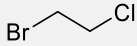
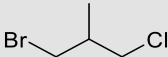
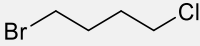
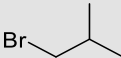
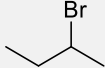
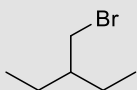
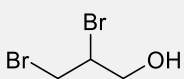
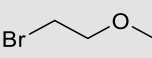
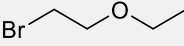
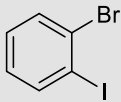
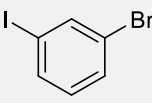
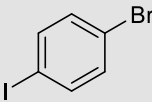
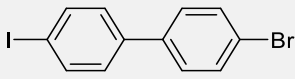
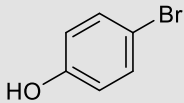
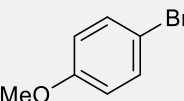
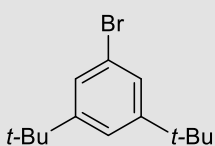


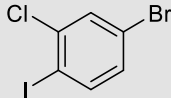
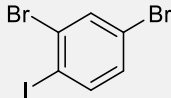
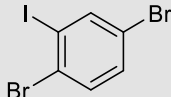
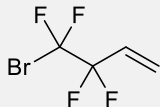


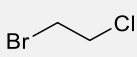
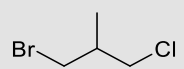
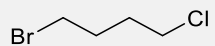
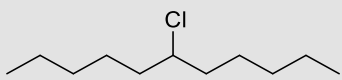
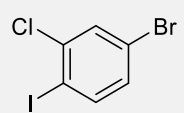
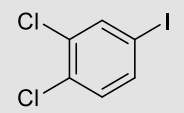
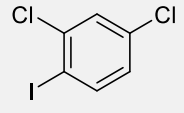
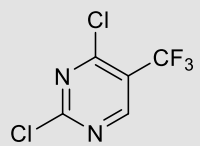
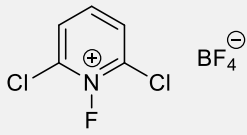
# Fine Chemicals Product List 2020

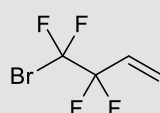
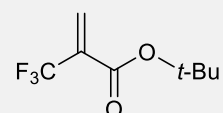
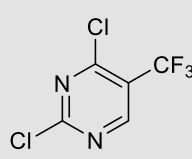
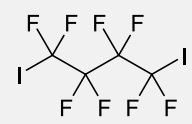
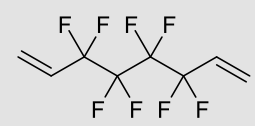
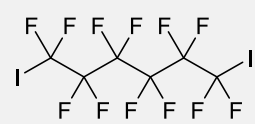
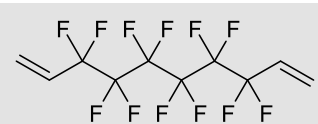
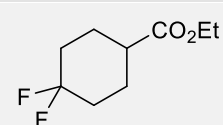
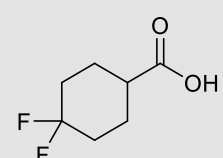


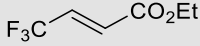
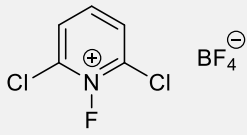
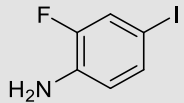
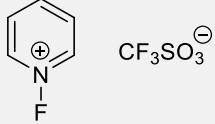
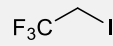
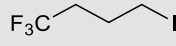
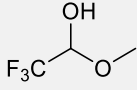
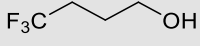
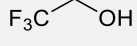
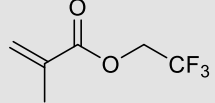

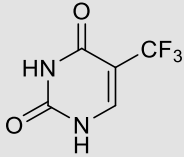
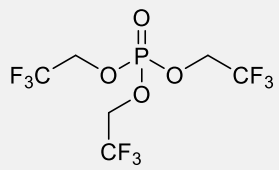
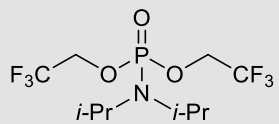
**TOSOH CORPORATION**


