稱:	Pentachlorophosphorane
Synonyms:	UN1806 Phosphorus perchloride Phosphorous pentachloride Pentachlorophosphorus 五氯化磷

結構式:

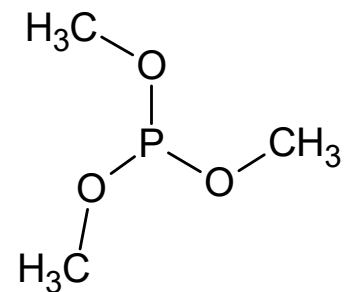


民生用途:

Used as a chlorinating agent for the synthesis of a variety of inorganic and organic phosphorous derivatives which are used as: pesticides, water treatment chemicals, flame-retardants, plasticizers, lithium-based batteries and stabilizers for plastics and elastomers, lube oil and paint additives. It is also used as a catalyst in cyclization reactions. Used in the pharmaceutical industry in the manufacture of penicillin and cephalosporin antibiotics. In aluminium metallurgy, it is used as a grain refiner for Al-Si alloys and as a grain structure improver in metal casting.

名稱:	Trimethyl phosphite
CAS RN:	121-45-9
CWC 分類:	3B08
CCC Code:	2920.23.00.00-6
分子式:	C ₃ H ₉ O ₃ P
CAS 名稱:	Phosphorous acid, trimethyl ester
IUPAC 名稱:	Trimethyl phosphite
Synonyms:	UN2329 Trimethoxyphosphine O,O,O Trimethyl phosphite 亞磷酸三甲酯

結構式:

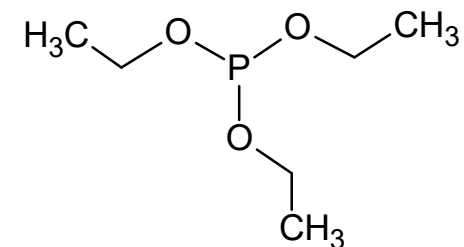


民生用途:

Key intermediate in the manufacture of organophosphorus pesticides and herbicide (Glyphosate). It is also used as a stabilizer for PVC neoprene and as a raw material in the production of fire resistant and flame retardant materials for plastics and wood products. Also used as plasticizer in nylons, as a catalyst in polymerization reactions and as coating additives. Further uses include: dyestuffs, optical brighteners, plasticizers and lubricants.

名稱:	Triethyl phosphite
CAS RN:	122-52-1
CWC 分類:	3B09
CCC Code:	2920.24.00.00-5
分子式:	C ₆ H ₁₅ O ₃ P
CAS 名稱:	Phosphorous acid, triethyl ester
IUPAC 名稱:	Triethyl phosphite
Synonyms:	UN2323 Tris(ethoxy)phosphine Triethoxyphosphine 亞磷酸三乙酯

結構式:

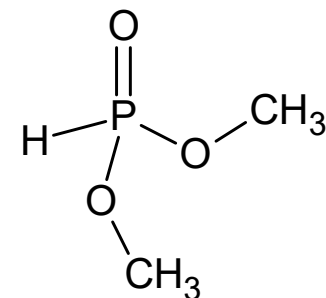


民生用途:

Used in the manufacture of flame-retardants for rigid polyurethane foam, fluorescent whitening agents, insecticides, and active ingredients for pharmaceuticals (e.g. synthetic Penicillin and Cephalosporin.). Used in organic synthesis, plasticizers, lubricant additives. Long-chained derivatives are mainly used as antioxidants for plastics. Widely used as organophosphorus reagent. Also used as whitening agents for dyes, plasticizers, stabilizers, lube oil additives.

名稱:	Dimethyl phosphite
CAS RN:	868-85-9
CWC 分類:	3B10
CCC Code:	2920.21.00.00-8
分子式:	C ₂ H ₇ O ₃ P
CAS 名稱:	Phosphonic acid, dimethyl ester
IUPAC 名稱:	Dimethyl phosphite
Synonyms:	Phosphorous acid dimethyl ester O,O-Dimethyl phosphonate NCI-C54773 Methyl phosphonate ((MeO) ₂ HPO) Hydrogen dimethyl phosphite Dimethylester kyseliny fosforite Dimethyl phosphonate Dimethyl hydrogen phosphonate Dimethyl hydrogen phosphite Dimethyl acid phosphite Dimethoxyphosphine oxide 亞磷酸二甲酯

結構式:



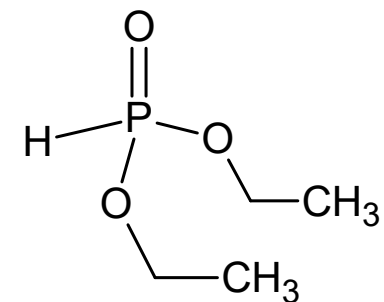
民生用途:

Main areas of application are in the production of Phosphonic acid derivatives, insecticides, and plastic additives. Used in the manufacture of Phosphonates, crop protection agents, flame retardants, e.g. for textile fibers and lubricant additives.

