

環境部公告

中華民國113年10月21日
環部化字第1138121141號

主 旨：預告修正「列管毒性化學物質及其運作管理事項」公告事項第一項及第二項附表二、第三項附表三、第四項附表四草案。

依 據：行政程序法第151條第2項準用第154條第1項。

公告事項：

一、修正機關：環境部。

二、修正依據：毒性及關注化學物質管理法第8條、第11條及第44條第4項。

三、修正草案如附件。本案另載於行政院公報資訊網（網址：
<https://gazette.nat.gov.tw/egFront/>）及公共政策網路參與平臺之眾開講（<https://join.gov.tw/policies/>）。

四、參考國際公約及管理趨勢修正，無重大爭議，縮短預告期間為30日。

五、對於本公告內容有任何意見或修正建議者，請於本公告刊登公報之次日起30日內陳述意見或洽詢：

（一）承辦單位：化學物質管理署

（二）地址：106臺北市大安區大安路二段132巷35弄1號

（三）聯絡人：趙技士

（四）電話：（02）2325-7399分機55314

（五）傳真：（02）2325-3823

（六）電子郵件：yiting.chao@moenv.gov.tw

部 長 彭啟明

列管毒性化學物質及其運作管理事項公告事項第一項及第二項附表二、第三項附表三、第四項附表四 修正草案總說明

列管毒性化學物質及其運作管理事項（以下簡稱本公告）於九十六年公告訂定，歷經十五次修正，最近一次修正為一百十三年四月二十四日。為配合聯合國持久性有機污染物斯德哥爾摩公約管理趨勢，增列全氟辛烷磺酸鹽類與相關化合物及全氟辛酸鹽類與相關化合物為毒性化學物質，訂定管制濃度及分級運作量，並調整得使用用途適用範圍。並因應歐盟限制壬基酚（壬酚）及壬基酚聚乙氧基醇應用於可能造成環境危害風險相關用途，包括工業及機構用清潔劑、紡織品和皮革製品處理、農業用乳化劑、金屬加工、紙漿和紙張之製造等，爰配合修正壬基酚及壬基酚聚乙氧基醇禁止運作事項及得使用用途。其修正要點如下：

- 一、修正壬基酚及壬基酚聚乙氧基醇毒性分類及增列化學文摘社登記號碼，與新增全氟辛烷磺酸鹽類與相關化合物及全氟辛酸鹽類與相關化合物為毒性化學物質，並調整毒性分類（修正公告事項第一項附表一）
- 二、增列壬基酚及壬基酚聚乙氧基醇禁止運作事項（修正公告事項第二項附表二）
- 三、修正壬基酚及壬基酚聚乙氧基醇，與增列全氟辛烷磺酸鹽類與相關化合物及全氟辛酸鹽類與相關化合物得使用用途（修正公告事項第三項附表三）
- 四、增列壬基酚及壬基酚聚乙氧基醇、全氟辛烷磺酸及其鹽類與相關化合物、全氟辛酸及其鹽類與相關化合物之應於規定期限完成相關事項一覽表（修正公告事項第四項附表四）

列管毒性化學物質及其運作管理事項公告事項第一
項及第二項附表二、第三項附表三、第四項附表四
修正草案公告對照表

修正公告	現行公告	說明
主旨：修正「列管毒性化學物質及其運作管理事項」公告事項第一項及第二項附表二、第三項附表三、第四項附表四，並自即日起生效。	主旨：修正「列管毒性化學物質及其運作管理事項」公告事項第一項及第二項附表二、第三項附表三、第四項附表四，並自即日起生效。	公告名稱及生效日期。
依據：毒性及關注化學物質管理法第八條、第十一條及第四十四條第四項。	依據：毒性及關注化學物質管理法第八條、第十一條及第四十四條第四項。	法源依據未修正。
公告事項： 一、公告毒性化學物質及其管制濃度與分級運作量如附表一及附件一至附件三。本公告所稱毒性化學物質指附表一所列化學物質重量百分比含量達管制濃度以上之物質。	公告事項： 一、公告毒性化學物質及其管制濃度與分級運作量如附表一及附件一。本公告所稱毒性化學物質指附表一所列化學物質重量百分比含量達管制濃度以上之物質。	為使本公告列管範疇一致，配合斯德哥爾摩公約管制全氟烷基類化合物，增列全氟辛烷磺酸鹽類與相關化合物為第一、二類毒性化學物質，以及全氟辛酸鹽類與相關化合物列為第一類毒性化學物質，且管制濃度為全濃度，爰修正附表一，並為利業者逐項辨識及確認，配合新增附件二正面表列八種全氟辛烷磺酸及其鹽類與相關化合物，及附件三正面表列三百五十三種全氟辛酸及其鹽類與相關化合物。

