

Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by the applicant as):

樣品名稱(Sample Name) : PACKAGE_SERIES

收件日(Sample Receiving Date) : 07-May-2025

測試期間(Testing Period) : 07-May-2025 to 22-May-2025

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages.)

測試需求(Test Requested)	總 結(Summary)
依據客戶要求,評估所選樣品中特定PFAS的風險。被評估的PFAS總項目數量為552項,包括147項檢測項和405項列表項 (see remark)。(As requested by the client, the risk of specific PFAS in the selected sample is evaluated. The total amounts of evaluated PFAS are 552 items, concluding 147 tested items and 405 listed items (see remark).	請參閱下一頁 (Please refer to following pages.)

Troy Chang / Department Makager Signed for and on behalf of Alwahi SGS TAIWAN LTD. Chemical Laboratory - Taipei



頁數(Page): 1 of 44

PIN CODE: 6017D76D



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 2 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

測試部位敘述 (Test Part Description)

No.1 : 整體混測 (MIXED ALL PARTS)

測試方法 (Test Method)

修改EN 17681-1: 2022 & EN 17681-2: 2022 · 以氣相層析質譜儀及液相層析串聯質譜儀分析。(Modified EN 17681-1: 2022 & EN 17681-2: 2022, analysis was performed by GC/MS and LC/MS/MS.)

測試結果 (Test Results) 單位 (Unit): mg/kg

物質名稱	MDL	結果
(Substance Name)		(Result)
		No.1
附錄一上所有全氟/多氟烷基物質(PFAS)清單測試 (All tested PFAS in Appendix 1)	-	n.d.

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. 樣品的測試是基於申請人要求混合測試,報告中的混合測試結果不代表其中個別單一材質的含量。
 The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

te): 22-May-2025 頁數(Page): 3 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

【附錄 (Appendix) 1】

現有PFAS定量技術是分析PFAS物質的特定結構,但同碳數族群之PFAS酸及鹽類物質,其可被辨識的特定結構相同,因此無法區別所分析的特定結構是來自酸或者鹽類,故測試結果為同碳數族群之PFAS之酸及鹽類物質的濃度總合。下表PFAS物質濃度皆已包含在測試結果中,相關資訊請參見下表:(下表列舉PFAS物質僅為範例,並不包含所有同碳數族群之PFAS鹽類。)

(The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it do not include all PFAS salts with the same carbon number group.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	三氟乙酸 (Trifluoroacetic acid) (TFA)	76-05-1	1
	三氟乙酸鈉 (TFA-Na) Sodium trifluoroacetate (TFA-Na)	2923-18-4	-
	三氟乙酸鉈 (TFA-TI) Thallium(III) trifluoroacetate (TFA-TI)	23586-53-0	-
	三氟乙酸鋰 (TFA-Li) Lithium Trifluoroacetate (TFA-Li)	2923-17-3	-
	三氟乙酸銀 (TFA-Ag) Silver trifluoroacetate (TFA-Ag)	2966-50-9	-
TFA, 及其鹽 (TFA, its salts)	三氟乙酸銫 (TFA-Cs) Cesium Trifluoroacetate (TFA-Cs)	21907-50-6	-
(TFA, Its saits)	三氟乙酸鉀 (TFA-K) Potassium trifluoroacetate (TFA-K)	2923-16-2	-
	三氟乙酸銨 (TFA-NH4) Ammoniumtrifluoroacetate (TFA-NH4)	3336-58-1	-
	三氟乙酸汞 (TFA-Hg) Mercury(II) trifluoroacetate (TFA-Hg)	13257-51-7	-
	三氟乙酸鈀 (TFA-Pd) Palladium(II) trifluoroacetate (TFA-Pd)	42196-31-6	-
	三氟乙酸鹽 (TFA anion) Trifluoroacetate / Trifluoroacetic acid anion (TFA anion)	14477-72-6	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 4 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	三氟乙酸二甲基[(三氟乙醯基)氧基]鋶 Dimethyl[(trifluoroacetyl)oxy]sulfanium trifluoroacetate	57738-66-6	-
	三氟乙酸鋁(III) (TFA-Al) Aluminium tris(trifluoroacetate) (TFA-Al)	36554-89-9	-
	三氟乙酸鋇(II) (TFA-Ba) Barium bis(trifluoroacetate) (TFA-Ba)	60884-92-6	-
	三氟乙酸鉺(III) (TFA-Er) Erbium tris(trifluoroacetate) (TFA-Er)	70236-99-6	-
	三氟乙酸銦(III) (TFA-In) Indium trifluoroacetate (TFA-In)	36554-90-2	-
	三氟乙酸鑭(III) (TFA-La) Lanthanum tris(trifluoroacetate) (TFA-La)	70236-92-9	-
	三氟乙酸鎳(II) (TFA-Ni) Nickel(2+) trifluoroacetate (TFA-Ni)	16083-14-0	-
TFA, 及其鹽 (TFA, its salts)	三氟乙酸鉛(II) (TFA-Pb) Lead(II) trifluoroacetate (TFA-Pb)	4146-73-0	-
	三氟乙酸銠(II) (TFA-Rh) Acetic acid, trifluoro-, rhodium(2+) salt (TFA-Rh)	72654-51-4	-
	三氟乙酸銩(III) (TFA-Tm) Thulium tris(trifluoroacetate) (TFA-Tm)	70237-00-2	-
	三氟乙酸鐿(III) (TFA-Yb) Ytterbium(3+) tris(trifluoroacetate) (TFA-Yb)	87863-62-5	-
	三氟乙酸鋅(II) (TFA-Zn) Zinc bis(trifluoroacetate) (TFA-Zn)	21907-47-1	-
	三氟乙酸釕(II) (TFA-Ru) Ruthenium(II) 2,2,2-trifluoroacetate (TFA-Ru)	61612-84-8	-
	三氟乙酸鎂(II) (TFA-Mg) Magnesium 2,2,2-trifluoroacetate (TFA-Mg)	123333-72-2	-
	三氟乙酸銅(II) (TFA-Cu) Copper(2+) trifluoroacetate (TFA-Cu)	123333-88-0	-
	全氟丁酸 (Perfluorobutane acid) (PFBA)	375-22-4	0.01
PFBA, 及其鹽	全氟丁酸銨 (PFBA-NH ₄) Ammonium perfluorobutanoate (PFBA-NH ₄)	10495-86-0	-
(PFBA, its salts)	全氟丁酸鈉 (PFBA-Na) Sodium perfluorobutanoate (PFBA-Na)	2218-54-4	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 5 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
(cresp rame)	全氟丁酸鉀 (PFBA-K) Potassium heptafluorobutanoate (PFBA-K)	2966-54-3	-
	全氟丁酸銀 (PFBA-Ag) Silver perfluorobutanoate (PFBA-Ag)	3794-64-7	-
PFBA, 及其鹽 (PFBA, its salts)	全氟丁酸鋰 (PFBA-Li) Lithium perfluorobutanoate (PFBA-Li)	4146-76-3	-
	全氟丁酸哌嗪 (1:1) Heptafluorobutanoic acid-piperazine (1:1)	375-04-2	-
	全氟丁酸鹽 Perfluorobutanoate (anion)	45048-62-2	-
	全氟丁磺酸 (Perfluorobutane sulfonate) (PFBS)	375-73-5	0.01
	全氟丁基磺酸鈉 (PFBS-Na) 1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, sodium salt (1:1) (PFBS-Na)	60453-92-1	-
	全氟丁基磺酸鋰 (PFBS-Li) Lithium perfluorobutanesulfonate (PFBS-Li)	131651-65-5	-
	全氟丁基磺酸鎂 (PFBS-Mg) Magnesium perfluorobutanesulfonate (PFBS-Mg)	507453-86-3	-
	全氟丁基磺酸鉀 (PFBS-K) Perfluorobutane Sulfonate K-salt (PFBS-K)	29420-49-3	-
	全氟丁基磺酸氟 (PFBS-F) Perfluorobutane sulfonyl fluoride (PFBS-F)	375-72-4	-
PFBS, 及其鹽&衍生物 (PFBS, its salts & derivatives)	全氟丁基磺酸四乙基銨 (PFBS-N(CH_3CH_2) $_4$) Tetraethylammonium perfluorobutanesulfonate (PFBS-N(CH_3CH_2) $_4$)	25628-08-4	-
	全氟丁基磺酸三苯基鋶 (TPS-PFBS) Triphenylsulfanium perfluorobutane sulfonate (TPS-PFBS)	144317-44-2	-
	全氟丁基磺酸二甲基(苯基)硫 Dimethyl(phenyl)sulfanium perfluorobutane sulfonate	220133-51-7	-
	全氟丁基磺酸四丁基磷 Tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate	220689-12-3	-
	全氟丁基磺酸嗎啉 Morpholinium perfluorobutanesulfonate	503155-89-3	-
	全氟丁基磺酸銨 (PFBS-NH ₄) Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1-sulphonate (PFBS-NH ₄)	68259-10-9	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟丁基磺酸水合物 Nonafluorobutanesulfonic acidHydrate	59933-66-3	-
	全氟丁基磺酸氯 (PFBS-CI) Nonafluoro-1-butanesulfonyl chloride (PFBS-CI)	2991-84-6	-
	全氟-1-丁磺酸雙(4-叔丁基苯基)碘鎓 (PFBS-I(C_6H_4) $_2$ (C_4H_9) $_2$) Bis(4-tert-butylphenyl)iodonium perfluoro-1-butanesulfonate (PFBS-I(C_6H_4) $_2$ (C_4H_9) $_2$)	194999-85-4	-
	$1,1,2,2,3,4,4,4$ —氟丁烷- 1 -磺酸與 $2,2$ '-亞氨基二乙醇的化合物 (1:1) (PFBS-NH(C_2H_5O) $_2$) $1,1,2,2,3,3,4,4,4$ -nonafluorobutane- 1 -sulphonic acid, compound with $2,2$ '-iminodiethanol (1:1) (PFBS-NH(C_2H_5O) $_2$)	70225-18-2	-
	1-(4-丁氧基-1-萘基)四氫噻吩九氟丁烷-1-磺酸鹽 (PFBS-SC ₁₈ H ₂₃ O) 1-(4-butoxy-1-naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate (PFBS-SC ₁₈ H ₂₃ O)	209482-18-8	-
PFBS, 及其鹽&衍生物 (PFBS, its salts & derivatives)	全氟丁基磺酸四丁基銨 ((PFBS-N(C_4H_9) ₄)) Tetrabutylammonium nonafluorobutanesulfonate ((PFBS-N(C_4H_9) ₄))	108427-52-7	-
	全氟丁基磺酸二苯碘 ((PFBS-I(C_6H_5) ₂)) Diphenyliodanium nonafluorobutane-1-sulfonate((PFBS-I(C_6H_5) ₂))	194999-82-1	-
	全氟丁基磺酸三(4-叔丁基苯基)鍺 Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	241806-75-7	-
	全氟丁基磺酸(4-環己基苯基)(二苯基)鍺 Sulfonium, (4-cyclohexylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	425670-64-0	-
	全氟丁基磺酸1-(1-甲基-1H-吲哚-3-基)硫醇-1-鎓 Thiophenium, tetrahydro-1-(1-methyl-1H-indol-3-yl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	867373-18-0	-
	全氟丁基磺酸1-乙基-3-甲基吡啶鎓 Pyridinium, 1-ethyl-3-methyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1- butanesulfonate (1:1)	1015420-87-7	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 7 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟丁基磺酸1-甲基-3-辛基咪唑鎓 1H-Imidazolium, 1-methyl-3-octyl-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	905972-83-0	-
	全氟丁基磺酸1-己基-3-甲基咪唑鎓 1H-Imidazolium, 3-hexyl-1-methyl-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	1001557-05-6	-
	全氟丁基磺酸N,N-二甲基-N-(丙-2-基)丙-2-胺 2-Propanaminium, N,N-dimethyl-N-(1-methylethyl)-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	374571-81-0	-
	全氟丁基磺酸[4-(2-叔丁氧基-2-氧代乙氧基)苯基](二苯基) (1:1) Sulfonium, [4-[2-(1,1-dimethylethoxy)-2-oxoethoxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	857285-80-4	-
	全氟丁基磺酸N,N-二丁基-N-甲基丁烷-1-胺 (1:1) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	124472-66-8	-
PFBS, 及其鹽&衍生物 (PFBS, its salts & derivatives)	全氟丁基磺酸鋅 (2:1) (PFBS-Zn) 1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, zinc salt (2:1) (PFBS-Zn)	502457-69-4	-
	全氟丁基磺酸N,N,N-三丙基戊烷 (1:1) 1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	56773-55-8	-
	全氟丁基磺酸四甲基銨鹽 (PFBS-N(CH ₃) ₄) Perfluorobutanesulfonic acid tetramethylammonium salt (PFBS-N(CH ₃) ₄)	25628-17-5	-
	全氟丁烷磺酸酐 1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, 1,1'- anhydride	36913-91-4	-
	全氟丁基磺酸鹽 Perfluorobutane sulfonate (anion)	45187-15-3	-
	1-(4-丁氧基-1-萘基)四氫噻吩鎓-1,1,2,2,3,3,4,4,4-九氟-1-丁磺酸鹽 1-(4-butoxy-1-naphthalenyl)tetrahydrothiophenium - 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate	EC No. 468-770-4	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 8 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	1-丁磺酸·1,1,2,2,3,3,4,4,4-九氟-化合物與 N,N-二乙基乙胺 (1:1) 1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-, compd. with N,N-diethylethanamine (1:1)	182059-38-7	-
	1-辛銨·N-(2-羥乙基)-N,N-二甲基-與1,1,2,2,3,3,4,4,4-九氟-1- 丁磺酸鹽 (1:1) 1-Octanaminium, N-(2-hydroxyethyl)-N,N-dimethyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	334529-55-4	-
PFBS, 及其鹽&衍生物	1-十六烷基-1,1,2,2,3,3,4,4,4-九氟-1-丁磺酸吡啶鎓 (1:1) Pyridinium, 1-hexadecyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1- butanesulfonate (1:1)	334529-62-3	-
(PFBS, its salts & derivatives)	1-丁基-1,1,2,2,3,3,4,4,4-九氟-1-丁磺酸吡啶鎓鹽 (1:1) Pyridinium, 1-butyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1- butanesulfonate (1:1)	334529-64-5	-
	1-辛胺·N-甲基-N,N-二辛基-·1,1,2,2,3,3,4,4,4-九氟-1-丁磺酸鹽 (1:1) 1-Octanaminium, N-methyl-N,N-dioctyl-, 1,1,2,2,3,3,4,4,4-nonafluoro-1-butanesulfonate (1:1)	495417-51-1	-
	三(4-甲基苯基)鍺全氟丁磺酸鹽 Sulfonium, tris(4-methylphenyl)-, 1,1,2,2,3,3,4,4,4- nonafluoro-1-butanesulfonate (1:1)	722538-68-3	-
-	全氟丁磺醯胺 Perfluorobutane sulfon amides	30334-69-1	0.1
-	N-(2-羥乙基)-N-甲基全氟丁烷磺醯胺 (PFBS-NC3H8O) 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N- methylbutane-1-sulphonamide (PFBS-NC3H8O)	34454-97-2	0.01
-	1H,1H,2H,2H-甲基丙烯酸全氟己酯 (4:2 FTMA) 1H,1H,2H,2H-Perfluorohexyl methacrylate (4:2 FTMA)	1799-84-4	0.1
	全氟戊酸 (Perfluoropentane acid) (PFPA)	2706-90-3	0.01
DFDA 乙廿烷	全氟戊酸鈉 (PFPA-Na) Sodium perfluoropentanoate (PFPA-Na)	2706-89-0	-
PFPA, 及其鹽 (PFPA, its salts)	全氟戊酸鉀 (PFPA-K) Potasium perfluoropentanoate (PFPA-K)	336-23-2	-
	全氟戊酸銨 (PFPA-NH ₄) Ammonium perfluoropentanoate (PFPA-NH ₄)	68259-11-0	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 9 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL
(Group Name)	(Substance Name)		(mg/kg)
	全氟戊酸鋰 (PFPA-Li)	198482-22-3	-
	Lithium perfluoropentanoate (PFPA-Li)		
	全氟戊酸銀 (PFPA-Ag)	2795-30-4	-
	Silver perfluoropentanoate (PFPA-Ag)		
PFPA, 及其鹽	全氟戊酸鹽	45167-47-3	-
(PFPA, its salts)	Perfluoropentanoate (anion)		
(FIFA, its saits)	全氟戊酸與苯甲基硫代氨基甲酸酯 (1:1) (PFPeA- $C_8H_{10}N_2S$)	64808-55-5	-
	Pentanoic acid, 2,2,3,3,4,4,5,5,5-nonafluoro-, compd. with		
	phenylmethyl carbamimidothioate (1:1) (PFPeA-C ₈ H ₁₀ N ₂ S)		
	全氟戊酸酐 (PFPeAA)	308-28-1	-
	Nonafluoropentanoic anhydrid (PFPeAA)		
	全氟已酸 (Perfluorohexane acid) (PFHxA)	307-24-4	0.01
	全氟已酸銨 (PFHxA-NH ₄)	21615-47-4	-
	Ammonium perfluorohexanoate (PFHxA-NH ₄)		
	全氟已酸鈉 (PFHxA-Na)	2923-26-4	-
	Sodium perfluorohexanoate (PFHxA-Na)		
	全氟已酸鉀 (PFHxA-K)	3109-94-2	-
	Potassium perfluorohexanoate (PFHxA-K)		
	全氟己酸氟 (PFHxA-F)	355-38-4	-
	Perfluorohexanoyl fluoride (PFHxA-F)		
	全氟己酸銀 (PFHxA-Ag)	336-02-7	-
	Silver perfluorohexanoate (PFHxA-Ag)		
DELLYA 五甘暖的怎什物	全氟己酸鋰 (PFHxA-Li)	90430-61-8	-
PFHxA, 及其鹽&衍生物 (PFHxA, its salts & derivatives)	Lithium perfluorohexanoate (PFHxA-Li)		
(FFFIXA, its saits & derivatives)	全氟己酸酐	308-13-4	-
	Perfluorohexanoic anhydride		
	全氟己酸哌嗪 (2:1)	423-47-2	-
	Hexanoic acid, undecafluoro-, compd. with piperazine (2:1)		
	(8CI,9CI)		
	全氟己酸鹽	92612-52-7	-
	Perfluorohexanoate (anion)		
	全氟己酰氯 (PFHxA-Cl)	335-53-5	-
	Perfluorohexanoyl chloride (PFHxA-Cl)		
	全氟已酸與1-己胺 (1:1) (PFHxA-C ₆ H ₁₅ N)	565225-91-4	-
	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-, compd.		
	with 1-hexanamine (1:1) (PFHxA-C ₆ H ₁₅ N)		