Used as intermediate to produce pesticides such as Glyphosate, Trichlorfon and EBP; also used to produce organic corrosion inhibitors, dye additives, plastic auxiliaries, flame-retarding agents, lube oil additives and adhesives.

名稱:	Diethyl phosphite
CAS RN:	762-04-9
CWC 分類:	3B11
CCC Code:	2920.22.00.00-7
分子式:	C ₄ H ₁₁ O ₃ P
CAS 名稱:	Phosphonic acid, diethyl ester
IUPAC 名稱:	Diethyl phosphite
Synonyms:	Hydrogen diethyl phosphite Diethyl phosphonate Diethyl hydrogen phosphite Diethyl acid phosphite Diethoxyphosphine oxide CGI 1700 亞磷酸二乙酯

結構式:



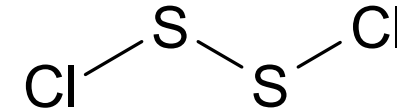
民生用途:

Used as paint solvent, lubricant additives, antioxidant for plastics, reducing agent, intermediate in flame retardants (e.g. in the manufacture of rigid Polyurethane foams), flame-retarding agents for textile fibers

Used for manufacture for crop protection agents (insecticides), and as a phosphorylating agent. It is an intermediate used in organic synthesis; also used to produce insecticides and fungicides and used in plasticizers and extracting agents.

名稱:	Sulfur monochloride
CAS RN:	10025-67-9
CWC 分類:	3B12
CCC Code:	2812.15.00.00-7
分子式:	Cl ₂ S ₂
CAS 名稱:	Sulfur chloride (S ₂ Cl ₂)
IUPAC 名稱:	Disulfur dichloride
Synonyms:	UN1828 (Sulfur chlorides) Thiosulfurous dichloride Sulphur chloride (mono) Sulfur subchloride Sulfur monochloride Dichlorodisulfane Chlorosulfane Chloride of sulfur 氯化硫

結構式:

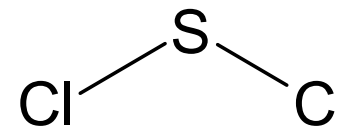


民生用途:

Used in the production of many chemical products: in the manufacture of vulcanizing agents for rubber, lubricant additives, gum erasers, rubber additives, rubber substitutes, sulfur dyes, antioxidants, pesticides, herbicides, insecticides, pharmaceuticals, paper and textile auxiliaries, plastics, and in the synthesis of various organic chemicals. The principal commercial uses of this chemical are in the manufacturing of lubricant additives and as a vulcanising agent for rubber.

名稱:	Sulfur dichloride
CAS RN:	10545-99-0
CWC 分類:	3B13
CCC Code:	2812.16.00.00-6
分子式:	Cl ₂ S
CAS 名稱:	Sulfur chloride (SCl ₂)
IUPAC 名稱:	Sulfur dichloride
Synonyms:	UN1828 (Sulfur chlorides) Sulfur dichloride (SCl ₂) Monosulfur dichloride Dichlorosulfane Chlorine sulfide (Cl ₂ S) 二氯化硫

結構式:

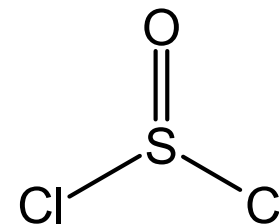


民生用途:

Uses are similar to that of Sulfur monochloride. Used in different organic synthesis. Large quantities used for the production of lubricating oil additives, also useful in the rapid vulcanisation of rubber. Smaller amounts are used in the production of antioxidants and organic-sulfur compounds. The cross-linking ability of Sulfur dichloride is also utilized to modify drying oils for varnishes and inks. Used to make an insecticide intermediate (4,4' - thiobisphenol), and is also an ingredient in the production of the fungicide captafol (Difolatan). Used as a chlorinating agent in the manufacture of parathion insecticide intermediates. Is also used in the food industry in the purification of sugar juices.