公告事項第一項附表一修正草案對照表

修正規定										現行規定										說明
附表一 公告毒性化學物質及其管制濃度與分級運作量一覽表										附表一 公告毒性化學物質及其管制濃度與分級運作量一覽表										一、參考歐盟化學品登錄、評估、授權及限制規章 (Regulation, Evaluation, Authorization and Restriction of Chemicals, REACH) 附錄十七項目四十六 (Annex XVII, Entry 46), 修正壬基酚 (壬基酚) 及壬基酚聚乙氧基醇管制濃度為 0.1%。 二、因應毒理資料更新及本法案第四類毒性化學物質定義調整, 考量壬基酚及壬基酚聚乙氧基醇內分泌干擾毒性實質明確, 調整壬基酚及壬基酚聚乙氧基醇毒性分級。 三、參考歐盟 REACH 及美國毒性物質管理方法 (Toxic Substances Control Act, TSCA) 壬基酚及壬基酚聚乙氧基醇化學文摘社登記號碼認列清單, 分別新增壬基酚及壬基酚聚乙氧基醇十二個及二十八個化學文摘社登記號碼, 以促進物質辨識。 四、因應斯德哥爾摩公約 (Stockholm Convention), 考量全氟烷基烴化合物具不易分解及永久性有機污染特性, 並與其他已納管全氟烷基烴具類似毒性, 並增列五種全氟烷基烴, 與前列公告化合物, 擬照相關化合
序號 ⁽¹⁾ Listed No.	中文名稱 ⁽²⁾ Chinese Name	英文名稱 ⁽²⁾ English Name	分子式 ⁽²⁾ Chemical Formula	化學文摘社登記號碼 CAS No.	管制濃度 ⁽³⁾ control concentration standard %	公報運作量 ⁽⁴⁾ graded handling quantity (公升)	毒性分級 ⁽⁵⁾ Toxicity Classify	公告日期	序號 ⁽¹⁾ Listed No.	中文名稱 ⁽²⁾ Chinese Name	英文名稱 ⁽²⁾ English Name	分子式 ⁽²⁾ Chemical Formula	化學文摘社登記號碼 CAS No.	管制濃度 ⁽³⁾ control concentration standard %	公報運作量 ⁽⁴⁾ graded handling quantity (公升)	毒性分級 ⁽⁵⁾ Toxicity Classify	公告日期			
165	壬基酚 (壬基酚)	Nonylphenol	C ₉ H ₁₉ O	25154-52-3 84852-15-3	5	50	1	96.12.17 98.07.31 104.12.31	165	壬基酚 (壬基酚)	Nonylphenol	C ₉ H ₁₉ O	25154-52-3 84852-15-3	5	50	1	96.12.17 98.07.31 104.12.31			
165	壬基酚聚乙氧基醇	polyethyleneglycol ether	(C ₂ H ₄ O) _n C ₁₂ H ₂₆ O	901645-9 26027-38-3	5	50	1	96.12.17 98.07.31 104.12.31	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
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169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
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169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24	169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S	1763-23-1	全濃度 ⁽¹⁸⁾	50	1,2	99.12.24 107.06.28 109.09.08 113.04.24			
169	全氟辛酸酞	Perfluorooctane sulfonic acid	C ₈ HF ₁₇ O ₃ S																	

			65455-72-3 68412-54-4 7311-27-5 85005-55-6 91648-64-5						例 1：含六價鉻達 1% 以上（含 1%）三氯化鉻運作總量（不含酸槽之鐵液）低於 500 公斤（不含 500 公斤）者，運作量低於分級運作量。 例 2：含氯離子達 1% 以上（含 1%）氯化鈉運作總量（不含酸槽之鐵液）低於 500 公斤（不含 500 公斤）者，運作量低於分級運作量。 5. 毒性分類：「1」表第一類毒性化學物質，「2」表第二類毒性化學物質，「3」表第三類毒性化學物質，「4」表第四類毒性化學物質。 6. 石鹼管制濃度為鐵銹狀、細絲狀或絨毛狀石棉含量達 1% 以上（含 1%）者。 7. 在攝氏 25 度以下恆溫製程處理中之二異氰酸甲酯（其管制濃度計算以 2,4-二異氰酸甲酯為主），其 5 公噸以下數量均計為使用量。 8. 物質或混合物所含全氟及多氟烷基物質，其濃度符合下列規定，且非屬故意添加者，不受本法管制： (1)全氟辛烷磺酸、全氟辛烷磺醯氯與全氟辛烷磺酸鹽總濃度未超過 10 mg/kg。 (2)全氟辛烷磺酸及其鹽類個別未超過 0.025 mg/kg。 (3)全氟已烷磺酸及其鹽類個別未超過 0.025 mg/kg。 (4)全氟已烷磺酸相關化合物總濃度未超過 1 mg/kg。
169	01	全氟辛烷磺酸及其鹽類相關化合物（註列三所生化鹽、物、質）	Perfluoroalkyl sulfonates PFOS salts and PFOS related compounds	=	附性二	全濃度 =8	50	1,2,4	99.12.24 107.06.28 109.09.08 113.04.24 113.0.0
169	04	全氟辛酸及其鹽類相關化合物（註列三所生化鹽、物、質）	Perfluorooctanoic acid (PFOA) salts and PFCA related compounds	=	附性三	全濃度 =8	50	1,2,4	107.06.28 109.09.08 113.04.24 113.0.0

註：1.本表中處理特性類似者，歸類為同一列管編號；一列管編號下之不同序號物質，計為不同種之毒性化學物質。
2.本表以化學文摘社登記號碼、中文名稱、英文名稱及分子式綜合判斷。
3.管制濃度：
例 1：「某」表示含某 70% 以上（含 70%）者。
例 2：「氯化鈉」表示含氯離子達 1% 以上（含 1%）者。
例 3：「多氯聯苯」表示含多氯聯苯 0.1% (1,000 ppm) 以上（含 0.1%）者。
4.分級運作量：酸槽之鐵液、金屬表面處理槽之表面處理液及乾洗機器內循環使用中之四氯乙烯，不計入分級運作量。
例 1：含六價鉻達 1% 以上（含 1%）三氯化鉻運作總量（不含酸槽之鐵液）低於 500 公斤（不含 500 公斤）者，運作量低於分級運作量。
例 2：含氯離子達 1% 以上（含 1%）氯化鈉運作總量（不含酸槽之鐵液）低於 500 公斤（不含 500 公斤）者，運作量低於分級運作量。
5. 毒性分類：「1」表第一類毒性化學物質，「2」表第二類毒性化學物質，「3」表第三類毒性化學物質，「4」表第四類毒性化學物質。
6. 石鹼管制濃度為鐵銹狀、細絲狀或絨毛狀石棉含量達 1% 以上（含 1%）者。
7. 在攝氏 25 度以下恆溫製程處理中之二異氰酸甲酯（其管制濃度計算以 2,4-二異氰酸甲酯為主），其 5 公噸以下數量均計為使用量。
8. 物質或混合物所含全氟及多氟烷基物質，其濃度符合下列規定，且非屬故意添加者，不受本法管制：
(1)全氟辛烷磺酸及其鹽類與相關化合物總濃度未超過 10 mg/kg。
(2)全氟辛酸及其鹽類個別未超過 0.025 mg/kg。
(3)全氟辛酸相關化合物總濃度未超過 1 mg/kg。
(4)全氟已烷磺酸及其鹽類個別未超過 0.025 mg/kg。
(5)全氟已烷磺酸相關化合物總濃度未超過 1 mg/kg。