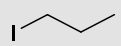

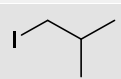
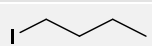
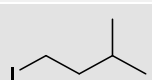
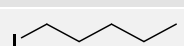
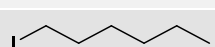
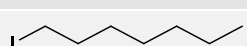
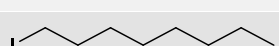
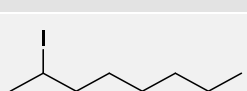
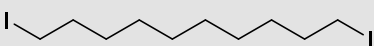
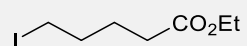
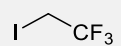
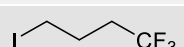
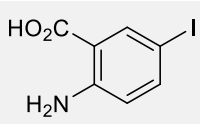
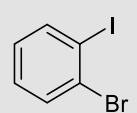
Brominated products		
Product name	Chemical structure	CAS number
1-Bromo-2-chloroethane		107-04-0
1-Bromo-3-chloro-2-methylpropane		6974-77-2
1-Bromo-4-chlorobutane		6940-78-9
<i>iso</i> -Butyl bromide		78-77-3
<i>sec</i> -Butyl bromide		78-76-2
3-Bromomethylpentane		3814-34-4
2,3-Dibromo-1-propanol		96-13-9
1-Bromo-2-methoxyethane		6482-24-2
1-Bromo-2-ethoxyethane		592-55-2
1-Bromo-2-iodobenzene		583-55-1
1-Bromo-3-iodobenzene		591-18-4
1-Bromo-4-iodobenzene		589-87-7
4-Bromo-4'-iodobiphenyl		105946-82-5
4-Bromophenol		106-41-2
1-Bromo-4-methoxybenzene		104-92-7
1-Bromo-3,5-di- <i>tert</i> -butylbenzene		22385-77-9

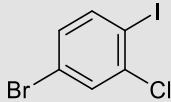
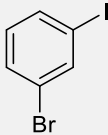
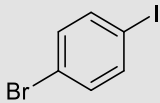
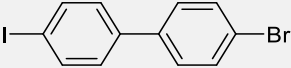
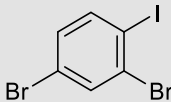
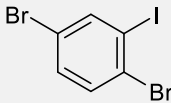
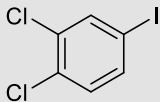
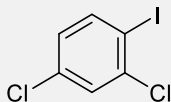
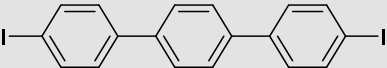
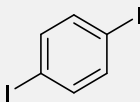
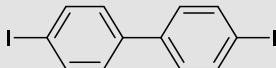
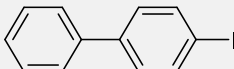
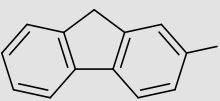
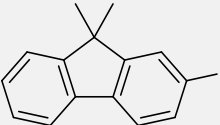
Brominated products		
Product name	Chemical structure	CAS number
1-Bromo-3-chloro-4-iodobenzene		31928-47-9
1,3-Dibromo-4-iodobenzene		19393-94-3
1,4-Dibromo-2-iodobenzene		89284-52-6
4-Bromo-3,3,4,4-tetrafluoro-1-butene		18599-22-9

Chlorinated products		
Product name	Chemical structure	CAS number
Chlorodiiodomethane	$\text{CHI}_2\text{Cl}$	593-71-5
1-Bromo-2-chloroethane		107-04-0
1-Bromo-3-chloro-2-methylpropane		6974-77-2
1-Bromo-4-chlorobutane		6940-78-9
6-Chloroundecane		20351-26-2
1-Bromo-3-chloro-4-iodobenzene		31928-47-9
1,2-Dichloro-4-iodobenzene		20555-91-3
1,3-Dichloro-4-iodobenzene		3032-81-3
2,4-Dichloro-5-trifluoromethylpyrimidine		3932-97-6
2,6-Dichloro-N-fluoropyridinium tetrafluoroborate (FP-B800)		140623-89-8