名稱:	Thionyl chloride
CAS RN:	7719-09-7
CWC 分類:	3B14
CCC Code:	2812.17.00.00-5
分子式:	Cl ₂ OS
CAS 名稱:	Thionyl chloride
IUPAC 名稱:	Thionyl dichloride
Synonyms:	UN1836 Thionyl chloride (SOCl ₂) Sulfurous oxychloride Sulfurous dichloride Sulfur oxychloride (SOCl ₂) Sulfur oxychloride Sulfur chloride oxide (SCl ₂ O) Sulfur chloride oxide (Cl ₂ SO) Sulfinyl dichloride Sulfinyl chloride 亞硫醯氯

結構式:

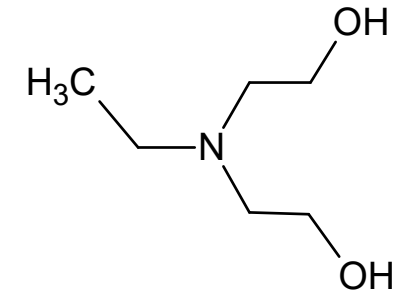


民生用途:

One of the most important chlorinating agents in organic chemistry. Application includes production of: crop-protection agents (herbicides and insecticides), pharmaceuticals (drugs and vitamins), dyes, paper and textile auxiliaries.

名稱:	Ethyldiethanolamine
CAS RN:	139-87-7
CWC 分類:	3B15
CCC Code:	2922.17.00.20-8
分子式:	C ₆ H ₁₅ NO ₂
CAS 名稱:	Ethanol, 2,2'-(ethylimino)bis-
IUPAC 名稱:	2,2'-(Ethylimino)diethanol
Synonyms:	N-Ethyldiethanolamine N-Ethyl-2,2'-iminodiethanol N,N-Bis(2-hydroxyethyl)ethylamine Ethylbis(2-hydroxyethyl)amine Ethanol, 2,2'-(ethylimino)di- Diethanoethylamine 乙基二乙醇胺

結構式:

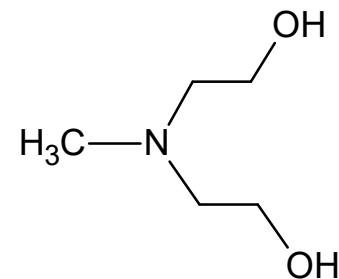


民生用途:

Used in pharmaceuticals, agricultural, textile, detergent, cosmetic and metallurgic industries. Used mainly as intermediates, especially in the production of pharmaceuticals, crop protection agents and flocculants. Used in the preparation of chemicals for the paper, plastic and leather industries. Direct uses include gas purification methods for removing acidic gases.

名稱:	Methyldiethanolamine
CAS RN:	105-59-9
CWC 分類:	3B16
CCC Code:	2922.17.00.10-0
分子式:	C ₅ H ₁₃ NO ₂
CAS 名稱:	Ethanol, 2,2'-(methylimino)bis-
IUPAC 名稱:	2,2'-(Methylimino)diethanol
Synonyms:	N-Methyliminodiethanol N-Methyldiethanolamine N-Methylaminodiglycol N-methyl-2,2'-iminodiethanol N-(2-Hydroxyethyl)-N-methylethanolamine N,N-Bis(2-hydroxyethyl)methylamine Methyliminodiethanol Methyldiethanolamine Methylbis(2-hydroxyethyl)amine MDEA Eve Ethanol, 2,2'-(methylimino)di- Diethanolmethylamine Amietol M12 甲基二乙醇胺

結構式:

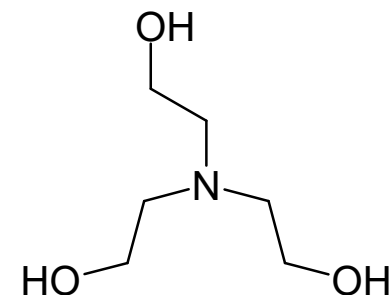


民生用途:

It is widely used in oil refinery for treating of natural gas (removal of acidic components or sweetening). It is used in many areas including: coatings, textile lubricants, polishes, detergents, pesticides, personal care products and pharmaceuticals such as intermediate in the production of analgesics with sedative and antispasmodic effects. It is a precursor to the Nitrogen Mustard HN2 which its hydrochloride salt is used as anticancer agent. . Applications also include gas scrubbing, dyes, lubrication oils, plasticizer, fabric softener, paints, agricultural chemicals, emulsifiers and corrosion inhibitors and catalyst for polyurethane foam production.