烷磺酸、全氟辛烷磺醯氯及全氟辛烷磺酸鹽併同管理，故調整公告名稱為全氟辛烷磺酸及其鹽類相關化合物（列管編號 169，序號 01）。

五、增列三百五十二種全氟辛酸鹽類與相關化合物，與原列管全氟辛酸併同管理，故調整公告名稱為全氟辛酸及其鹽類與相關化合物（列管編號 169，序號 04）。

六、因應毒理資料更新，調整全氟辛烷磺酸鹽類與相關化合物、全氟辛酸及其鹽類與相關化合物之毒性分類。

七、考量新增全氟辛烷磺酸鹽類與相關化合物、全氟辛酸鹽類與相關化合物，參據國際相關規定，修正原註 8 圖值規定。

公告事項第一項附件二修正草案對照表

修正規定				現行規定	說明
附件二 全氟辛烷磺酸及其鹽類相關化合物					一、本附件新增。 二、為接軌斯德哥爾摩公約管制範疇，參考其公告之指示清單內容，增列附件二，以正面表列八種全氟辛烷磺酸及其鹽類相關化合物。 三、依循斯德哥爾摩公約全氟辛烷磺酸及其鹽類相關化合物管制清單係以登載化學物質英文名稱及化學文摘社登記號碼之方式呈現，爰規定以英文名稱及化學文摘社登記號碼綜合判斷。 四、本附件各項化學物質皆屬全氟辛烷磺酸及其鹽類與相關化合物之管制範疇，其管制濃度、分級運作量及得使用用途等依附表一及附表三規定辦理。
項次 Item	英文名稱 English Name	化學文摘社 登記號碼 CAS No.	結構式 structural formula		
1	Perfluorooctane sulfonic acid	1763-23-1			
2	Potassium perfluorooctane sulfonate	2795-39-3			
3	Lithium perfluorooctane sulfonate	29457-72-5			
4	Ammonium perfluorooctane sulfonate	29081-56-9			
5	Diethyldiammonium perfluorooctane sulfonate	70225-14-8			
6	Tetraethyldiammonium perfluorooctane sulfonate	56773-42-3			
7	Didecyldimethylammonium perfluorooctane sulfonate	251095-16-8			
8	Perfluorooctane sulfonyl fluoride	307-35-7			

30	Hexanoic acid, 2,3,4,4,5,5,6,6,6-nonafluoro-2,3-bis(trifluoromethyl)-	1812247-18-9
31	Hexanoic acid, 3,3,4,4,5,5,6,6,6-nonafluoro-2,2-bis(trifluoromethyl)-	1812247-17-8
32	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-nonafluoro-4,4-bis(trifluoromethyl)-	1192593-79-5
33	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-nonafluoro-4,5-bis(trifluoromethyl)-	1144512-36-6
34	Hexanoic acid, 2,2,3,3,4,4,5,5,6,6,6-nonafluoro-3,5-bis(trifluoromethyl)-	1144512-35-5
35	Hexanoic acid, 2,2,3,3,3,4,4,4,6,6,6-nonafluoro-5,5-bis(trifluoromethyl)-	1144512-34-4
36	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-4- (trifluoromethyl)-	1144512-18-4
37	Heptanoic acid, 2,2,3,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-5- (trifluoromethyl)-	909009-42-3
38	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-3- (trifluoromethyl)-	705240-04-6
39	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-2- (trifluoromethyl)-	207678-51-1
40	Isostearic acid, penta-decafluoro-	123116-17-6
41	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6,6-decafluoro-2(1,1,2,2,2- pentafluoromethyl)-	35605-76-6
42	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-6- (trifluoromethyl)-	15166-06-0
43	Octanoic acid, penta-decafluoro-, branched, ammonium salt	90480-56-1
44	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, ammonium salt (1:1)	3825-26-1
45	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, sodium salt (1:1)	335-95-5
46	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, potassium salt (1:1)	2395-00-8
47	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, lithium salt (1:1)	17125-58-5
48	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, silver(1+) salt (1:1)	335-93-3
49	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, chromium(3+) salt (3:1)	68141-02-6
50	Ethylammonium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- penta-decafluoroacetate (1:1)	98241-25-9
51	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2(1,1,2,2,2- pentafluoromethyl)-, ammonium salt (1:1)	13058-06-5
52	Hexanoic acid, 2,3,3,4,4,5,5,6,6,6-decafluoro-2(1,1,2,2,2- pentafluoromethyl)-, sodium salt (1:1)	1195164-59-0
53	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodeca fluoro-6- (trifluoromethyl)-, ammonium salt (1:1)	19742-57-5
54	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodecafluoro-6- (trifluoromethyl)-, iron salt (1:3)	61436-04-2
55	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodeca fluoro-6- (trifluoromethyl)-, potassium salt (1:1)	29457-73-6
56	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodeca fluoro-6- (trifluoromethyl)-, sodium salt (1:1)	18017-22-6
57	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodeca fluoro-6- (trifluoromethyl)-, chromium salt (1:3)	15739-82-9
58	Heptanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,7-dodeca fluoro-6- (trifluoromethyl)-, aluminum salt (3:1)	15715-47-6
59	Fatty acids, C ₁₂₋₁₈ perfluoro	68333-92-6
60	Ethylamine salts of C ₁₋₃ perfluorinated fatty acids	69278-80-4
61	Fatty acids, C ₁₂₋₁₈ perfluoro	91032-01-8
62	Fatty acids, C ₁₂₋₁₈ perfluoro, ammonium salts	72968-38-8
63	Fatty acids, C ₁₂₋₁₈ perfluoro, ammonium salts	77623-77-9
64	Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-penta-decafluoro-, methyl	276-27-2