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

期(Date): 22-May-2025 頁數(Page): 10 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
PFHxA, 及其鹽&衍生物 (PFHxA, its salts & derivatives)	全氟已酸與1-苯基哌嗪 (1:1) (PFHxA- $C_{10}H_{14}N_2$) Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-undecafluoro-, compd. with 1-phenylpiperazine (1:1) (PFHxA- $C_{10}H_{14}N_2$)	985-60-4	-
-	1H,1H,2H,2H-全氟-1-辛醇 (6:2 FTOH) 1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7	0.1
-	1H,1H,2H,2H-全氟辛基丙烯酸酯 (6:2 FTA) 1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6	0.1
-	1H,1H,2H,2H-全氟辛基甲基丙烯酸酯 (6_2 FTMAC) 1H,1H,2H,2H-Perfluorooctyl methacrylate (6:2 FTMAC)	2144-53-8	0.1
	1H,1H,2H,2H-全氟辛磺酸 (1H,1H,2H,2H- Perfluorooctanesulphonic acid) (6:2 FTS)	27619-97-2	0.01
	1H, 1H, 2H, 2H-全氟辛烷磺酸鈉 (6:2 FTS-Na) Sodium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-Na)	27619-94-9	-
	1H, 1H, 2H, 2H-全氟辛烷磺酸鉀 (6:2 FTS-K) Potassium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-K)	59587-38-1	-
6:2 FTS, 及其鹽 (6:2 FTS, its salts)	1H, 1H, 2H, 2H-全氟辛烷磺酸銨 (6:2 FTS-NH ₄) Ammonium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-NH ₄)	59587-39-2	-
	1H, 1H, 2H, 2H-全氟辛烷磺酸銨鋇 (6:2 FTS-Ba) 1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-, barium salt (2:1) (6:2 FTS-Ba)	1807944-82-6	-
	1H,1H,2H,2H-全氟辛磺酸鹽 (6:2 FTS(anion)) 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulfonate (6:2 FTS(anion))	425670-75-3	-
-	1-碘-1H,1H,2H,2H-全氟辛烷 (6:2 FTI) 1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-8-iodooctane (6:2 FTI)	2043-57-4	0.1
-	全氟己基碘 (PFHxI) Perfluorohexyl iodide (PFHxI)	355-43-1	0.2
-	N-(4,4,5,5,6,6,7,7,8,8,9,9,9-十三氟壬基)碘乙醯胺 n-(4,4,5,5,6,6,7,7,8,8,9,9,9-tridecafluorononyl)iodoacetamide	852527-50-5	0.01
-	全氟辛基三乙氧基矽烷 (POTS) Perfluorooctyl triethoxysilane (POTS)	51851-37-7	0.1