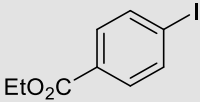
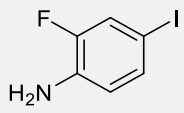
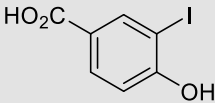
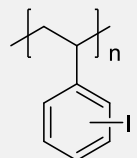
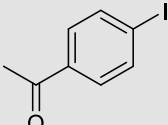
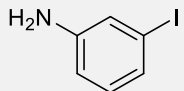
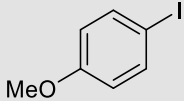
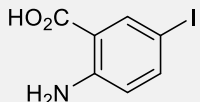
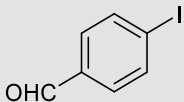
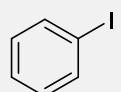
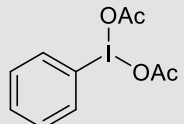
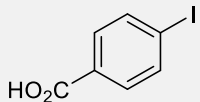
Fluorinated products		
Product name	Chemical structure	CAS number
4-Bromo-3,3,4,4-tetrafluoro-1-butene		18599-22-9
<i>tert</i> -Butyl- <i>a</i> -(trifluoromethyl)acrylate		105935-24-8
2,4-Dichloro-5-trifluoromethylpyrimidine		3932-97-6
1,4-Diiodoperfluorobutane		375-50-8
1,4-Divinylperfluorobutane		678-65-9
1,6-Diiodoperfluorohexane		1800-91-5
1,6-Divinylperfluorohexane		375-80-4
Ethyl 4,4-difluorocyclohexanecarboxylate		178312-47-5
4,4-Difluorocyclohexanecarboxylic acid		122665-97-8

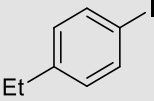
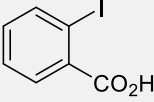
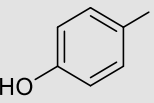
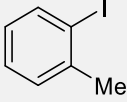
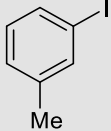
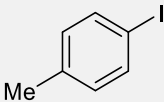
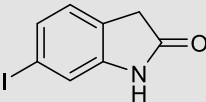
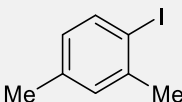
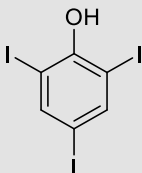
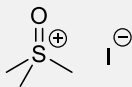
Fluorinated products		
Product name	Chemical structure	CAS number
Ethyl 4,4,4-trifluorocrotonate		25597-16-4
2,6-Dichloro-N-fluoropyridinium tetrafluoroborate (FP-B800)		140623-89-8
2-Fluoro-4-iodoaniline		29632-74-4
N-Fluoropyridinium triflate		107263-95-6
Trifluoroiodomethane	$\text{CF}_3\text{I}$	2314-97-8
2-Iodo-1,1,1-trifluoroethane		353-83-3
4-Iodo-1,1,1-trifluorobutane		461-17-6
Trifluoroacetaldehyde methyl hemiacetal		431-46-9
4,4,4-Trifluoro-1-butanol		461-18-7
2,2,2-Trifluoroethanol		75-89-8
2,2,2-Trifluoroethyl methacrylate		352-87-4
(Trifluoromethyl)trimethylsilane		81290-20-2
5-(Trifluoromethyl)uracil		54-20-6
Tris(2,2,2-trifluoroethyl)phosphate		358-63-4
Bis(2,2,2-trifluoroethyl) diisopropylphosphoramidate		1461621-96-4