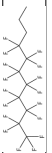
	ester		
65	Octoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, ethyl ester	3108-24-5	
66	Octoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, 1,1'-anhydride	33496-48-9	
67	Phosphinic acid, bis(perfluoro-C ₈ -alkyl) derivs.	68412-69-1	
68	Phosphinic acid, bis(perfluoro-C ₈ -alkyl) derivs., aluminum salts	93462-53-4	
69	Bis(perfluorooctyl)phosphinic acid	40145-79-1	
70	Phosphinic acid, P-(1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hepta-decafluorooctyl)-P-(1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluorohexyl)-	610800-34-5	
71	Octanoyl fluoride, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-	335-66-0	
72	Perfluorooctyl iodide	507-63-1	
73	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-tricosafuoro-11-iodo-	307-50-6	
74	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-12-iodo-	307-60-8	
	Tetradecane,		
75	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafuoro-14-iodo-	307-63-1	
	Pentadecane,		
76	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-hentriacosafuoro-15-iodo-	335-79-5	
	Tridecane,		
77	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13-heptacosafuoro-13-iodo-	376-04-5	
78	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafuoro-10-iodo-	423-62-1	
79	Nonane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10-nonadecafluoro-9-iodo-	558-97-4	
80	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-icosafuoro-10-iodo-2-(trifluoromethyl)-	677-93-0	
81	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-tetracosafuoro-12-iodo-2-(trifluoromethyl)-	3248-61-1	
82	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-octacosafuoro-14-iodo-2-(trifluoromethyl)-	3248-63-3	
83	Alkyl iodides, C ₇₋₁₅ -perfluoro	90622-71-2	
84	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hepta-decafluoro-10-iodo-12-iodo-	2043-53-0	
85	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosafuoro-12-iodo-	2043-54-1	
86	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-pentacosafuoro-14-iodo-	30946-31-2	
	Hexadecane,		
87	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14-nonacosafuoro-16-iodo-	65510-55-6	
88	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-nonadecafluoro-11-iodo-	65510-56-7	
89	Alkyl iodides, C ₇₋₁₅ -perfluoro	68188-12-5	
90	Alkyl iodides, C ₇₋₁₅ -perfluoro	68390-33-0	
91	8:2 Fluorotoluene olefin	21652-58-4	
92	1-Dodecene, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafuoro-	30389-25-4	
	1-Hexadecanol,		
93	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuoro-	60699-51-6	
	1-Pentadecanol,		
94	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,15-heptacosafuoro-	176676-70-3	

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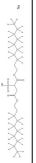
141	Phosphoric acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-hexacosafluorododecylbis (3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl) ester	1578186-57-8	
142	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluoro-, 1,1,1'-phosphate	149790-22-7	
143	1-Decanecarboxamide, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluoro-N-[3-(phosphorooxypropyl)-N-propyl-, sodium salt (1:2)]	441765-20-4	
144	2-Propenoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,17,17-octacosafluoro-2-hydroxy-16-(trifluoromethyl)heptaacyl ester	16083-78-6	
145	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,1-octacosafluorohexacyl ester	4980-53-4	
146	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafluorotetradecyl ester	6014-75-1	
147	2-Propenoic acid, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,15,15,15-tetracosafluoro-2-hydroxy-14-(trifluoromethyl)heptaacyl ester	16083-87-7	
148	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-tetracosafluoro-13-(trifluoromethyl)heptaacyl ester	52956-82-8	
149	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-octacosafuoro-11-(trifluoromethyl)dodecyl ester	74256-14-7	
150	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-ternacosafuoro-13-(trifluoromethyl)heptaacyl ester	74256-15-8	
151	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-2-(perfluorodecyl) ethyl acrylate	17741-60-5	
152	2-(Perfluorodecyl) ethyl methacrylate		
152	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-hexacosafluorododecyl ester	2144-54-9	
153	8,2-Fluorotetramer acrylate	27905-45-9	
153	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10,10-heptafluorodecyl ester		
154	8,2-Fluorotetramer methacrylate		
154	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl ester	1996-88-9	
155	2-Propenoic acid, γ-o-perfluoro-C ₁₂ acyl ester	85631-54-5	
155	2-Propenoic acid		
156	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,13,13,14,14,15,16,16-octacosafuoro-15-(trifluoromethyl)hexacyl ester	91615-22-4	
157	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,18,18-dodecafluoro-17-(trifluoromethyl)hexacyl ester	94158-03-1	
158	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,13,13,14,14,15,16,16-octacosafuoro-15-(trifluoromethyl)hexacyl ester	94158-64-2	
159	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,13,13,14,14,15,15,16,16,17,18,18-dodecafluoro-17-(trifluoromethyl)hexacyl ester	94158-65-3	
160	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluoro-1-(trifluoromethyl)dodecyl ester	146955-29-5	