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
-	1H,1H,2H,2H-全氟辛基三氯矽烷 1H,1H,2H,2H-Perfluorooctyltrichlorosilane	78560-45-9	0.1
-	1H,1H,2H,2H-全氟辛基三甲氧基矽烷 1H,1H,2H,2H-Perfluorooctyltrimethoxysilane	85857-16-5	0.1
C-2 manaDAD TI H 1996	單[2-(全氟乙烷)乙基]磷酸鹽 (Mono[2-(perfluorohexyl)ethyl] Phosphate) (6:2 monoPAP)	57678-01-0	0.1
6:2 monoPAP, 及其鹽 (6:2 monoPAP, its salts)	單[2-(全氟乙烷)乙基]磷酸二銨 (6:2 monoPAP-NH ₄ NH ₄) Diammonium 6:2 fluorotelomer phosphate monoester (6:2 monoPAP-NH ₄ NH ₄)	1000852-37-8	-
-	2-碘-1H,1H,1H,2H,3H,3H-全氟壬烷 2-lodo-1H,1H,1H,2H,3H,3H-perfluorononane	38550-34-4	0.2
-	N-[3-(二甲基氨基)丙基]-3,3,4,4,5,5,6,6,7,7,8,8,8-十三氟辛基磺醯 胺N-氧化物 N-[3-(dimethylamino)propyl]-3,3,4,4,5,5,6,6,7,7,8,8,8- tridecafluorooctanesulphonamide N-oxide	80475-32-7	0.1
-	硫氰酸, 3,3,4,4,5,5,6,6,7,7,8,8,8-十三氟辛酯 Thiocyanic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester	26650-09-9	0.2
-	2H,2H,3H,3H-全氟壬酸 (6:3 FTCA) 2H,2H,3H,3H-Perfluorononanoic acid (6:3 FTCA)	27854-30-4	0.1
-	1H,1H,2H,2H-全氟辛硫醇(6:2 FTSH) 1H,1H,2H,2H-Perfluorooctanethiol (6:2 FTSH)	34451-26-8	0.2
-	1H,1H,2H,2H-全氟辛基二甲基氯矽烷 (6:2 FTSiMe2Cl) 1H,1H,2H,2H-Perfluorooctyldimethylchlorosilane (6:2 FTSiMe2Cl)	102488-47-1	0.2
-	1-碘-1H,1H-全氟庚烷 (6:1 FTI) 1-lodo-1H,1H-Perfluoroheptane (6:1 FTI)	212563-43-4	0.2
-	1H,1H,2H,2H,3H,3H-全氟壬基碘化物 (6:3 FTI) 3-(Perfluorohexyl)propyl iodide (6:3 FTI)	89889-20-3	0.2
COLTDA TO THE	1H,1H,2H,2H-全氟辛烷磷酸 (1H,1H,2H,2H- Perfluorooctanephosphonic acid) (6:2 FTPA)	252237-40-4	0.1
6:2 FTPA, 及其鹽 (6:2 FTPA, its salts)	((全氟己基)乙基)膦酸鈉 (Cheminox FHP 2OH-Na(PFHEPA-Na)) Sodium hydrogen ((perfluorohexyl)ethyl)phosphonate (Cheminox FHP 2OH-Na(PFHEPA-Na))	1189052-95-6	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 11 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
-	十一氟正己烷-1-醇 (5:1 FTOH) 1H,1H-perfluorohexan-1-ol (5:1 FTOH)	423-46-1	0.2
-	全氟-1-庚醇 (6:1 FTOH) 1H,1H-perfluoro-1-heptanol (6:1 FTOH)	375-82-6	0.2
-	3-全氟己基丙醇 (6:3 FTOH) 3-(perfluorohexyl)propanol (6:3 FTOH)	80806-68-4	0.2
-	3,3,4,4,5,5,6,6,7,7,7-十一氟-2-庚醇 3,3,4,4,5,5,6,6,7,7,7-undecafluoro-2-heptanol	914637-05-1	0.2
-	全氟己基辛烷 1-(perfluorohexyl)octane	133331-77-8	0.2
-	1H,1H-全氟庚基胺 (6:1 FTNH2) 1H,1H-Perfluoroheptylamine (6:1 FTNH2)	423-49-4	0.2
	全氟己基磺酸 (Perfluorohexane sulfonate) (PFHxS)	355-46-4	0.01
	全氟己基磺酸鈉 (PFHxS-Na) Perfluorohexanesulfonate Na-salt (PFHxS-Na)	82382-12-5	-
	全氟己基磺酸鉀 (PFHxS-K) Perfluorohexanesulfonate K-salt (PFHxS-K)	3871-99-6	-
	全氟己基磺酸銨 (PFHxS-NH ₄) Ammonium perfluorohexanesulfonate (PFHxS-NH ₄)	68259-08-5	-
	全氟己基磺酸鋰 (PFHxS-Li) Perfluorohexanesulfonate Li-salt (PFHxS-Li)	55120-77-9	-
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	全氟己基磺酸鋅 (PFHxS-Zn) Perfluorohexanesulfonate Zn-salt (PFHxS-Zn)	70136-72-0	-
(111), is said a delivatives,	全氟己基磺醯氟 (PFHxS-F) Perflurohexane sulphonyl fluoride (PFHxS-F)	423-50-7	-
	三苯基(苯甲基)磷-, 1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3	-
	N,N,N-三丁基-1-丁銨與十三氟-1-己烷磺酸的鹽 N,N,N-tributylbutan-1-aminium tridecafluorohexane-1- sulfonate	108427-54-9	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 12 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025 頁數(Page): 13 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	N,N,N-三乙基乙銨與十三氟-1-己烷磺酸的鹽 (1:1) N,N,N-triethylethanaminium tridecafluorohexane-1- sulfonate (1:1)	108427-55-0	-
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與吡咯烷的化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. With pyrrolidine (1:1)	1187817-57-7	-
	N-[4-[[4-(二乙基氨基)苯基][4-(乙基氨基)-1-萘基]亞甲基]-2,5-環己二-1-基]-N-乙基乙銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-24-0	-
	N-[4-[[4-(二甲基氨基)苯基][4-(乙基氨基)-1-萘基]亞甲基]-2,5-環 己二-1-基]-N-甲基甲銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4- (ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien- 1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro- 1-hexanesulfonate (1:1)	1310480-27-3	-
	N-[4-[[4-(二甲基氨基)苯基][4-(苯基氨基)-1-萘基]亞甲基]-2,5-環己二-1-基]-N-甲基甲銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-28-4	-
	β-環糊精, 與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸離子(1-) 的化合物 (1:1) Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)	1329995-45-0	-
	γ-環糊精, 與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸離子(1-) 的化合物 (1:1) Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)	1329995-69-8	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
三苯基锍,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	144116-10-9	-
喹啉鎓,1-(羧甲基)-4-[2-[4-[4-(2,2-二苯基乙烯基)苯基]-1,2,3,3a,4,8b-六氫環戊[b]吲哚-7-基]乙烯基]-,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1462414-59-0	-
二苯基碘鎓,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) lodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	153443-35-7	-
N,N,N-三甲基甲銨與1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸的鹽 (1:1) Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	189274-31-5	-
1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與2-甲基-2-丙胺的化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)	202189-84-2	-
雙[4-(1,1-二甲基乙基)苯基]碘鎓, 1,2,2,3,3,4,4,5,5,6,6,6 -十三氟-1-己 烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	213740-81-9	-
1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鎵鹽 (9CI) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, gallium salt (9CI)	341035-71-0	-
雙(4-甲基苯基)苯基硫磺酸1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	341548-85-4	-
	三苯基锍,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-1-hexanesulfonate (1:1)	三苯基硫,1,1,2,2,3,3,4,4,5,5,6,6,6-十三第-1-已烷磺酸鹽 (1:1) Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 14 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鈧(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1) (PFHxS-Sc)	350836-93-0	-
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸釹(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1) (PFHxS-Nd)	41184-65-0	-
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸釔(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1) (PFHxS-Y)	41242-12-0	-
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	(硫代二-4,1-亞苯基)雙[二苯基硫鹽與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟- 1-己烷磺酸 (1:2) Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)	421555-73-9	-
	雙[4-(1,1-二甲基丙基)苯基]碘鎓鹽與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟- 1-己烷磺酸 lodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid	421555-74-0	-
	三[4-(1,1-二甲基乙基)苯基]锍-,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟- 1-己烷磺酸鹽 (1:1) Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	425670-70-8	-
	十三氟己烷磺酸與二乙醇胺的化合物 Tridecafluorohexanesulphonic acid, compound with 2,2'- iminodiethanol (1:1)	70225-16-0	-
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與N·N-二乙基乙胺 的化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1)	72033-41-1	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 15 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL
(Group Name)	(Substance Name)		(mg/kg)
	雙[(1,1-二甲基乙基)苯基]碘鎓鹽-與1,1,2,2,3,3,4,4,5,5,6,6,6-十三 氟-1-己烷磺酸 (1:1) (9CI) lodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI)	866621-50-3	-
	(4-甲基苯基)二苯基锍-,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	910606-39-2	-
	[4-[(2-甲基-1-氧-2-丙烯-1-基)氧基]苯基]二苯基锍- ,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1- yl)oxy]phenyl]diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonate (1:1)	911027-68-4	-
PFHxS, 及其鹽&衍生物	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸銫鹽 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, cesium salt (1:1) (PFHxS-CsH)	92011-17-1	-
(PFHxS, its salts & derivatives)	二苯並[k,n][1,4,7,10,13]四氧噻吩基環戊二烯鎓,19-[4-(1,1-二甲基乙基)苯基]-6,7,9,10,12,13-六氫-,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	928049-42-7	-
	全氟己基磺酸氯 (PFHxS-Cl) Perfluorohexylsulfonyl chloride (PFHxS-Cl)	55591-23-6	-
	PFHxS-磺酸酯聚合物 Sulfonium, [4-[(2-methyl-1-oxo-2- propenyl)oxy]phenyl]diphenyl-, salt with1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2- methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2- methyl-2-propenoate	911027-69-5	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 16 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟己基磺酸鹽 Perfluorohexane sulfonate (anion)	108427-53-8	-
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	十三氟己烷-1-磺酸四丁基鏻 (PFHxS-P (C4H9)4)) Tetrabutylphosphonium tridecafluorohexane-1-sulfonate (PFHxS-P (C4H9)4))	2310194-12-6	-
-	N-甲基全氟-1-己烷磺醯胺 (N-MeFHxSA) N-Methylperfluoro-1-hexanesulfonamide (N-Me-FHxSA)	68259-15-4	0.01
-	全氟己烷磺醯胺 (PFHxSA) Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	0.01
-	N-[3-(二甲基氨基)丙基]十三氟己烷磺醯胺 (N-AP-FHxSA) N-[3-(dimethylamino)propyl]tridecafluorohexanesulphonamide (N-AP-FHxSA)	50598-28-2	0.01
-	2-[甲基[(十三氟己基)磺醯基]氨基]丙烯酸乙酯 (N-MeFHSEA) 2-[Methyl[(tridecafluorohexyl)sulphonyl]amino]ethyl acrylate (N-MeFHSEA)	67584-57-0	0.2
-	2-[甲基[(十三氟己基)磺醯基]氨基]乙基甲基丙烯酸酯 2-Propenoic acid, 2-methyl-, 2-[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]amino]ethyl ester	67584-61-6	0.1
-	2-[乙基[(十三氟己基)磺醯基]氨基]乙基甲基丙烯酸酯 2-Propenoic acid, 2-methyl-, 2-[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluorohexyl)sulfonyl]amino]ethyl ester	67906-70-1	0.1
-	十三氟-N-(2-羥基乙基)-N-甲基己烷磺醯胺 (MeFHxSE) 1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro- N-(2-hydroxyethyl)-N-methyl-(MeFHxSE)	68555-75-9	0.01
	N-乙基-N-[(十三氟己基)磺醯基]甘氨酸 (Glycine, N-ethyl-N- [(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)sulfonyl]) (EtFHxSAA)	68957-32-4	0.01
EtFHxSAA, 及其鹽 (EtFHxSAA, its salts)	N-乙基-N-[(十三氟己基)磺醯基]甘氨酸鉀 (EtFHxSAA-K) Potassium N-ethyl-n-[(tridecafluorohexyl)sulfonyl]glycinate (EtFHxSAA-K)	67584-53-6	-
	N-乙基-N-((十三氟己基)磺醯基)甘氨酸鈉 (EtFHxSAA-Na) Sodium N-ethyl-N-((tridecafluorohexyl)sulphonyl)glycinate (EtFHxSAA-Na)	68555-70-4	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 17 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟庚酸 (Perfluoroheptane acid) (PFHpA)	375-85-9	0.01
	全氟庚酸鈉 (PFHpA-Na) Sodium perfluoroheptanoate (PFHpA-Na)	20109-59-5	-
	全氟庚酸鉀 (PFHpA-K) Potassium perfluoroheptanoate (PFHpA-K)	21049-36-5	-
	全氟庚酸銨 (PFHpA-NH ₄) Ammonium perfluoroheptanoate (PFHpA-NH ₄)	6130-43-4	-
PFHpA, 及其鹽 (PFHpA, its salts)	全氟庚酸銫 (PFHpA-Cs) Cesium perfluoroheptanoate (PFHpA-Cs)	171198-24-6	-
	全氟庚酸銀 (PFHpA-Ag) Silver perfluoroheptanoate (PFHpA-Ag)	424-05-5	-
	全氟庚酸鋰 (PFHpA-Li) Lithium perfluoroheptanoate (PFHpA-Li)	60871-90-1	-
	全氟庚酸鹽 Perflluoroheptanoate (anion)	120885-29-2	-
	7H-十二氟庚酸 (7H-Dodecanefluoroheptane acid) (HPFHpA)	1546-95-8	0.01
	7H-十二氟庚酸鈉 (HPFHpA-Na) Sodium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-Na)	2264-25-7	-
HPFHpA, 及其鹽 (HPFHpA, its salts)	7H-十二氟庚酸銨 (HPFHpA-NH ₄) Ammonium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-NH ₄)	376-34-1	-
	全氟庚酸鹽 (HPFHpA(anion)) 7H-Perfluoroheptanoate (HPFHpA(anion))	69681-35-2	-
	全氟庚基磺酸 (Perfluoroheptane sulfonate) (PFHpS)	375-92-8	0.01
PFHpS, 及其鹽 (PFHpS, its salts)	全氟庚基磺酸鈉 (PFHpS-Na) Perfluoroheptanesulfonate Na-salt (PFHpS-Na)	21934-50-9	-
	全氟庚基磺酸鉀 (PFHpS-K) Potassium perfluoroheptanesulfonate (PFHpS-K)	60270-55-5	-
	全氟庚基磺酸銨 (PFHpS-NH ₄) Ammonium perfluoroheptanesulfonate (PFHpS-NH ₄)	68259-07-4	-
	全氟庚基磺酸鋰 (PFHpS-Li) Lithium perfluoroheptanesulfonate (PFHpS-Li)	117806-54-9	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 18 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟庚基磺酸-雙(2-羥乙基)銨 (1:1) 1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7- pentadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)	70225-15-9	-
	全氟庚基磺酸鹽 Perfluoroheptane sulfonate (anion)	146689-46-5	-
PFHpS, 及其鹽 (PFHpS, its salts)	全氟庚烷磺酸三乙銨 Triethylammonium perfluoroheptane sulfonate	72033-40-0	-
(TTTp3, its saits)	全氟庚烷磺酸四乙銨 Tetraethylammonium perfluoroheptane sulfonate	439863-97-5	-
	1-庚磺酸·1,1,2,2,3,3,4,4,5,5,6,6,7,7,7-十五氟酸酐 (9CI) (PFHpSA) 1-Heptanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,7- pentadecafluoro-, anhydride (9CI) (PFHpSA)	140429-92-1	-
	全氟辛烷磺酸 (Perfluorooctane sulfonates) (PFOS)	1763-23-1	0.01
	全氟辛基磺酸鉀 (PFOS-K) Potassium perfluorooctanesulfonate (PFOS-K)	2795-39-3	-
	全氟辛基磺酸鋰 (PFOS-Li) Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5	-
	全氟辛基磺酸銨 (PFOS-NH ₄) Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9	-
PFOS, 及其鹽&衍生物	全氟辛基磺酸二乙醇銨 (PFOS-NH(C2H4OH)2) Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(C2H4OH)2)	70225-14-8	-
(PFOS, its salts & derivatives)	全氟辛基磺酸四乙基銨 (PFOS-N(C_2H_5) ₄) Perfluorooctanesulfonic acid,tetraethylammonium salt (PFOS-N(C_2H_5) ₄)	56773-42-3	-
	全氟辛基磺酸二癸二甲基銨 (PFOS-DDA) N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1- sulfonate (PFOS-DDA)	251099-16-8	-
	全氟辛基磺酸四丁基銨 (PFOS-N(C_4H_9) $_4$) TetrabutylAmmonium perfluorooctanesulfonate (PFOS-N(C_4H_9) $_4$)	111873-33-7	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 19 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟辛基磺醯氟 (POSF) Perfluorooctane sulfonyl fluoride (POSF)	307-35-7	-
	全氟辛基磺酸鎂 (PFOS-Mg) Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4	-
	全氟辛基磺酸鈉 (PFOS-Na) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0	-
	全氟辛烷磺酸哌啶 Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluorooctanesulfonate	71463-74-6	-
	全氟辛烷磺酸鹽 Perfluorooctanesulfonate (anion)	45298-90-6	-
	全氟辛烷磺酸與 N,N-二乙基乙胺 (1:1) (PFOS-N(C_2H_5) ₃) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (PFOS-N(C_2H_5) ₃)	54439-46-2	-
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	N,N,N-三甲基-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛烷磺酸甲銨(1:1) (PFOS-N(CH ₃) ₄) Methanaminium, N,N,N-trimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(CH ₃) ₄)	56773-44-5	-
	1-五胺·N,N,N-三丙基-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟- 1 -辛烷磺酸鹽(1:1) (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁)) 1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁))	56773-56-9	-
	1-丁銨·N,N-二丁基-N-甲基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- 十七氟-1-辛烷磺酸鹽 (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃)) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0	-
	碘鎓·雙[4-(1,1-二甲基乙基)苯基]-·1,1,2,2,3,3,4,4,5,5,6,6,7,7 ,8,8,8 - 十七氟-1-辛烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	213740-80-8	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 20 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL (mg/lcg)
(Group Name)	(Substance Name) [二苯基鍺(2,4,6-三甲基苯基)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十	258341-99-0	(mg/kg)
	七氟- 1-辛烷磺酸鹽 (1:1) Sulfonium, diphenyl(2,4,6-trimethylphenyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)		
	吡啶鎓·1-十六烷基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 -辛烷磺酸鹽 (1:1) Pyridinium, 1-hexadecyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	334529-63-4	-
	1-癸胺·N,N,N-三乙基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七 氟-1 -辛烷磺酸鹽(1:1) 1-Decanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	773895-92-4	-
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	全氟辛烷磺酸四丁基鏻 (PFOS-P(C ₄ H ₉) ₄)) Tetrabutylphosphonium perfluorooctane sulfonate (PFOS-P(C ₄ H ₉) ₄))	2185049-59-4	-
	全氟辛烷磺酸二乙胺鹽 (PFOS-C ₄ H ₁₁ N) Perfluorooctanesulfonic acid diethylamine salt (PFOS- C ₄ H ₁₁ N)	2205029-08-7	-
	庚基二甲基 $\{2-[(2-甲基丙-2-烯酰基)氧基]乙基}全氟辛烷磺酸氮繁 鹽 (PFOS-C_{15}H_{30}NO_2) Heptyldimethyl\{2-[(2-methylprop-2-enoyl)oxy]ethyl\}azanium perfluorooctanesulfonate (PFOS-C_{15}H_{30}NO_2)$	1203998-97-3	-
	1-辛烷磺酸·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-,1,1' -酸酐 (PFOSAN) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-, 1,1'-anhydride (PFOSAN)	423-92-7	-
-	N-乙基全氟正辛磺醯胺 (EtFOSA) N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	0.01
-	N-甲基全氟正辛磺醯胺 (N-Me-FOSA) N-Methyl-Perfluoroctanesulfonamide (N-Me-FOSA)	31506-32-8	0.01
-	N-乙基全氟辛基磺醯胺乙醇 (N-Et-FOSE alcohol) N-Ethyl-Perfluoroctanesulfonamidoethanol (N-Et-FOSE alcohol)	1691-99-2	0.01