名稱:	Triethanolamine
CAS RN:	102-71-6
CWC 分類:	3B17
CCC Code:	2922.15.00.00-4
分子式:	C ₆ H ₁₅ NO ₃
CAS 名稱:	Ethanol, 2,2',2''-nitrilotris-
IUPAC 名稱:	2,2',2''-Nitrilotriethanol
Synonyms:	Trolamine Tis-(2-Hydroxyethyl)amine Tris(beta-hydroxyethyl)amine Tris(2-hydroxyethyl)amine Triethanolamin TEOA TEA (amino alcohol) TEA Sting-Kill Sterolamide Nitrilotriethanol Daltogen Alkanolamine 244 2,2',2''-Nitrilotris[ethanol] 三乙醇胺

結構式:



民生用途:

Production of: emulsifiers, detergents, textile and leather chemicals, drilling and cutting oils (impregnating materials, soaps, cosmetics and toiletries, agricultural products, pharmaceuticals. Production of cleaners: all-purpose cleaners, cleaners that involve skin contact because of the mildness of this chemical, waterless hand cleaners. Wax formulations: cream waxes and polishes used for furniture, floors and automotive car wax. Production of cement and concrete: milling additive. Production of adhesives. Application in coatings technology: metal coating preparations, glass coating (shatter proofing, anti-frosting, antifogging and-dirt resistant films on glass and plastics), accelerator for photopolymerisation coating (improves thermal properties and reduces cracking in prepared wire coatings). Used as corrosion inhibitor, gas purification processes, metal working, mining, petroleum and coal, polymers, textiles, pigment dispersion, pesticides and herbicides.

貿易量大的列管化學品清單 (依 CWC 分類排序)

Most Traded Scheduled Chemicals ordered by Schedule

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B04	129788-86-9	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,3,5-Triazine-2,4,6-triamine	1
2B04	170836-68-7	2931.90.40.80-6	3824.91.00.00-8	Mixture of (5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate (CAS RN 41203-81-0) and bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate (CAS RN 42595-45-9)	2
2B04	18755-43-6	2931.90.40.80-6	2931.32.00.00-2	Dimethyl propylphosphonate	3
2B04	294675-51-7	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560 TP)	4
2B04	3001-98-7	2931.90.40.80-6	2931.39.00.80-8	3,9-Dimethyl-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane 3,9-dioxide	5
2B04	363626-50-0	2931.90.40.80-6	3907.20.90.00-5	Bis(polyoxyethylene) methylphosphonate	6
2B04	41203-81-0	2931.90.40.80-6	2931.36.00.00-8	(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl methyl methylphosphonate	7
2B04	42595-45-9	2931.90.40.80-6	2931.37.00.00-7	Bis[(5-ethyl-2-methyl-2-oxido-1,3,2-dioxaphosphinan-5-yl)methyl] methylphosphonate	8
2B04	4708-04-7	2931.90.40.80-6	2931.39.00.80-8	Propylphosphonic dichloride	9
2B04	63747-58-0	2931.90.40.80-6	3911.90.90.00-4	Poly(1,3-phenylene methyl phosphonate)	10
2B04	663176-00-9	2931.90.40.80-6	3824.99.99.90-3	Phosphonic acid, methyl-, polyglycol ester (Exolit OP 560)	11
2B04	676-97-1	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic dichloride	12