161	2-Propenoic acid, 4,4,5,5,6,6,7,7,8,8,9,10,10, 11,11,11-heptafluoro-2-hydroxy undecyl ester		70962-34-0
162	1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3- [4,4,5,5,6,6,7,7,8,8,9,10,10,11,11,12,12,13,13,14,14,15,15,15- pentafluoro-2-hydroxypentadecyl]amino]-, inner salt		93776-12-6
163	1-Propanaminium, N-(2-carboxyethyl)-3- [4,4,5,5,6,6,7,7,8,8,9,10,10, 11,11,12,12,13,13,13-henicosafuoro- 2-hydroxytridecyl]amino]-N,N-dimethyl-, inner salt		93776-13-7
164	1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3- [4,4,5,5,6,6,7,7,8,8,9,10,10,11,11,12,12,13,13,14,14,15,15,15- tetracosafuoro-2-hydroxy-14- (trifluoromethylpentadecyl)amino]-, inner salt		93776-15-9
165	2-Tridecanol, 1-[[3- (dimethylamino propyl) amino]- 4,4,5,5,6,6,7,7,8,8,9,10,10,11,11,12,13,13,3-ecosafluoro-1,2- (trifluoromethyl)-		94159-83-8
166	2-Pentadecanol, 1-[[3-(dimethylamino)propyl]amino]- pentafluoro-		94159-79-2
167	2-Tridecanol, 1-[[3- (dimethylamino propyl) amino]- 4,4,5,5,6,6,7,7,8,8,9,10,10,11,11,12,13,13-henicosafuoro- 2-Pentadecanol, 1-[[3-(dimethylamino)propyl]amino]- tetracosafuoro-14- (trifluoromethyl)-		94159-80-5 94159-82-7
168	8,2-Fluorotetramer stearate monoester		99955-83-6
169	Octadecanoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10- heptafluoro-2-hydroxy-1 ester		30291-186-0
170	8,2-Fluorotetramer citrate triester		3102-79-2
171	Pentadecioic acid, 3-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10- heptafluoro-2-hydroxy-1,5- bis(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptafluorodecyl) ester		74612-30-9
172	Perfluorooctyltetraethoxysilane		101947-16-4
173	Perfluorooctyltetraethoxysilane		146090-84-8
174	Perfluorooctyltetraethoxysilane		78560-44-8
175	Perfluorooctyltetraethoxysilane		83048-65-1
176	Perfluorooctyltetraethoxysilane		123445-18-1
177	Perfluorooctyltetraethoxysilane		246234-80-0
178	Silane, (3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10,10- heptafluoro-2-hydroxy-1,5- bis(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptafluorodecyl) ester		1189587-64-1
179	Silane, tetraakis[2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10- heptafluoro-2-hydroxy-1,5- bis(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptafluorodecyl) ester		68187-42-8
180	Propanamide, 3-[(ω-perfluoro-C ₁₁ -alkyl)thio] derivatives		70960-47-0
181	Thiols, C ₂₈ , γ-ω-perfluoro, telomers with acrylamide		95370-51-7
182	Carbanic acid, [2-(ω-perfluoro-C ₁₁ -alkyl)thio] derivatives, ammonium salts		148240-85-1
183	1,3-Propanediol, 2,2-bis[[γ-ω-perfluoro-C ₁₁ -alkyl]thio]methoxy]		148240-87-3
184	1,3-Propanediol, 2,2-bis[[γ-ω-perfluoro-C ₁₁ -alkyl]thio]methoxy]		

	derivs, phosphates, ammonium salts		
186	Oxirane, methyl-, polymer with oxirane, mono[2-hydroxy-3-[(<i>γ</i> -oxo-perfluoro-C ₃₋₈ -alkyl)thio]propyl] ethers	183146-60-3	
187	Pantoic acid, 4,4-bis[(<i>γ</i> -oxo-perfluoro-C ₃₋₈ -alkyl)thio]derivs, compds, with diethanolamine	71608-61-2	
188	1,2-Dichloroethanol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-hexafluoro-, 1-(di(hydrogen phosphate)-, ammonium salt (1:2)	94200-45-0	
189	2-Pentadecanol, 1,1'-bis[4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15-pentacosylfluoro-	93776-00-2	
190	Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	77117-48-7	
191	Undecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	1835250-28-6	
192	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	182130-12-7	
193	Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	1835250-47-9	
194	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	182130-14-9	
195	Pentadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	182130-15-0	
196	Hexadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	6145-05-7	
197	Heptadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	931415-52-0	
198	Octadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	138472-76-1	
199	Nonadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	171461-18-6	
200	Hexacosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	133310-73-3	
201	Oxacosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	137338-39-7	
202	Tricontane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	137338-40-0	
203	Dotriacontane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	137338-41-1	
204	Dodecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	154478-87-2	
205	Tridecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	1835251-22-3	
206	Tetradecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	1244062-17-6	
207	Pentadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	250738-42-2	
208	Hexadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	116177-54-9	
209	Heptadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	200817-54-5	
210	Octadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	93454-70-7	
211	Nonadecane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	125635-85-0	
212	Eicosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	90499-29-9	
213	Docosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	93454-71-8	
214	Eicosane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	133299-41-9	
215	Triacontane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-henicosylfluoro-	100550-08-1	
216	9-Tetraacosene, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluoro-	1244062-16-5	
217	1-Undecanol, 4,4,5,5,6,6,7,7,8,8,9,9,10,11,11-hexadecylfluoro-10-(trifluoromethyl)-	31200-97-2	
218	1-Nonanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9-heptafluoro-	423-56-3	
219	1-Decanol, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10-nonadecylfluoro-	30737-9	
220	1-Tetradecanol, 2,2,2,2,3,3,3,3,4,4,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10,10-tetradecylfluoro-	20746-0	