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 21 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 22 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol)	24448-09-7	0.01
全氟辛基磺醯胺 (Perfluoroctanesulfonamide) (PFOSA)	754-91-6	0.01
全氟辛基磺醯胺鋰鹽 (1:1) (PFOSA-Li) Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9	-
全氟辛基磺醯胺鈉鹽 (1:1) (PFOSA-Na) Perfluorooctanesulfonamide Sodium salt (1:1) (PFOSA-Na)	76752-78-8	-
全氟辛基磺醯胺鉀鹽 (1:1) (PFOSA-K) Perfluorooctanesulfonamide Potassium salt (1:1) (PFOSA-K)	76752-70-0	-
全氟辛基磺醯胺銨鹽 (1:1) (PFOSA-NH ₄) Perfluorooctanesulfonamide Ammonium salt (1:1) (PFOSA-NH ₄)	76752-72-2	-
全氟辛基磺醯胺三乙胺的化合物(1:1) (PFOSA- $C_6H_{15}N$) heptadecafluorooctane-1-sulphonamide, compound with triethylamine(1:1) (PFOSA- $C_6H_{15}N$)	76752-82-4	-
全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1	0.01
全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5	-
全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8	-
全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3	-
全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	-
全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	-
全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5	-
全氟辛酸鈷 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6	-
全氟辛酸銫 (PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9	-
	(Substance Name) N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol) 全氟辛基磺醯胺 (Perfluoroctanesulfonamide) (PFOSA) 全氟辛基磺醯胺 (Perfluoroctanesulfonamide) (PFOSA) 全氟辛基磺醯胺 (PEROSA-Li) Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li) 全氟辛基磺醯胺纳鹽 (1:1) (PFOSA-Na) Perfluorooctanesulfonamide Sodium salt (1:1) (PFOSA-Na) 全氟辛基磺醯胺鉀鹽 (1:1) (PFOSA-K) Perfluorooctanesulfonamide Potassium salt (1:1) (PFOSA-K) 全氟辛基磺醯胺銨鹽 (1:1) (PFOSA-NH4) Perfluorooctanesulfonamide Ammonium salt (1:1) (PFOSA-NH4) 全氟辛基磺醯胺三乙胺的化合物(1:1) (PFOSA-C ₆ H ₁₅ N) heptadecafluorooctane-1-sulphonamide, compound with triethylamine(1:1) (PFOSA-C ₆ H ₁₅ N) 全氟辛酸 (Perfluorooctanoic acid) (PFOA) 全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na) 全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K) 全氟辛酸鉀 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F) 全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO) 全氟辛酸銨 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li) 全氟辛酸銨 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) 24448-09-7 N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol) 24448-09-7 24752-79-9 24752-79-9 24448-09-7 24752-79-9 24752-79-9 24448-09-7 24752-79-9 24448-09-7 24752-79-9 24752-79-9 24448-09-7 24752-79-9 24752-79-9 24448-09-7 24752-79-9 24752



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟辛酸鉻 (PFOA-Cr(3 ⁺)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) (PFOA-Cr(3 ⁺))	68141-02-6	-
	全氟辛酸-哌嗪(2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9	-
	全氟辛酸鹽 Pentadecafluorooctanoate (anion)	45285-51-6	-
	全氟辛酸酐 Perfluorooctanoic Anhydride	33496-48-9	-
	乙銨·N,N,N-三乙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctanoate (1:1)	98241-25-9	-
	全氟辛酸四甲銨鹽 Tetramethylammoniumperfluoroctanoat	32609-65-7	-
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	1-丙銨·N,N,N-三丙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) 1-Propanaminium, N,N,N-tripropyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	277749-00-5	-
	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-鉀鹽·水合物 (1:1:2) (PFOA-K(H ₂ O) ₂) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, potassium salt, hydrate (1:1:2) (PFOA-K(H ₂ O) ₂)	98065-31-7	-
	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-·化合物。與乙胺 (1:1) (PFOA-C ₂ H ₇ N) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6	-
	十五氟辛酸化合物與吡啶 (1:1) (9CI) (PFOA- C_5H_5N) Octanoic acid, pentadecafluoro-, compd. with pyridine (1:1) (9CI) (PFOA- C_5H_5N)	95658-47-2	-
	十五氟辛酸-1-苯基哌嗪(1:1) (PFOA- $C_{10}H_{14}N_2$) Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA- $C_{10}H_{14}N_2$)	1514-68-7	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 23 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

ate): 22-May-2025 頁數(Page): 24 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	1-辛胺·N,N,N-三甲基-·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) (PFOA- C ₁₁ H ₂₆ N) 1-Octanaminium, N,N,N-trimethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1) (PFOA- C ₁₁ H ₂₆ N)	927835-01-6	-
-	全氟辛酸甲酯 (Me-PFOA) Methyl perfluorooctanoate (Me-PFOA)	376-27-2	0.1
-	全氟辛酸乙酯 (Et-PFOA) Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	0.1
-	全氟辛基碘烷 (PFOI) Perfluoro-1-iodooctane (PFOI)	507-63-1	0.1
-	3-全氟庚基丙酸 (7:3 FTCA) 3-Perfluoroheptyl propanoic acid (7:3 FTCA)	812-70-4	0.01
	單-[2-(全氟辛基)乙烷]磷酸酯 (Mono-[2- (perfluorooctyl)ethyl]phosphate) (8:2 monoPAP)	57678-03-2	0.1
	8:2氟調聚物磷酸二銨鹽 8:2 Fluorotelomer diammonium phosphate	93857-44-4	-
	8:2氟調聚物磷酸鈉鹽 Disodium 1H,1H,2H,2H-perfluorodecylphosphate	438237-75-3	-
	雙[2-(全氟辛基)乙基]磷酸銨鹽 Ammonium bis[2-(perfluorohexyl)ethyl] phosphate	1764-95-0	-
8:2 monoPAP, 及其鹽 (8:2 monoPAP, its salts)	單[2-(全氟辛基)乙基]磷酸銨鹽 3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctanol phosphate ammonium salt	92401-44-0	-
	單[2-(全氟辛基)乙基]磷酸鹽單鈉鹽 Sodium 1H,1H,2H,2H-perfluorooctylphosphate	144965-22-0	-
	單[2-(全氟辛基)乙基]磷酸單鉀鹽 Monopotassium monoperfluorohexyl ethylphosphate	150033-28-6	-
	單[2-(全氟辛基)乙基]磷酸氫銨鹽 Ammonium 2-(perfluorohexyl)ethyl hydrogen phosphate	2353-52-8	-
	1H,1H,2H,2H-全氟癸磺酸 (1H,1H,2H,2H- Perfluorodecanesulfonic acid) (8:2 FTS)	39108-34-4	0.01
8:2 FTS, 及其鹽 (8:2 FTS, its salts)	1H, 1H, 2H, 2H-全氟癸磺酸鉀 (8:2 FTS-K) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Potassium salt (8:2 FTS-K)	438237-73-1	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 25 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	1H, 1H, 2H, 2H-全氟癸磺酸銨 (8:2 FTS-NH ₄) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Ammonium salt (8:2 FTS-NH ₄)	149724-40-3	-
8:2 FTS, 及其鹽 (8:2 FTS, its salts)	1H, 1H, 2H, 2H-全氟癸磺酸鈉 (8:2 FTS-Na) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Sodium salt (8:2 FTS-Na)	27619-96-1	-
	1H,1H,2H,2H-全氟癸磺酸鹽 (8:2 FTS(anion)) 8: 2 Fluorotelomer sulfonate (anion) (8:2 FTS(anion))	481071-78-7	-
-	1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH) 1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	0.1
-	1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2 FTA) 1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	0.1
-	1H,1H,2H,2H-全氟癸基甲基丙烯酸酯 (8:2 FTMA) 1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	0.1
	2H,2H-全氟癸酸 (2H,2H-Perfluorodecane acid) (H2PFDA)	27854-31-5	0.01
H2PFDA, 及其鹽 (H2PFDA, its salts)	四丁基磷2H,2H-全氟癸酸酯 Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	882489-14-7	-
-	1H,1H,2H,2H-全氟癸基碘 (8_2 FTI) 1H,1H,2H,2H-Perfluorodecyl iodide (8_2 FTI)	2043-53-0	0.1
-	1H,1H,2H,2H-全氟十七烷三甲基氧矽烷(8:2 FTSi(OC2H5)3) 1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTSi(OC2H5)3)	101947-16-4	0.1
	2H,2H,3H,3H-全氟癸酸 (2H,2H,3H,3H-Perfluoroundecanoic Acid) (4HPFUnA)	34598-33-9	0.01
4HPFUnA, 及其鹽 (4HPFUnA, its salts)	2H,2H,3H,3H-全氟癸酸鉀 (H4PFUnA-K) Potassium 2H,2H,3H,3H-Perfluoroundecanoate (H4PFUnA-K)	83310-58-1	-
	2H,2H,3H,3H-全氟癸酸鋰 (H4PFUnA-Li) Lithium 3-(perfluorooctyl)propanoate (H4PFUnA-Li)	67304-23-8	-
-	1H,1H,2H-全氟-1-癸烯 (PFDE) 1H,1H,2H-Heptadecafluoro-1-decene (PFDE)	21652-58-4	0.1
8:2diPAP, 及其鹽 (8:2diPAP, its salts)	雙(1H,1H,2H,2H-全氟癸基)磷酸酯 (Bis(1H,1H,2H,2H- Perfluorodecyl)phosphate) (8:2diPAP)	678-41-1	0.01