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B04	68957-94-8	2931.90.40.80-6	2931.35.00.00-9	2,4,6-Tripropyl-1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide	13
2B04	70715-06-9	2931.90.40.80-6	3824.99.99.90-3	Dimethylmethylphosphonate, polymer with oxirane and phosphorus oxide	14
2B04	7526-26-3	2931.90.40.80-6	2931.39.00.80-8	Diphenyl methylphosphonate	15
2B04	756-79-6	2931.90.40.80-6	2931.31.00.00-3	Dimethyl methylphosphonate	16
2B04	78-38-6	2931.90.40.80-6	2931.33.00.00-1	Diethyl ethylphosphonate	17
2B04	84402-58-4	2931.90.40.80-6	2931.38.00.00-6	Salt of methylphosphonic acid and (aminoiminomethyl)urea (1:1)	18
2B04	849-29-6	2931.90.40.80-6	2931.39.00.80-8	O-(3-chloropropyl) O-[4-nitro-3-(trifluoromethyl)phenyl] methylphosphonothionate	19
2B04	84962-98-1	2931.90.40.80-6	2931.34.00.00-0	Sodium 3-(trihydroxysilyl)propyl methylphosphonate	20
2B04	993-13-5	2931.90.40.80-6	2931.39.00.80-8	Methylphosphonic acid	21
2B04	99580-93-5	2931.90.40.80-6	2931.39.00.80-8	Product from the reaction of Methylphosphonic acid and 1,2-Ethanediamine	22
2B08	76-93-7	2918.19.90.10-5	2918.17.00.10-6	2,2-Diphenyl-2-hydroxyacetic acid	23
2B09	1619-34-7	2933.99.90.40-3	2933.99.90.40-3	Quinuclidine-3-ol	24
2B09	25333-42-0	2933.99.90.40-3	2933.99.90.40-3	R-(-)-3-Quinuclidinol	25
2B10	4261-68-1	2921.19.00.20-7	2921.14.00.00-6	2-(N,N-Diisopropylamino)ethylchloride hydrochloride	26
2B10	4584-46-7	2921.19.00.20-7	2921.12.00.10-6	2-(N,N-Dimethylamino)ethylchloride hydrochloride	27
2B10	869-24-9	2921.19.00.20-7	2921.13.00.00-7	2-(N,N-Diethylamino)ethylchloride hydrochloride	28
2B11	96-80-0	2922.19.00.19-9	2922.18.00.00-1	2-(N,N-Diisopropylamino)ethanol	29
2B12	100-38-9	2930.90.90.30-7	2930.60.00.00-8	2-(N,N-Diethylamino)ethanethiol	30

Schedule	CAS RN	CCC Code 2016	CCC Code 2017	Chemical Name	Page
2B12	108-02-1	2930.90.90.30-7	2930.90.90.30-7	2-(N,N-Dimethylamino)ethanethiol	31
2B13	111-48-8	2930.90.90.40-5	2930.70.00.00-6	Bis(2-hydroxyethyl)sulfide (Thiodiglycol)	32
3A01	75-44-5	2812.10.90.10-1	2812.11.00.00-1	Carbonyl dichloride (phosgene)	33
3A02	506-77-4	2853.00.90.40-7	2853.10.00.00-2	Cyanogen chloride (chlorcyan)	34
3A03	74-90-8	2811.19.90.10-3	2811.12.00.00-1	Hydrogen cyanide (hydrocyanic acid)	35
3A04	76-06-2	2904.90.00.10-2	2904.91.00.00-3	Trichloronitromethane (Chloropicrin)	36
3B05	10025-87-3	2812.10.90.30-7	2812.12.00.00-0	Phosphorus oxychloride	37
3B06	7719-12-2	2812.10.10.00-0	2812.13.00.00-9	Phosphorus trichloride	38
3B07	10026-13-8	2812.10.20.00-8	2812.14.00.00-8	Phosphorus pentachloride	39
3B08	121-45-9	2920.90.49.10-5	2920.23.00.00-6	Trimethyl phosphite	40
3B09	122-52-1	2920.90.49.20-3	2920.24.00.00-5	Triethyl phosphite	41
3B10	868-85-9	2920.90.49.30-1	2920.21.00.00-8	Dimethyl phosphite	42
3B11	762-04-9	2920.90.49.40-9	2920.22.00.00-7	Diethyl phosphite	43
3B12	10025-67-9	2812.10.90.40-5	2812.15.00.00-7	Sulfur monochloride	44
3B13	10545-99-0	2812.10.90.50-2	2812.16.00.00-6	Sulfur dichloride	45
3B14	7719-09-7	2812.10.90.60-0	2812.17.00.00-5	Thionyl chloride	46
3B15	139-87-7	2922.19.00.20-6	2922.17.00.20-8	Ethyldiethanolamine	47
3B16	105-59-9	2922.19.00.30-4	2922.17.00.10-0	Methyldiethanolamine	48
3B17	102-71-6	2922.13.00.10-4	2922.15.00.00-4	Triethanolamine	49