	heneicosaffluoro-		
221	Decanal, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-	135984-68-8	
222	Dodecanal, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-difluoro-	864551-38-2	
223	2-Dodecanol, 3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-difluoro-	864551-40-6	
224	Nonanal, 2,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9,9,9-heptadecafluoro-	63967-40-8	
225	Decanal, 2,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonadecafluoro-	335-73-9	
226	Undecanal, 2,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-difluoro-	63967-42-0	
227	Ethanol, 2-[2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)ethoxy]-	56900-98-2	
228	Propanol, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)methyl]ethoxy]-	88243-13-4	
229	Ethanol, 2-[2-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)methyl]ethoxy]-	88243-12-3	
230	3,6,9,12-Tetraoxadecan-1-ol, 1,5,15,16,16,17,17,18,18,19,19,20,20,21,21,22,22,22-heptadecafluoro-	55427-54-8	
231	3,6,9,12-Tetraoxadecan-1-ol, 1,5,15,16,16,17,17,18,18,19,19,20,20,21,21,22,22-heptadecafluorodimethyl-	88271-22-1	
232	3,6,9,12-Tetraoxadecan-1-ol, 1,5,15,16,16,17,17,18,18,19,19,20,20,21,21,22,22-heptadecafluorotetramethyl-	88243-14-5	
233	3,6,9,12,15-Pentaoxadecan-1-ol, 1,8,18,19,19,20,20,21,21,22,22,23,23,24,24,25,25-hexadecafluoropentamethyl-	88243-15-6	
234	3,6,9,12,15,18-Hexaoxaoctacosan-1-ol, 21,21,22,22,23,23,24,24,25,25,26,26,27,27,28,28,28-heptadecafluoro-	88247-39-6	
235	3,6,9,12,15,18-Hexaoxaoctacosan-1-ol, 21,21,22,22,23,23,24,24,25,25,26,26,27,27,28,28,28-heptadecafluoropentamethyl-	88243-11-2	
236	3,6,9,12,15,18-Hexaoxaoctacosan-1-ol, 21,21,22,22,23,23,24,24,25,25,26,26,27,27,28,28,28-heptadecafluorohexamethyl-	88243-16-7	
237	3,6,9,12,15,18,21-Heptaacetriacontan-1-ol, 24,24,25,25,26,26,27,27,28,28,29,29,30,30,31,31-heptadecafluoropentamethyl-	88243-10-1	
238	3,6,9,12,15,18,21,24-Octaoxatetra triacontan-1-ol, 27,27,28,28,29,29,30,30,31,31,32,32,33,33,34,34-heptadecafluoro-	88247-40-9	
239	3,6,9,12,15,18,21,24-Octaoxatetra triacontan-1-ol, 27,27,28,28,29,29,30,30,31,31,32,32,33,33,34,34-heptadecafluoroctamethyl-	88243-17-8	
240	3,6,9,12,15-Pentaoxapentacosan-1-ol, 18,18,19,19,20,20,21,21,22,22,23,23,24,24,25,25-pentadecafluoropentamethyl-, acetate	88243-09-8	
241	1,2-Propanediol, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)-	121500-31-0	
242	1,1,14,17,20,23,26,29,32-Octaoxaoctatriacontan-33-one, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluoro-	67549-47-7	
243	Tridecanoic acid, 27,27,28,28,29,29,30,30,31,31,32,32,33,33,34,34,34-heptadecafluoro-3,6,9,12,15,18,21,24-octaoxatetra triacont-1-yl ester	67535-33-5	
244	Oxirane, 2-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9,9-heptadecafluoromethyl)-	38565-53-6	
245	Oxirane, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)methyl]-	114482-33-6	
246	1-Decanaminium, N,N-diethyl-3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-2-hydroxy-N-methyl-, iodide (1:1)	99679-40-0	

247	1-Undecanaminium, 4,4,5,5,6,6,7,7,8,8,9,10,10,11,11,11-heptaecafluoro-2-hydroxy-N,N-bis(2-hydroxyethyl)-N-methyl-, iodide (1:1)	93776-18-2	
248	2-Undecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-nonadecafluoro-1-[(1-methylpropyl) amino]-	94817-79-5	
249	2-Dodecanol, 4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-nonadecafluoro-1-[(1-methylpropyl) amino]-	94817-80-8	
250	1-Propylaminium, 3-[[4-[(3,3,4,4,5,5,6,6,7,7,8,8, 9,9,10,10,10-heptaecafluorodecyl)oxy]-1,4-dioxo-2-buten-1-yl]amino]-N,N,N-trimethyl-, iodide (1:1)	121912-26-3	
251	Pyridinium, 1-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10, 10,10-heptaecafluorodesyl)-, iodide (1:1)	25935-14-2	
252	Ethanaminium, N-ethyl-2-[[[3-[[[3-[[[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptaecafluorodecyl)oxy]carbonyl]amino]methyl]phenyl]fluorodecyl)oxy]carbonyl]amino]methyl]phenyl]amino]carbonyl]oxy]-N,N-dimethyl-, ethyl sulfate	100155-23-5	
253	1-Decanamine, 3,3,4,4,5,5,6,6,7,7,8,8,9,9, 10, 10-heptaecafluoro-N,N-dimethyl-, N-oxide	-	
254	1-Dodecanamine, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10, 10,11,11,11-nonadecafluoro-N,N-dimethyl-, N-oxide	-	
255	Ethanaminium, N-ethyl-2-[[[3-[[[3-[[[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptaecafluorodecyl)oxy]carbonyl]amino]methyl]phenyl]fluorodecyl)oxy]carbonyl]amino]methyl]phenyl]carbonyl]amino]methyl]phenyl]amino]carbonyl]oxy]-N,N-dimethyl-, ethyl sulfate	100107-48-0	
256	1-Decanaminium, N-(carboxymethyl)-3,3,4,4,5,5,6,6,7,7,8,8,9,10,10-heptaecafluoro-N,N-dimethyl-,	2089109-26-0	
257	1-Dodecanaminium, N-(carboxymethyl)-3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro-N,N-dimethyl-,	2089109-27-1	
258	1-Decanaminium, N-(carboxymethyl)-3,3,4,4,5,5,6,6,7,7,8,8,9,10,10-heptaecafluoro-N,N-dimethyl-, inner salt	145441-32-3	
259	1-Dodecanaminium, N-(carboxymethyl)-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-nonadecafluoro-N,N-dimethyl-, inner salt	171184-16-0	
260	1-Tetradecanaminium, N-(carboxymethyl)-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-tricosafluoro-N,N-dimethyl-, inner salt	171184-17-1	
261	1-Dodecanaminium, N-(carboxymethyl)-3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-icosafuoro-N,N-dimethyl-, inner salt	171184-04-6	
262	1-Dodecanaminium, N-(carboxymethyl)-5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heptaecafluoro-N,N-dimethyl-,	2089109-30-6	
263	1-Undecanaminium, 2-(acetyloxy)-N-(carboxy methyl)-4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11-heptaecafluoro-N,N-dimethyl-, inner salt	80234-03-3	
264	1-Tridecanaminium, 2-(acetyloxy)-N-(carboxy methyl)-N,N-dimethyl-, inner salt	80244-66-2	
265	1-Decanethiol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10, 10-heptaecafluoro-2-Propenamide, telomer with 3,3,4,4,5,5,6,6,7,7, 8,8,9,9,10,10,10-heptaecafluoro-1-decanethiol	34143-74-3	
266	2-Propenamide, telomer with 3,3,4,4,5,5,6,6,7,7,heptaecafluoro-1-decanethiol	76830-13-2	
267	2-Propenamide, telomer with 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,12,12,12-heneicosafluoro-1-dodecanethiol	121913-10-8	
268	1-Decanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9, 9,10,10,10-	39108-34-4	