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

到(Date): 22-May-2025 頁數(Page): 26 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	雙(1H,1H,2H,2H-全氟癸基)磷酸酯鈉 (8:2diPAP-Na) Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)	114519-85-6	-
8:2diPAP, 及其鹽	雙(2-羥乙基)雙((全氟辛基)乙基)磷酸氫銨 Bis(2-hydroxyethyl)ammonium bis((perfluorooctyl)ethyl) hydrogen phosphate	57677-97-1	-
(8:2diPAP, its salts)	雙[2-(全氟辛基)乙基]磷酸銨鹽 (8:2diPAP-NH ₄) Bis[2-(perfluorooctyl)ethyl] phosphate ammonium salt (8:2diPAP-NH ₄)	93776-20-6	-
	8:2 氟調聚物磷酸二酯離子 8:2 Fluorotelomer phosphate diester ion	1411713-91-1	-
	全氟壬酸 (Perfluorononan-1-oic acid) (PFNA)	375-95-1	0.01
	全氟壬酸鈉 (PFNA-Na) Perfluorononanoate Na-salt (PFNA-Na)	21049-39-8	-
	全氟壬酸銨 (APFN) Perfluorononanoate ammounium salt (APFN)	4149-60-4	-
	全氟壬酸鉀 (PFNA-K) Potassium perfluorononanoate (PFNA-K)	21049-38-7	-
	全氟壬酸鋰 (PFNA-Li) Perfluorononanoate Li-Salt (PFNA-Li)	60871-92-3	-
	全氟壬酸銀 (PFNA-Ag) Silver perfluorononanoate (PFNA-Ag)	7358-16-9	-
PFNA, 及其鹽 (PFNA, its salts)	全氟壬酸甲烷銨 (PFNA-NH ₃ (CH ₃)) Methanaminium perfluorononanoate (PFNA-NH ₃ (CH ₃))	77032-23-6	-
	全氟王酸-N-乙基乙胺 (1:1) (PFNA-NH $_2$ (C_2 H $_5$) $_2$)) Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-ethylethanamine (1:1) PFNA-NH $_2$ (C_2 H $_5$) $_2$)	77032-27-0	-
	全氟壬酸-N-甲基甲胺 (1:1) (PFNA-NH $_2$ (CH $_3$) $_2$) Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with N-methylmethanamine (1:1) (PFNA-NH $_2$ (CH $_3$) $_2$)	77032-24-7	-
	全氟壬酸-N·N-二乙基乙醯胺 (1:1) (9CI) (PFNA-NH(C_2H_5) $_3$)) Nonanoic acid, heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (9CI) (PFNA-NH(C_2H_5) $_3$)	327176-80-7	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 27 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟壬酸-哌啶 (1:1) (9CI) (PFNA-NH ₂ (C_5H_{10})) Nonanoic acid, heptadecafluoro-, compd. with piperidine (1:1) (9CI) (PFNA-NH ₂ (C_5H_{10}))	95682-66-9	-
	全氟壬酸-苯胺 (1:1) (PFNA-NH $_3$ (C $_6$ H $_5$)) Nonanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluoro-, compd. with benzenamine (1:1) (PFNA-NH $_3$ (C $_6$ H $_5$))	95682-67-0	-
PFNA, 及其鹽 (PFNA, its salts)	全氟壬酸-環己胺 (1:1) (9CI) ((PFNA-NH $_3$ (C $_6$ H $_{11}$)) Nonanoic acid, heptadecafluoro-, compd. with cyclohexanamine (1:1) (9CI) (PFNA-NH $_3$ (C $_6$ H $_{11}$))	328531-06-2	-
	全氟壬酸鹽 Perfluorononanoate (anion)	72007-68-2	-
	4 -[(6-甲氧基-3-噠嗪基)氨磺酰基]苯銨十七氟壬酸酯 (PFNA- $C_{11}H_{12}N_4O_3S$) 4 -[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium heptadecafluorononanoate (PFNA- $C_{11}H_{12}N_4O_3S$)	298703-33-0	-
	全氟壬酸酐 (PFNAA) Perfluorononanoic anhydride (PFNAA)	228407-54-3	-
-	全氟-3,7-二甲基辛酸 (PF-3,7-DMOA) Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6	0.01
	全氟癸酸 (Perfluorodecane acid) (PFDA)	335-76-2	0.01
	全氟癸酸鈉 (PFDA-Na) Perfluorodecanoate Na-salt (PFDA-Na)	3830-45-3	-
	全氟癸酸氨 (APFDA) Perfluorodecanoate ammonium salt (APFDA)	3108-42-7	-
	全氟癸酸鉀 (PFDA-K*) Potassium perfluorodecanoate (PFDA-K*)	51604-85-4	-
PFDA, 及其鹽 (PFDA, its salts)	全氟癸酸銀 (PFDA-Ag) Silver perfluorodecanoate (PFDA-Ag)	5784-82-7	-
	全氟癸酸鋰 (PFDA-Li) Lithium perfluorodecanoate (PFDA-Li)	84743-32-8	-
	全氟癸酸鹽 Perfluorodecanoate (anion)	73829-36-4	-
	全氟癸酸酐 (PFDAA) Perfluorodecanoic anhydride (PFDAA)	942199-24-8	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟十一烷酸 (Perfluoroundecanoic acid) (PFUnDA)	2058-94-8	0.01
	全氟十一烷酸銨 (PFUnDA-NH ₄) Ammonium perfluoroundecanoate (PFUnDA-NH ₄)	4234-23-5	-
	全氟十一烷酸鈉 (PFUnDA-Na) Perfluoroundecanoic acid sodium salt (PFUnDA-Na)	60871-96-7	-
PFUnDA, 及其鹽 (PFUnDA, its salts)	全氟十一烷酸鉀 (PFUnDA-K) Potassium perfluoroundecanoate (PFUnDA-K)	30377-53-8	-
	全氟十一烷酸鈣 (PFUnDA-Ca) Calcium perfluoroundecanoate (PFUnDA-Ca)	97163-17-2	-
	全氟十一烷酸鹽 Perfluoroundecanoate (anion)	196859-54-8	-
	全氟十二烷酸 (Perfluorododecanoic acid) (PFDoDA)	307-55-1	0.01
PFDoDA, 及其鹽	全氟十二烷酸銨 (APFDoDA) Ammonium perfluorododecanoate (APFDoDA)	3793-74-6	-
(PFDoDA, its salts)	全氟十二烷酸鹽 Perfluorododecanoate (anion)	171978-95-3	-
	全氟癸烷磺酸 (Perfluorodecane sulfonate) (PFDS)	335-77-3	0.01
	全氟癸烷磺酸鈉 (PFDS-Na) Perfluorodecanesulfonate Na-salt (PFDS-Na)	2806-15-7	-
DEDC 77 HR	全氟癸烷磺酸鉀 (PFDS-K) Perfluorodecanesulfonate K-salt (PFDS-K)	2806-16-8	-
PFDS, 及其鹽 (PFDS, its salts)	全氟癸基磺酸銨 (PFDS-NH ₄) Perfluoroaliphatic dean-sulfonate salt of NH ₄ (PFDS-NH ₄)	67906-42-7	-
	全氟癸基磺酸鹽 Perfluorodecane sulfonate (anion)	126105-34-8	-
	全氟癸磺酸酐 (PFDSA) Perfluorodecane sulfonic anhydride (PFDSA)	51667-62-0	-
	全氟十三烷酸 (Pentacosafluorotridecanoic acid) (PFTrDA)	72629-94-8	0.01
PFTrDA, 及其鹽 (PFTrDA, its salts)	全氟十三烷酸銨 (PFTrDA-NH ₄) Ammonium perfluorotridecanoate (PFTrDA-NH ₄)	4288-72-6	-
	全氟十三烷酸鈉 (PFTrDA-Na) Sodium perfluorotridecanoate (PFTrDA-Na)	60872-01-7	-
	全氟十三烷酸鹽 Perfluorotridecanoate (anion)	862374-87-6	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 28 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
PFTDA, 及其鹽	全氟十四烷酸 (Perfluorotetradecanoic acid) (PFTDA)	376-06-7	0.01
(PFTDA, 次兵鹽 (PFTDA, its salts)	全氟十四烷酸鹽 Perfluorotetradecanoate (anion)	365971-87-5	-
-	1H,1H,2H,2H-全氟-1-十二醇 (10:2 FTOH) 1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1	0.1
-	1H,1H,2H,2H-全氟十二烷基丙烯酸酯 (10:2 FTA) 1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5	0.1
-	1H,1H,2H,2H-全氟十二烷基甲基丙烯酸酯 (10:2 FTMA) 1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	2144-54-9	0.1
-	1H,1H,2H,2H-全氟十四烷基醇 (12:2 FTOH) 1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	0.1
10.2 FTC 77 甘蓝	1H,1H,2H,2H-全氟十二烷磺酸 (1H,1H,2H,2H- Perfluorododecane sulfonic acid) (10:2 FTS)	120226-60-0	0.01
10:2 FTS, 及其鹽 (10:2 FTS, its salts)	1H,1H,2H,2H-全氟十二烷磺酸鈉鹽 (10:2 FTS-Na) 1H,1H,2H,2H-Perfluorododecane sulfonic acid Sodium Salt (10:2 FTS-Na)	108026-35-3	-
-	1H,1H,2H,2H-全氟十二烷基碘 (10:2 FTI) 1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	0.1
-	1H,1H,2H,2H-全氟十四烷基碘 (12:2 FTI) 1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	0.1
	全氟壬烷磺酸 (Perfluorononane sulfonic acid) (PFNS)	68259-12-1	0.01
	全氟壬烷磺酸鈉 (PFNS-Na*) Sodium perfluoro-1-nonanesulfonate (PFNS-Na*)	98789-57-2	-
PFNS, 及其鹽 (PFNS, its salts)	全氟壬烷磺酸銨 (PFNS-NH ₄) Ammonium nonadecafluorononanesulphonate (PFNS-NH ₄)	17202-41-4	-
(PFINS, ILS SAILS)	全氟壬烷磺酸鉀 (PFNS-K*) Potassium perfluorononanesulfonate (PFNS-K*)	29359-39-5	-
	全氟壬烷磺酸鹽 Perfluorononane sulfonate (anion)	474511-07-4	-
DELIADO 及甘臨	全氟十一烷磺酸 (Perfluoroundecane sulfonic acid) (PFUnDS)	749786-16-1	0.01
PFUnDS, 及其鹽 (PFUnDS, its salts)	全氟十一烷磺酸鹽 Perfluoroundecanesulfonate (anion)	441296-91-9	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 29 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
<u> </u>	全氟十二烷磺酸 (Perfluorododecane sulfonic acid) (PFDoDS)	79780-39-5	0.01
DED DO 77 ++ 575	全氟十二烷磺酸鈉 (PFDoDS-Na*) Sodium perfluoro-1-dodecanesulfonate (PFDoDS-Na*)	1260224-54-1	-
PFDoDS, 及其鹽 (PFDoDS, its salts)	全氟十二烷磺酸鉀 (PFDoDS-K) Potassium perfluorododecanesulfonate (PFDoDS-K)	85187-17-3	-
	全氟十二烷磺酸鹽 Perfluorododecane sulfonate (anion)	343629-43-6	-
DET-DC THE	全氟十三烷磺酸 (Perfluorotridecane sulfonic acid) (PFTrDS)	791563-89-8	0.01
PFTrDS, 及其鹽 (PFTrDS, its salts)	全氟十三烷磺酸鈉 (PFTrDS-Na*) Sodium perfluoro-1-tridecanesulfonate (PFTrDS-Na*)	174675-49-1	-
	雙[2-(全氟癸基)乙基]磷酸鹽 (10:2 Fluortelomerphosphatediester) (10:2 diPAP)	1895-26-7	0.1
10:2 diPAP, 及其鹽 (10:2 diPAP, its salts)	雙[3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-二十一氟十二烷基]磷酸氫鹽化合物與 2,2'-亞氨基二乙醇 (1:1) (10:2 diPAP-C ₄ H ₁₁ O ₂) bis[3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluorododecyl] hydrogen phosphate, compound with 2,2'-iminodiethanol (1:1) (10:2 diPAP-C ₄ H ₁₁ O ₂)	57677-98-2	-
-	全氟碘代十二烷 (PFDoDI) Perfluorododecyl iodide (PFDoDI)	307-60-8	0.1
-	1-碘全氟癸烷 (PFDI) Perfluorodecyl iodide (PFDI)	423-62-1	0.1
10:2 monoPAP, 及其鹽	單[2-(全氟癸基)乙基]磷酸酯 (10:2 Fluortelomerphosphatemonoester) (10:2 monoPAP)	57678-05-4	0.1
(10:2 monoPAP, its salts)	單[2-(全氟癸基)乙基]磷酸雙銨鹽 10:2 Fluorotelomer diammonium dihydrogen phosphate	93857-45-5	-
PFPeDA, 及其鹽	全氟十五烷酸 (Perfluoropentadecanoic acid) (PFPeDA, C15)	141074-63-7	0.1
(PFPeDA, 次兵鹽 (PFPeDA, its salts)	全氟十五烷酸鹽 (PFPeDA (anion)) Nonacosafluoropentadecanoate (PFPeDA (anion))	1214264-29-5	-
PFHxDA, 及其鹽 (PFHxDA, its salts)	全氟十六烷酸 (Perfluorohexadecanoic acid) (PFHxDA, C16)	67905-19-5	0.01
	全氟十六烷酸鹽 (PFHxDA (anion)) Hentriacontafluorohexadecanoate anion (PFHxDA (anion))	1214264-30-8	-
PFODA, 及其鹽	全氟十八烷酸 (Perfluorooctadecanoic acid) (PFODA, C18))	16517-11-6	0.01
PFODA, 及其鹽 (PFODA, its salts)	全氟十八烷酸鹽 (PFODA (anion)) Perfluorooctadecanoate anion (PFODA (anion))	798556-82-8	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 30 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