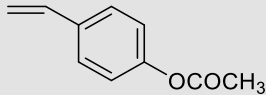
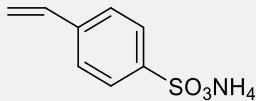
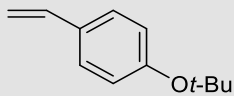
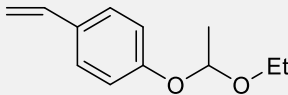
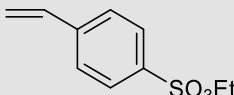
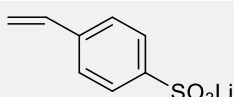
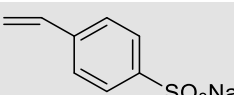
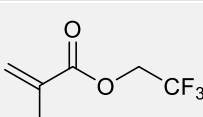
Iodinated products		
Product name	Chemical structure	CAS number
Iodomethane	$\text{CH}_3\text{I}$	74-88-4
Iodoethane		75-03-6
1-Iodopropane		107-08-4
2-Iodopropane		75-30-9
1-Iodo-2-methylpropane		513-38-2
1-Iodobutane		542-69-8
1-Iodo-3-methylbutane		541-28-6
1-Iodopentane		628-17-1
1-Iodohexane		638-45-9
1-Iodoheptane		4282-40-0
1-Iodooctane		629-27-6
2-Iodooctane		557-36-8
Diiodomethane	$\text{CH}_2\text{I}_2$	75-11-6
Chlorodiiodomethane	$\text{CHI}_2\text{Cl}$	593-71-5
1,10-Diiododecane		16355-92-3
Ethyl 5-Iodopentanoate		41302-32-3
Trifluoroiodomethane	$\text{CF}_3\text{I}$	2314-97-8
2-Iodo-1,1,1-trifluoroethane		353-83-3
4-Iodo-1,1,1-trifluorobutane		461-17-6
2-Amino-5-iodobenzoic acid		5326-47-6
1-Bromo-2-iodobenzene		583-55-1

Iodinated products		
Product name	Chemical structure	CAS number
1-Bromo-3-chloro-4-iodobenzene		31928-47-9
1-Bromo-3-iodobenzene		591-18-4
1-Bromo-4-iodobenzene		589-87-7
4-Bromo-4'-iodobiphenyl		105946-82-5
1,3-Dibromo-4-iodobenzene		19393-94-3
1,4-Dibromo-2-iodobenzene		89284-52-6
1,2-Dichloro-4-iodobenzene		20555-91-3
1,3-Dichloro-4-iodobenzene		3032-81-3
4,4''-Diiodo- <i>p</i> -terphenyl		19053-14-6
1,4-Diiodobenzene		624-38-4
4,4'-Diiodobiphenyl		3001-15-8
4-Iodobiphenyl		1591-31-7
2-Iodofluorene		2523-42-4
2-Iodofluorene		2523-42-4



Iodinated products		
Product name	Chemical structure	CAS number
Ethyl 4-iodobenzoate		51934-41-9
2-Fluoro-4-iodoaniline		29632-74-4
4-Hydroxy-3-iodobenzoic acid		37470-46-5
Iodinated polystyrene		N/A
4'-Iodoacetophenone		13329-40-3
3-Iodoaniline		626-01-7
4-Iodoanisole		696-62-8
5-Iodoanthranilic acid		5326-47-6
4-Iodobenzaldehyde		15164-44-0
Iodobenzene		591-50-4
Iodobenzene diacetate		3240-34-4
4-Iodobenzoic acid		619-58-9

Iodinated products		
Product name	Chemical structure	CAS number
4-Iodoethylbenzene		25309-64-2
2-Iodobenzoic acid		88-67-5
4-Iodophenol		540-38-5
2-Iodotoluene		615-37-2
3-Iodotoluene		625-95-6
4-Iodotoluene		624-31-7
6-Iodo-2-oxindole		919103-45-0
4-Iodo- <i>m</i> -xylene		4214-28-2
2,4,6-Triiodophenol		609-23-4
Trimethylsulfoxonium iodide		1774-47-6

Unique monomers		
Product name	Chemical structure	CAS number
<i>p</i> -Acetoxystyrene		2628-16-2
Ammonium <i>p</i> -styrenesulfonate (SPINOMAR®AmSS)		19922-72-6
<i>p</i> - <i>tert</i> -Butoxystyrene		95418-58-9
<i>p</i> -(1-Ethoxyethoxy) styrene		157057-20-0
<i>p</i> -Ethylstyrenesulfonate		16736-98-4
Lithium <i>p</i> -styrenesulfonate (SPINOMAR®LiSS)		4551-88-6
Sodium <i>p</i> -styrenesulfonate (SPINOMAR®NaSS)		2695-37-6
2,2,2-Trifluoroethyl methacrylate		352-87-4



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