	heptadecafluoro-			
269	1-Dodecenesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,10,11,11,12,12,12-henicosafluoro-	1 20226-60-0		
270	1-Decanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-, potassium salt (1:1)	43823-73-1		
271	1-Decanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hepta-decafluoro-, 1-(hydrogen sulfate), ammonium salt (1:1)	63225-57-0		
272	1-Dodecanol, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafluoro-, 1-(hydrogen sulfate), ammonium salt (1:1)	63225-58-1		
273	Butenedioic acid, 2-sulfo-, 1,4-bis(3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptadecafluorodecyloxy) ester, sodium salt (1:1)	54950-06-0		
274	Acetic acid, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-, lithium salt (1:1)	441765-12-4		
275	Propanoic acid, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	54207-62-4		
276	Propanoic acid, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-, lithium salt (1:1)	481050-04-8		
277	Etanesulfonic acid, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-, lithium salt (1:1)	441765-14-6		
278	2-Propenol, 1,3-bis[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	160819-47-6		
279	2-Propenol, 1-[(2-dodecyloxy)hexadecyloxy]-3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	160819-50-1		
280	2-Propenol, 1-[(2-decyltetradecyloxy)-3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	160819-49-8		
281	2,5,8,11,14,17,20,23-Octaoxa-27-dithiapentria contain-25-ol, 30,31,31,32,32,33,33,33,34,34,35,35,36,36,37,37,37-heptadecafluoro-	121912-28-5		
282	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	727351-53-3		
283	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafuorodecyloxy)sulfonol]-	1513864-17-9		
284	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-, chloride (1:1)	71940-07-3		
285	1-Propanaminium, 3-[(2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafuorodecyloxy)thio]-N,N,N-trimethyl-, isofide (1:1)	-		
286	Etanaminium, 2-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]ethoxy]-N,N,N-trimethyl-, isofide (1:1)	71625-52-0		
287	Acetamide, N-[3-(dimethylamino)propyl]-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-	1513863-91-6		
288	Acetamide, N-[3-(dimethylamino)propyl]-2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-henicosafuorodecyloxy)thio]-	1513863-92-7		
289	1-Propanaminium, 3-[(2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]acetyl)amino]-N,N,N-trimethyl-	704870-51-9		
290	1-Propanaminium, 3-[(2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10,11,11,12,12,12-henicosafuorodecyloxy)thio]acetyl)amino]-N,N,N-trimethyl-	1513864-01-1		
291	1-Propanaminium, N-ethyl-3-[3-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyloxy)thio]-2-methyl-1-oxopropyl]amino]-N,N-dimethyl-, ethyl sulfate (1:1)	67333-62-4		
292	1-Propanaminium, N-(carboxymethyl)-3-[(2-	1513863-96-1		

[illegible]

	decyl)butyl(furyl)amino]hexyl]-, dipotassium salt		
	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12,12-hexafluorodecyl ester, polymer with		
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-propenoate, hexadecyl 2-propenoate, N-(hydroxy methyl)-2-propenamide, octadecyl		
314	2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosylfluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorocetyl 2-propenoate	115592-83-1	
	2-Propenoic acid, 2-methyl-, C ₁₀₋₁₈ -alkyl esters, polymers with 2-hydroxyethyl methacrylate, Me methacrylate and γ-ω-perfluoro-C ₈₋₁₇ -alkyl acrylate	129783-45-5	
315	2-Propenoic acid, dodecyl ester, polymers with Bu (1-oxo-2-propenyl)carbamate and γ-ω-perfluoro-C ₁₀₋₁₈ -alkyl acrylate	144031-01-6	
316	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12,12-hexafluorodecyl ester, polymer with		
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-propenoate, alpha-(2-methyl-1-oxo-2-propenyl)-omega-(2-methyl-1-oxo-2-propenyl)poly(oxy-1,2-ethandithiol),		
317	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonafluorohexadecyl 2-propenoate, octadecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosylfluorotetradecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontylfluorooctadecyl 2-propenoate	116984-14-6	
	Poly[2-(perfluorocetyl)ethyl acrylate]		
318	2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl ester, homopolymer	74049-08-4	
	2-Propenoic acid, 2-methyl-,		
	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12,12-hexafluorodecyl ester, polymer with		
319	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosylfluorotetradecyl 2-methyl-2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorocetyl 2-methyl-2-propenoate	65104-45-2	
	2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-hexafluorodecyl ester, polymer with 2-propenoic acid		
320	Poly(oxy-1,2-ethanediol)-a-[2-(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentafluoro-1-oxocetyl) amino]ethyl-ω-hydroxy	93480-00-3	
321	2-Propenoic acid, polymer with 2-ethylmethylphthalene and hydroxyundecyl 2-propenoate	934505-67-6	
322	2-Propenoic acid, 2-methyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentafluorodecyl ester, polymer with 2-propenoic acid	53515-73-4	
	2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with		
323	3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12,12-hexafluorodecyl 2-propenoate, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl 2-propenoate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosylfluorotetradecyl 2-propenoate	142636-88-2	
	Amides, C ₁₀₋₁₈ , α-ω-perfluoro-N,N-bis(4-hydroxyethyl)	90629-99-4	
324	Piperazinium, 1-(carboxymethyl)-1-(2-hydroxyethyl)-4-		
325	(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-nonafluoro-1-oxodecyl)-, inner salt	71356-38-2	
326	2-Propenoic acid, perfluoro-C ₁₀₋₁₈ -alkyl esters	85681-64-7	
327	2-Propenoic acid, 2-methyl-, C ₁₀₋₁₈ -alkyl esters, polymers with 2-	125528-29-2	