期(Date): 22-May-2025 頁數(Page): 31 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
-	全氟-3-甲氧基丙酸 (PFMPA) Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	0.01
-	全氟 4-甲氧基丁酸 (PFMBA) Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	0.01
-	全氟-3,6-二氧雜庚酸 (NFDHA) Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	0.01
	4,8-二氧雜-3H-全氟壬酸 (4,8-Dioxa-3H-perfluorononanoic acid) (ADONA)	919005-14-4	0.01
ADONA, 及其鹽 (ADONA, its salts)	4,8-二氧雜-3H-全氟壬酸銨 (ADONA-NH ₄) Ammonium 4,8-dioxa-3H-perfluorononanoate (ADONA-NH ₄)	958445-44-8	-
	4,8-二氧雜-3H-全氟壬酸鈉 (ADONA-Na) Sodium 4,8-dioxa-3H-perfluorononanoate (ADONA-Na)	2250081-67-3	-
-	1H,1H,2H,2H-全氟-1-己醇 (4:2 FTOH) 1H,1H,2H,2H-Perfluoro-1-hexanol (4:2FTOH)	2043-47-2	0.4
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸 (2,3,3,3-tetrafluoro-2- (heptafluoropropoxy)propionic acide) (HFPO-DA)	13252-13-6	0.01
	丙酸・2,3,3,3-四氟-2-(1,1,2,2,3,3,3-七氟丙氧基)-(2R)- Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3- heptafluoropropoxy)-(2R)-	75579-39-4	-
	丙酸・2,3,3,3-四氟-2-(1,1,2,2,3,3,3-七氟丙氧基)-(2S)- Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3- heptafluoropropoxy)-(2S)-	75579-40-7	-
HFPO-DA, 及其鹽&衍生物 (HFPO-DA, its salts & derivatives)	2,3,3,3-四氟-2-(七氟丙氧基)丙酸鉀 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, K- salts	67118-55-2	-
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸銨 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, ammonium salts	62037-80-3	-
	丙酸·2,3,3,3-四氟-2-(1,1,2,2,3,3,3-七氟丙氧基)-鈉鹽 (1:1) Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3- heptafluoropropoxy)-, sodium salt (1:1)	67963-75-1	-
	丙酸・2,3,3,3-四氟-2-(1,1,2,2,3,3,3-七氟丙氧基)-・離子(1-) Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3- heptafluoropropoxy)-, ion(1-)	122499-17-6	-



Test Report

號碼(No.): ETR25500975 日期(Da

日期(Date): 22-May-2025

頁數(Page): 32 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL
(Group Name)	(Substance Name)		(mg/kg)
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸化合物與 N-丙基-1-丙胺 (1:1) Propanoic acid, 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3- heptafluoropropoxy)-, compd. with N-propyl-1- propanamine (1:1)	165951-17-7	-
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸化合物與 N,N-二乙基乙胺 (1:1) (9CI) Propanoic acid, 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-, compd. with N,N-diethylethanamine (1:1) (9CI)	165951-18-8	-
HFPO-DA, 及其鹽&衍生物 (HFPO-DA, its salts & derivatives)	4-[(6-甲氧基-3-噠嗪基)氨磺酰]2,3,3,3-四氟-2-(七氟丙氧基)丙酸 苯銨 4-[(6-Methoxy-3-pyridazinyl)sulfamoyl]anilinium 2,3,3,3- tetrafluoro-2-(heptafluoropropoxy)propanoate	298703-31-8	-
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸醯基氟化物 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, its acyl halides	2062-98-8	-
	苯甲酸 · 2,3,6-三碘-,(1-甲基-3-哌啶基)甲酯化合物與 2,3,3,3-四氟-2-(1,1,2,2,3,3,3-七氟丙氧基)丙酸酯 (1:1) (HFPO-C ₁₄ H ₁₆ I ₃ NO ₂) Benzoic acid, 2,3,6-triiodo-, (1-methyl-3-piperidinyl)methyl ester, compd. with 2,3,3,3-tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoro propoxy)propanoate (1:1) (HFPO-C ₁₄ H ₁₆ I ₃ NO ₂)	2412106-69-3	-
	1H,1H,2H,2H-全氟己磺酸 (1H,1H,2H,2H- Perfluorohexanesulfonic acid) (4:2 FTS)	757124-72-4	0.01
4:2 FTS, 及其鹽 (4:2 FTS, its salts)	1H,1H,2H,2H-全氟己烷磺酸鈉 1H,1H,2H,2H-perfluorohexane sulfonate acid sodium salt	27619-93-8	-
	1H,1H,2H,2H-全氟己磺酸鹽 (4:2FTS(anion)) 4: 2 Fluorotelomer sulfonate (4:2FTS(anion))	414911-30-1	-
	全氟辛烷磺酰胺乙酸 (Perfluorooctane sulfonamidoacetic acid) (FOSAA)	2806-24-8	0.01
FOSAA, 及其鹽 (FOSAA, its salts)	全氟辛烷磺酰胺乙酸鹽 (FOSAA(anion)) N-[(Perfluorooctyl)sulfonyl]glycinate (FOSAA(anion))	909405-47-6	-
	全氟辛烷磺酰胺乙酸鉀 (FOSAA-K) N-[(Perfluorooctyl)sulfonyl]glycine potassium salt (1:1) (FOSAA-K)	75260-69-4	-
	全氟辛烷磺酰胺乙酸鈉 (FOSAA-Na) N-[(Perfluorooctyl)sulfonyl]glycine sodium salt (1:1) (FOSAA-Na)	115716-87-5	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
(Group Name)	N-甲基全氟辛烷磺酰胺乙酸 (N-methylperfluorooctane	2355-31-9	0.01
N-MeFOSAA, 及其鹽	sulfonamidoacetic acid) (N-MeFOSAA) N-甲基全氟辛烷磺酰胺乙酸鹽 (N-Me-FOSAA(anion)) 2-(N-Methylperfluorooctanesulfonamido)acetate (N-Me-FOSAA(anion))	909405-48-7	-
(N-MeFOSAA, its salts)	N-甲基全氟辛烷磺酰胺乙酸鉀 (N-Me-FOSAA-K) Potassium N-((heptadecafluorooctyl)sulphonyl)-N-methylglycinate (N-Me-FOSAA-K)	70281-93-5	-
	N-乙基全氟辛烷磺酰胺乙酸 (N-ethylperfluorooctane sulfonamidoacetic) (N-EtFOSAA)	2991-50-6	0.01
	N-乙基全氟辛烷磺酰胺乙酸鉀 (N-Et-FOSAA-K) Potassium N-ethyl-N-((heptadecafluorooctyl)sulphonyl)glycinate (N-Et-FOSAA-K)	2991-51-7	-
N-EtFOSAA, 及其鹽 (N-EtFOSAA, its salts)	N-乙基全氟辛烷磺酰胺乙酸鹽 (N-Et-FOSAA(anion)) 2-(N-Ethyl-perfluorooctanesulfonamido)acetate (N-Et-FOSAA(anion))	909405-49-8	-
	N-乙基全氟辛烷磺酰胺乙酸氨 (N-Et-FOSAA-NH4) Ammonium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-NH4)	2991-52-8	-
	N-乙基全氟辛烷磺酰胺乙酸鈉 (N-Et-FOSAA-Na) Sodium 2-(N-ethylperfluorooctanesulfonamido)acetate (N-Et-FOSAA-Na)	3871-50-9	-
	全氟戊磺酸 (Perfluoropentane sulfonic acid) (PFPeS)	2706-91-4	0.01
	全氟戊磺酸鈉 (PFPeS-Na*) Sodium perfluoro-1-pentanesulfonate (PFPeS-Na*)	630402-22-1	-
	全氟戊磺酸鉀 (PFPeS-K) Potassium perfluoropentane-1-sulphonate (PFPeS-K)	3872-25-1	-
PFPeS, 及其鹽 (PFPeS, its salts)	全氟戊磺酸銨 (PFPeS-NH ₄ *) Ammonium perfluoropentanesulfonate (PFPeS-NH ₄ *)	68259-09-6	-
	全氟戊磺酸-雙(2-羥乙基)銨 Bis(2-hydroxyethyl) ammonium 1,1,2,2,3,3,4,4,5,5,5- undecafluoropentane-1-sulphonate	70225-17-1	-
	全氟戊磺酸鋰 (PFPeS-Li) Undecafluoropentane-1-sulfonic acid lithium salt (PFPeS-Li)	1046864-81-6	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 33 of 44



Test Report

號碼(No.): ETR25500975 日期(Date):