acrylate			
328	Phosphine, tri[4-(3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptafluoroethyl)phenyl]-	325459-92-5	
329	Palladium, dichlorobis(tris[4-(3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-heptafluoroethyl)phenyl]phosphine- <i>s</i> -P)-	326475-46-1	
330	1-Propanaminium, N-(2-carboxyethyl)-N,N-bis(2-hydroxyethyl)-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-, inner salt	39186-68-0	
331	Octanamide, N-[3-bis(2-hydroxyethyl)amino]propyl]-	41358-63-8	
332	Benzenesulfonyl chloride, 3,4-bis[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-	24216-05-5	
333	1-Propanaminium,N,N,N-trimethyl-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-, chloride (1:1)	53517-98-9	
334	1-Propanaminium, N,N,N-trimethyl-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-, iodide (1:1)	335-90-0	
335	Octanamide, N-(3-aminopropyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-	85938-56-3	
336	1-Propanesulfonic acid,3-[ethyl (2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-sodium salt (1:1)	89085-61-0	
337	Nonene, heptaecafluoro-1-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoroethyl)-	84029-60-7	
338	Glycine, N-ethyl-N-(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)-, ammonium salt	138473-79-7	
339	Octanamide, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-N-(14-hydroxy-3,6,9,12-tetraoxatetradec-1-yl)-	89932-71-8	
340	Ethanaminium, N,N,N-trimethyl-2-[(2,2,3,3,3,4,4,4,5,5,6,6,7,7,7-pentadecafluoro-1-oxooctyl)amino]-, chloride (1:1)	178766-44-4	
341	Octanamide, N-[3-(dimethylamino)propyl]-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-	376-23-8	
342	1-Pentanaminium, N,N,N-trimethyl-5-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-, iodide (1:1)	91707-61-8	
343	Octanamide, N-[3-(dimethyloxidaniumpropyl)]-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-	30295-55-5	
344	Pyridinium, 1-[2-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]ethyl]-, chloride (1:1)	308-01-0	
345	Pyridinium, 1-[2-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]ethyl]-, bromide (1:1)	331755-02-3	
346	Piperazinium, 1-(2-hydroxyethyl)-1-methyl-4-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)-, chloride (1:1)	103555-98-2	
347	1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-, inner salt	90179-39-8	
348	1-Propanaminium, N-(2-carboxyethyl)-3-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8-pentadecafluoro-1-oxooctyl)amino]-N,N-dimethyl-, inner salt	5158-52-1	
349	Ethanesulfonic acid, 2-ethyl-[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-, potassium salt (1:1)	57670-46-9	
350	1-Propanesulfonic acid, 3-[(3-aminopropyl)-2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl)amino]-2-hydroxy-, sodium salt (1:1)	98900-76-6	
351	Benzenesulfonic acid, 4-[3-(methylamino)propyl]hydroxy-, sodium salt (1:1)	98000-75-5	

352	Octanamide, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-N-[3-(trimethoxysilyl)propyl]- 	98046-76-5	
353	Poly(oxy-1,2-ethanediyl), α-[[dimethoxy[3-[[2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl]amino]propyl]silyl]-ω-[[dimethoxy[3-[[2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-oxooctyl]amino]propyl]silyl]oxy]- 	154380-30-0	

公告事項第二項附表二修正草案對照表

修正規定					現行規定					說明
附表二 公告列管毒性化學物質禁止運作事項一覽表					附表二 公告列管毒性化學物質禁止運作事項一覽表					
列管編號	序號	化學物質 中文名稱	禁止運作事項	備註	列管編號	序號	化學物質 中文名稱	禁止運作事項	備註	
165	01	壬基酚（壬酚）	1. 禁止使用於製造家用清潔劑		165	01	壬基酚（壬酚）	禁止使用於製造家用清潔劑		
	2. 禁止使用於下列用途。但受控之系統、製程、防制設備，可完全回收、焚化或自廢水移除，且非於國內市場使用及販賣者，不在此限： (1)製造工業及公共機構用清潔劑 (2)處理紡織品或皮革製品 (3)金屬加工 (4)製造紙張或紙漿									
165	02	壬基酚聚乙氧基醇			165	02	壬基酚聚乙氧基醇			

一、修正壬基酚及壬基酚聚乙氧基醇之禁止運作事項：	（一）參考歐盟 REACH 附錄十七項目四十六，限制壬基酚及壬基酚聚乙氧基醇用於工業及公共機構用清潔劑 (Industrial cleaning, I&I cleaning)、紡織品和皮革製品之處、理、金屬加工、紙漿和紙張之製造等具環境風險之相關用途。 （二）除家用清潔劑已自九十七年一月一日起禁止使用壬基酚、壬基酚聚乙氧基醇製造，其他用途之工業及機構用清潔劑 (Industrial and institutional cleaning, I&I cleaning) 依附表四期限禁止運作。 （三）本項所指「清潔劑」係指任何用於清潔過程中，含肥皂或界面活性劑之物質或混合物。

				6.高壓電線及電纜之聚氟乙烯(PEP)之製造。 7.車用內裝之圓形環、三角皮帶及塑膠零件之製造。		辛烷磺醯氯（列管編號169-03）。 四、配合增列三百五十二種全氟辛酸鹽類與相關化合物，為管理一致，調整原全氟辛酸（列管編號169-04）名稱為全氟辛酸及其鹽類與相關化合物。 五、參考歐盟持久性有機污染物條例豁免原則修訂全氟辛酸磺酸(PFOS)得使用用途： (一) 一旦使用更安全替代品，且技術及經濟上可行，將不再使用PFOS。 (二) 於無適當之更安全替代品，且已報告為了尋找更安全替代品所做努力下之情況下，得繼續豁免。 (三) 透過應用最佳可行技術以最大限度降低PFOS排放至環境中。	
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[illegible]

備緊急應變車及設備。 提報無障礙器材、備測及警報設備之設置及操作計畫。 提報消防組織設立計畫。 完成消防及警報設備之設置。 依備有之危害預防及應變計畫內容實施。 專業技師管理人員。 責任保險。 專業應變人員。 依規定取得許可證、登記文件或後可文件。 其他未及本列事項。	中華民國一百十五年三月一日前完成提報。 中華民國一百十五年六月一日前完成提報。 中華民國一百十五年六月一日前完成。 中華民國一百十五年九月一日前完成設置。 中華民國一百十五年九月一日起實施。 中華民國一百十五年九月一日前完成設置。 自公告日起六個月內完成投保事宜。 中華民國一百十五年九月一日起完成訓練及登載。 中華民國一百十五年九月一日前取得。 自即日起依有關規定辦理。
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