日期(Date): 22-May-2025

頁數(Page): 34 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	全氟戊磺酸鹽 Perfluoropentane sulfonate (anion)	175905-36-9	-
PFPeS, 及其鹽 (PFPeS, its salts)	全氟戊磺酸三乙銨 Triethylammonium perfluoropentane sulfonate	72033-42-2	-
	全氟戊磺酸酐 (PFPeSA) Perfluoropentane sulfonic anhydride (PFPeSA)	161877-72-1	-
3:3 FTCA, 及其鹽	3-全氟丙基丙酸 (3:3 FTCA) 3-Perfluoropropyl propanoic acid (3:3 FTCA)	356-02-5	0.01
(3:3 FTCA, its salts)	4,4,5,6,6,6-七氟己酸鹽 (3:3 FTCA(anion)) 4,4,5,5,6,6,6-Heptafluorohexanoate (3:3 FTCA(anion))	1169706-83-5	-
-	2-全氟己基乙酸 (6:2 FTCA) 2-Perfluorohexyl ethanoic acid (6:2 FTCA)	53826-12-3	0.01
5:3 FTCA, 及其鹽	3-全氟戊基丙酸 (5:3 FTCA) 3-Perfluoropentyl propanoic acid (5:3 FTCA)	914637-49-3	0.01
(5:3 FTCA, its salts)	2H·2H·3H·3H全氟辛酸鹽 (5:3 FTCA(anion)) 2H,2H,3H,3H-Perfluorooctanoate (5:3 FTCA(anion))	1799325-94-2	-
	全氟(2-乙氧基乙烷)磺酸 (PFEESA) Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	0.01
PFEESA, 及其鹽 (PFEESA, its salts)	全氟(2-乙氧基乙烷)磺酸鉀 (PFEESA-K) Potassium perfluoro(2-ethoxyethane) sulfonate (PFEESA-K)	117205-07-9	-
	全氟(2-乙氧基乙烷)磺酸鈉 (PFEESA-Na) Sodium perfluoro(2-ethoxyethane) sulfonate (PFEESA-Na)	113507-87-2	-
	9-氯十六氟-3-氧雜壬烷-1-磺酸 (9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid) (9Cl-PF ₃ ONS)	756426-58-1	0.01
9Cl-PF₃ONS, 及其鹽 (9Cl-PF₃ONS, its salts)	9-氯十六氟-3-氧雜壬烷-1-磺酸鉀 (9Cl-PF ₃ ONS-K) Potassium 9-chlorohexadecafluoro-3-oxanonane-1- sulfonate (9Cl-PF ₃ ONS-K)	73606-19-6	-
	9-氯十六氟-3-氧雜壬烷-1-磺酸銨 (9CI-PF ₃ ONS-NH ₄) Ammonium perfluoro-2-[(6-chlorohexyl)oxy]ethane-1- sulfonate (9CI-PF ₃ ONS-NH ₄)	1383434-28-3	-
11CL DE OLIAS 及甘晦	11-氯二十氟-3-氧雜十一烷-1-磺酸 (11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid) (11Cl-PF ₃ OUdS)	763051-92-9	0.01
11Cl-PF ₃ OUdS, 及其鹽 (11Cl-PF ₃ OUdS, its salts)	11-氯二十氟-3-氧雜十一烷-1-磺酸鉀 (11CI-PF ₃ OUdS-K) Potassium 11-chloroeicosafluoro-3-oxaundecane-1- sulfonate (11CI-PF ₃ OUdS-K)	83329-89-9	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
-	2-(N-乙基全氟辛烷磺醯胺基)丙烯酸乙酯 (EtFOSAC) 2-(N-ethylperfluorooctanesulfamido)ethyl acrylate (EtFOSAC)	423-82-5	0.1
	11H-全氟十一烷酸 (11H-Perfluoroundecanoic acid) (11H-PFUnDA)	1765-48-6	0.1
11H-PFUnDA, 及其鹽	11H-全氟十一烷酸鉀 (11H-PFUnDA-K) potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11- icosafluoroundecanoate (11H-PFUnDA-K)	307-71-1	-
(11H-PFUnDA, its salts)	11H-全氟十一烷酸銨 (11H-PFUnDA-NH ₄) Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11- icosafluoroundecanoate (11H-PFUnDA-NH ₄)	5081-02-7	-
	11H-全氟十一烷酸鹽 (11H-PFUnDA(anion)) 11-H-Perfluoroundecanoate (11H-PFUnDA(anion))	69681-37-4	-
	五氟丙酸 (Pentafluoropropionate acid) (PFPrA)	422-64-0	0.1
	五氟丙酸鈉 (PFPrA-Na) Sodium pentafluoropropionate (PFPrA-Na)	378-77-8	-
PFPrA, 及其鹽 (PFPrA, its salts)	五氟丙酸銀 (PFPrA-Ag) Silver pentafluoropropionate (PFPrA-Ag)	509-09-1	-
(FFFIA, Its Saits)	五氟丙酸鉀 (PFPrA-K) Potassium pentafluoropropionate (PFPrA-K)	378-76-7	-
	五氟丙酸銨 (PFPrA-NH ₄) Ammonium pentafluoropropionate (PFPrA-NH ₄)	2730-58-7	-
-	1H,1H,2H,2H-全氟癸基三氯矽烷 1H,1H,2H,2H-Perfluorodecyltrichlorosilane	78560-44-8	0.1
-	1H,1H,2H,2H-全氟癸基三甲氧基矽烷 1H,1H,2H,2H-Perfluorodecyltrimethoxysilane	83048-65-1	0.1
-	2H-全氟-2-癸烯酸 (8:2 FTUCA) 2H-Perfluoro-2-decenoic acid (8:2 FTUCA)	70887-84-2	0.01
-	2H-全氟-2-辛烯酸 (6:2 FTUCA) 2H-Perfluoro-2-octenoic acid (6:2 FTUCA)	70887-88-6	0.01
-	2H-全氟-2-十二烯酸 (10:2 FTUCA) 2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4	0.01
-	2-全氟癸基乙酸 (10:2 FTCA) 2-Perfluorodecyl ethanoic acid (10:2 FTCA)	53826-13-4	0.01

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 35 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 36 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	6:6 全氟次磷酸 (6:6 Perfluorophosphinic acid) (6:6 PFPi)	40143-77-9	0.01
	6:6 全氟次磷酸鈉 (6:6 PFPi-Na) Sodium bis(perfluorohexyl)phosphinate (6:6 PFPi-Na)	70609-44-8	-
6:6 PFPi, 及其鹽 (6:6 PFPi, its salts)	6:6 全氟次磷酸鏡 (6:6 PFPi-Yb) Bis(perfluorohexyl) phosphinic acid ytterbium(3+) salt (6:6 PFPi-Yb)	500776-72-7	-
	6:6 全氟次磷酸鉺 (6:6 PFPi-Er) Bis(perfluorohexyl) phosphinic acid erbium(3+) salt (6:6 PFPi-Er)	500776-73-8	-
-	6:8全氟次磷酸 (6:8 PFPi) 6:8 Perfluorophosphinic acid (6:8 PFPi)	610800-34-5	0.01
	8:8全氟次磷酸 (8:8 Perfluorophosphinic acid) (8:8 PFPi)	40143-79-1	0.01
	8:8 全氟次磷酸鈉 (8:8 PFPi-Na) Sodium bis(perfluorooctyl)phosphinate (8:8 PFPi-Na)	500776-69-2	-
8:8 PFPi, 及其鹽 (8:8 PFPi, its salts)	8:8全氟次磷酸鉺 (8:8 PFPi-Er) Bis(perfluorooctyl) phosphinic acid erbium(3+) salt (8:8 PFPi-Er)	500776-70-5	-
	8:8全氟次磷酸鏡 (8:8 PFPi-Yb) Bis(perfluorooctyl) phosphinic acid ytterbium(3+) salt (8:8 PFPi-Yb)	500776-71-6	-
-	2-全氟辛基乙基乙酸酯 (8:2 FTOAc) 1H,1H,2H,2H-Heptadecafluorodecyl acetate (8:2 FTOAc)	37858-04-1	0.1
-	1-十二烷醇, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-二十二碳氟-, 1 -醋酸鹽 (10:2 FTOAc) 1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-, 1-acetate (10:2 FTOAc)	37858-05-2	0.1
	全氟-2,5-二甲基-3,6-二氧雜壬酸 (Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid) (HFPO-TA)	13252-14-7	0.2
HFPO-TA, 及其鹽 (HFPO-TA, its salts)	全氟-2,5-二甲基-3,6-二氧雜壬酸鉀 (HFPO-TA-K) Potassium perfluoro(2-(2-propoxypropoxy)propanoate) (HFPO-TA-K)	67118-57-4	-
	全氟-2,5-二甲基-3,6-二氧雜壬酸鈉 (HFPO-TA-Na) Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid, sodium salt (HFPO-TA-Na)	67963-76-2	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 37 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
HFPO-TA, 及其鹽 (HFPO-TA, its salts)	全氟-2,5-二甲基-3,6-二氧雜壬酸銨 (HFPO-TA-NH ₄) 2,3,3,3-Tetrafluoro-2-[1,1,2,3,3,3-hexafluoro-2- (heptafluoropropoxy)propoxy]propanoic acidammonia (HFPO-TA-NH ₄)	13043-05-5	-
	全氟-2,5-二甲基-3,6-二氧雜壬酸氟 (HFPO-TA-F) Hexafluoropropene oxide trimer (HFPO-TA-F)	2641-34-1	-
	五氟乙烷磺酸 (PFEtS) Pentafluoroethane sulfonic acid (PFEtS)	354-88-1	0.01
PFEtS, 及其鹽 (PFEtS, its salts)	全氟乙烷磺酸鹽 (PFEtS (anion)) Pentafluoroethanesulfonate (PFEtS (anion))	108410-37-3	-
	全氟乙烷磺酸鉀 (PFEtS-K) Potassium pentafluoroethane-1-sulfonate (PFEtS-K)	2837-92-5	-
	雙[2 - (全氟己基)乙基]磷酸鹽 (Bis[2-(perfluorohexyl)ethyl] Phosphate) (6:2 diPAP)	57677-95-9	0.01
6:2 diPAP, 及其鹽 (6:2 diPAP, its salts)	雙[2 - (全氟己基)乙基]磷酸鈉 (6:2 diPAP-Na) Sodium bis[2-(perfluorohexyl)ethyl] phosphate (6:2 diPAP-Na)	407582-79-0	-
	雙[2 - (全氟己基)乙基]磷酸鹽 (6:2 diPAP(anion)) Bis(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) phosphate ion (6:2 diPAP(anion))	667465-18-1	-
	雙三氟甲烷磺酰亞胺 (Trifluoromethanesulfonimide) (TFSI)	82113-65-3	0.01
	吡咯烷鎓·1-丁基-1-甲基-·與 1,1,1-三氟-N-[(三氟甲基)磺酰基] 甲磺酰胺的鹽 (1:1) Pyrrolidinium, 1-butyl-1-methyl-, salt with 1,1,1-trifluoro-N- [(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)	223437-11-4	-
TFSI, 及其鹽 (TFSI, its salts)	三丁基甲基雙(三氟甲磺酰)亞胺銨 Tributylmethyl Ammonium Bis(trifluoromethanesulfonyl) Imide	405514-94-5	-
	雙三氟甲烷磺酰亞胺鋰 (TFSI-Li) Lithium bis((trifluoromethyl)sulfonyl)azanide (TFSI-Li)	90076-65-6	-
	1-癸基-3-甲基咪唑雙(三氟甲烷)磺酰亞胺 1-Decyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide	433337-23-6	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL
(Group Name)	(Substance Name)		(mg/kg)
	三氟甲磺酸 (Trifluoromethane sulfonic acid) (TFMS)	1493-13-6	0.01
	三氟甲磺酸鈉鹽 (TFMS-Na)	2926-30-9	-
	Trifluoromethane sulfonic acid Sodium salt (TFMS-Na)		
	三氟甲磺酸銀鹽 (TFMS-Ag)	2923-28-6	-
	Silver trifluoromethanesulfonate (TFMS-Ag)		
	三氟甲磺酸鋅鹽 (TFMS-Zn)	54010-75-2	-
	Zinc trifluoromethanesulfonate (TFMS-Zn)		
	三氟甲磺酸鈧鹽 (TFMS-Sc)	144026-79-9	-
	Scandium trifluoromethanesulfonate (TFMS-Sc)		
	三氟甲磺酸酐	358-23-6	-
	Trifluoromethanesulfonic anhydride		
	三氟甲磺酸鋰鹽 (TFMS-Li)	33454-82-9	-
	Lithium trifluoromethanesulfonate (TFMS-Li)		
	三氟甲磺酸銅鹽 (TFMS-Cu)	34946-82-2	-
	Copper(II) trifluoromethanesulfonate (TFMS-Cu)		
	三氟甲磺酸鋇鹽 (TFMS-Ba)	2794-60-7	_
	Barium trifluoromethanesulfonate (TFMS-Ba)		
TFMS, 及其鹽	三氟甲磺酸鈰鹽 (TFMS-Ce)	107792-63-2	_
(TFMS, its salts)	Cerium(IV) trifluoromethanesulfonate (TFMS-Ce)		
	三氟甲磺酸鎂鹽 (TFMS-Mg)	60871-83-2	_
	Magnesium trifluoromethanesulfonate (TFMS-Mg)		
	三氟甲磺酸鉀鹽 (TFMS-K)	2926-27-4	_
	Potassium trifluoromethanesulfonate (TFMS-K)	2320 27	
	三氟甲磺酸鎳鹽 (TFMS-Ni)	60871-84-3	_
	Nickel(II) Trifluoromethanesulfonate (TFMS-Ni)	00072010	
	三氟甲磺酸錫鹽 (TFMS-Sn)	62086-04-8	_
	Tin(II) trifluoromethanesulfonate (TFMS-Sn)	02000 01 0	
	三氟甲磺酸釔鹽 (TFMS-Y)	52093-30-8	_
	Yttrium(III) trifluoromethanesulfonate (TFMS-Y)	32033 30 0	
	三氟甲磺酸鐵鹽 (TFMS-Fe)	63295-48-7	
	一	03293-46-7	-
	三氟甲磺酸鈰鹽 (TFMS-Ce)	76089-77-5	_
	二無平碘酸卵鹽 (TFMS-Ce) Cerium(III) Trifluoromethanesulfonate (TFMS-Ce)	/0003-//-3	_
	三氟甲磺酸四丁基銨	25005 70 6	
	二氟甲磺酸四丁基兹 Tetrabutylammonium trifluoromethanesulfonate	35895-70-6	-
	Tetrabutyiaminomum timuoromethanesunonate		

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 38 of 44



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025 頁數(Page): 39 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	三氟甲磺酸甲基三辛基銨 Methyltrioctylammonium trifluoromethanesulfonate	121107-18-4	-
	咪唑三氟甲磺酸酯 Imidazole trifluoromethanesulfonate	29727-06-8	-
	三氟乙醯基三氟甲磺酸酯 Trifluoroacetyl Trifluoromethanesulfonate	68602-57-3	-
	三氟甲磺酸鑭(III)(TFMS-La) Lanthanum(III) trifluoromethanesulfonate (TFMS-La)	52093-26-2	-
	三氟甲磺酸銦(III)(TFMS-In) Indium(III) trifluoromethanesulfonate (TFMS-In)	128008-30-0	-
	三氟甲磺酸釤 (III) (TFMS-Sm) Samarium(III) trifluoromethanesulfonate (TFMS-Sm)	52093-28-4	-
	三氟甲磺酸鏡(III)(TFMS-Yb) Ytterbium(III) trifluoromethanesulfonate (TFMS-Yb)	54761-04-5	-
	三氟甲磺酸銩 (III) (TFMS-Tm) Thulium(III) trifluoromethanesulfonate (TFMS-Tm)	141478-68-4	-
TFMS, 及其鹽	三氟甲磺酸四乙基銨 Tetraethylammonium trifluoromethanesulfonate	35895-69-3	-
(TFMS, its salts)	三氟甲磺酸1-氟-3,5-二氯吡啶 1-Fluoro-3,5-dichloropyridinium triflate	107264-06-2	-
	三氟甲磺酸三乙胺鹽 Triethylamine salt of trifluoromethanesulfonic acid	646-58-2	-
	三苯基三氟甲酸酐鏻 Triphenylphosphonium anhydride triflate	72450-51-2	-
	N, N-二乙基-6-(二乙氨基)-9-(2-(甲氧羰基)苯基)-3H-蒽-3-亞基三氟甲磺酸銨 N,N-Diethyl-6-(diethylamino)-9-(2- (methoxycarbonyl)phenyl)-3H-xanthene-3- ylideneammonium trifluoromethanesulfonate	120611-30-5	-
	三氟甲磺酸二苯銨 Diphenylammonium Trifluoromethanesulfonate	164411-06-7	-
	1-(3-氨基氮雜環丁烷-1-基)丙-2-烯-1-酮, 三氟甲磺酸 1-(3-aminoazetidin-1-yl)prop-2-en-1-one, trifluoromethanesulfonic acid	2060047-56-3	-
	三氟甲磺酸胍 Guanidine trifluoromethanesulfonic acid	153756-25-3	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 40 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
	三氟甲磺酸-1-乙基-1H-咪唑(1/1) Trifluoromethanesulfonic acid1-ethyl-1H-imidazole (1/1)	501693-46-5	-
	釕(3+)(OC-6-22)-與三氟甲磺酸(1:3)的鹽 Ruthenium(3+), (OC-6-22)-, salt with trifluoromethanesulfonic acid (1:3)	74468-24-9	-
	O-新戊醯基羥胺三氟甲磺酸酯 O-Pivaloylhydroxylamine trifluoromethanesulfonate	1293990-73-4	-
	三氟甲磺醯氯 Trifluoromethanesulfonyl chloride	421-83-0	-
	(2-吡啶甲基)磺醯氯三氟甲磺酸酯 (2-Pyridylmethyl)sulfonyl chloride triflate	882564-09-2	-
	三氟甲磺醯溴 Trifluoromethanesulfonyl bromide	15458-53-4	-
	三氟甲磺酸汞(II) (TFMS-Hg) Mercury(II) trifluoromethanesulfonate (TFMS-Hg)	49540-00-3	-
TENAC 77 H RE	三氟甲磺酸鏑(III) (TFMS-Dy) Dysprosium(III) tris(trifluoromethanesulfonate) (TFMS-Dy)	139177-62-1	-
TFMS, 及其鹽 (TFMS, its salts)	三氟甲磺酸錳(II) (TFMS-Mn) Manganese bis(trifluoromethanesulfonate) (TFMS-Mn)	55120-76-8	-
	三氟甲磺酸五胺鋨(III) Pentaammine(trifluoromethanesulfonato)osmium(III) triflate	83781-30-0	-
	三氟甲磺酸鑥(III) (TFMS-Lu) Lutetium(III) trifluoromethanesulfonate (TFMS-Lu)	126857-69-0	-
	三氟甲磺酸鋱(III) (TFMS-Tb) Terbium(III) trifluoromethanesulfonate (TFMS-Tb)	148980-31-8	-
	三氟甲磺酸釹(III) (TFMS-Nd) Neodymium(III) trifluoromethanesulfonate (TFMS-Nd)	34622-08-7	-
	三氟甲磺酸銨 (TFMS-NH4) Ammonium trifluoromethanesulfonate (TFMS-NH4)	38542-94-8	-
	三氟甲磺酸鈥(III) (TFMS-Ho) Holmium(III) trifluoromethanesulfonate (TFMS-Ho)	139177-63-2	-
	三氟甲磺酸酯 Trifluoromethanesulfonate	37181-39-8	-
	三氟甲磺酸鐠(III) (TFMS-Pr) Praseodymium(III) trifluoromethanesulfonate (TFMS-Pr)	52093-27-3	-



Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

頁數(Page): 41 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱	物質名稱	CAS No.	MDL
(Group Name)	(Substance Name)		(mg/kg)
	三氟甲磺酸鉍(III) (TFMS-Bi) Bismuth(III) trifluoromethanesulfonate (TFMS-Bi)	88189-03-1	-
	三氟甲磺酸銪(III) (TFMS-Eu) Europium(III) trifluoromethanesulfonate (TFMS-Eu)	52093-25-1	-
	三氟甲磺酸鉺(III) (TFMS-Er) Erbium(III) trifluoromethanesulfonate (TFMS-Er)	139177-64-3	-
TENAC TI HR	三氟甲磺酸鎵(III) (TFMS-Ga) Gallium(III) trifluoromethanesulfonate (TFMS-Ga)	74974-60-0	-
TFMS, 及其鹽 (TFMS, its salts)	N,N,N-三乙基-2,2,2-三氟乙烷-1-三氟甲磺酸銨 N,N,N-Triethyl-2,2,2-trifluoroethan-1-aminium trifluoromethanesulfonate	380230-73-9	-
	三氟甲磺酸鈣(II) (TFMS-Ga) Methanesulfonic acid, trifluoro-, calcium salt (TFMS-Ga)	55120-75-7	-
	三氟甲磺酸鉈(I) (TFMS-TI) Thallium(1+) trifluoromethanesulfonate (TFMS-TI)	73491-36-8	-
	三氟甲磺酸鉿(IV) (TFMS-Hf) Hafnium(IV) Trifluoromethanesulfonate (TFMS-Hf)	161337-67-3	-
PFPrS, 及其鹽	全氟丙烷磺酸 (Perfluoropropate sulfonic acid) (PFPrS)	423-41-6	0.01
(PFPrS, its salts)	全氟丙烷磺酸鈉 (PFPrS-Na) Perfluoropropanesulfonic acid sodium salt (PFPrS-Na)	359868-82-9	-
-	1-全氟庚基乙醇 (7:2s FTOH) 1-pefluoroheptyl ethanol (7:2 secondary) (7:2s FTOH)	24015-83-6	0.2
-	1-碘-1H, 1H, 2H, 2H-全氟己烷 (4:2 FTI) 4:2 Fluorotelomer iodide (4:2 FTI)	2043-55-2	0.2
PFHpSi, 及其鹽	全氟庚烷-1-亞磺酸 (Perfluoroheptane-1-sulfinic acid) (PFHpSi)	769067-51-8	0.01
(PFHpSi, its salts)	全氟庚烷-1-亞磺酸鈉鹽 (PFHpSi-Na) 1-heptanesulfinic Acid Sodium Salt (PFHpSi-Na)	68555-66-8	-
	全氟辛基磷酸 (Perfluorooctylphosphoic acid) (PFOPA)	40143-78-0	0.01
PFOPA, 及其鹽 (PFOPA, its salts)	全氟辛基磷酸-4-甲基苯甲醯胺 (Heptadecafluorooctyl)phosphonic acid4-methylaniline (1/1)	1263361-03-0	-
-	1H, 1H全氟辛胺 1H,1H-Perfluorooctylamine	307-29-9	0.2



Test Report

號碼(No.): ETR25500975 日期(Date)

日期(Date): 22-May-2025

頁數(Page): 42 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.	MDL (mg/kg)
-	全氟庚醯胺 Perfluoroheptanamide	2358-22-7	0.1
-	全氟丁醯胺 Perfluorobutyramide	662-50-0	0.2
-	1H, 1H, 2H, 2H-九氟己酯 (4:2 FTA) 1H,1H,2H,2H-Nonafluorohexyl acrylate (4:2 FTA)	52591-27-2	0.2
-	N-甲基-九氟丁磺醯胺 N-methylperfluoro-1-butanesulfonamide	68298-12-4	0.01
-	N-乙基-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-N-(2-羥乙基)-1-己磺醯胺 N-Ethyl-1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2- hydroxyethyl)-1-hexanesulfonamide	34455-03-3	0.01
-	全氟己基乙烯 (PFHxE) Perfluorohexyl ethylene (PFHxE)	25291-17-2	1
乙基九氟丁基及其異構體 (Ethyl	乙基九氟丁基及其異構體 (Ethyl perfluoroisobutyl ether and its isomers)	163702-05-4	10
perfluoroisobutyl ether and its isomers)	全氟異丁基乙醚 Perfluoroisobutyl ethyl ether	163702-06-5	-
-	1,1,1,2,2,3,4,5,5,5-十氟戊烷 1,1,1,2,2,3,4,5,5,5,-decafluoro-Pentane	138495-42-8	10
-	三氟甲苯 Trifluorotoluene	98-08-8	1
-	對氯三氟甲苯 1-Chloro-4 (Trifluoromethyl)Benzene	98-56-6	1
-	1H,1H,2H,2H-全氟癸基甲基二氯矽烷 1H,1H,2H,2H-Perfluorodecylmethyldichlorosilane	3102-79-2	0.1

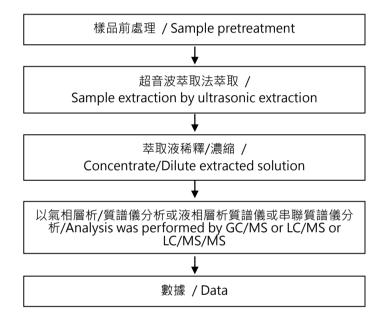


Test Report

號碼(No.): ETR25500975 日期(Date): 22-May-2025

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.) 新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

全氟化合物(包含全氟辛酸/全氟辛烷磺酸/其相關化合物等等)分析流程圖 / Analytical flow chart – PFAS (including PFOA/PFOS/its related compound, etc.)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

頁數(Page): 43 of 44



Test Report

號碼(No.): ETR25500975

日期(Date): 22-May-2025

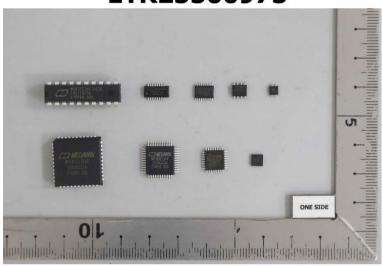
頁數(Page): 44 of 44

笙泉科技股份有限公司 (MEGAWIN TECHNOLOGY CO., LTD.)

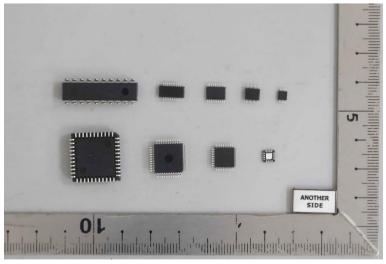
新竹縣竹北市台元一街8號7樓之1 (7F-1, NO. 8, TAIYUAN 1ST ST., JHUBEI CITY, HSINCHU COUNTY 30288, TAIWAN)

* 照片中如有箭頭標示,則表示為實際檢測之樣品/部位. * (The tested sample / part is marked by an arrow if it's shown on the photo.)

ETR25500975



ETR25500975



** 報告結尾 (End of Report) **