P&M-Invest Ltd.
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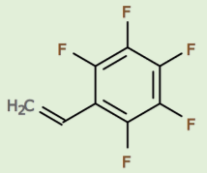
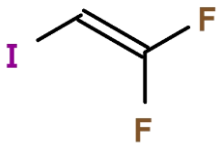
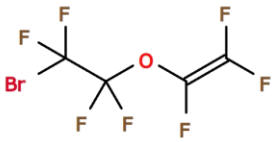
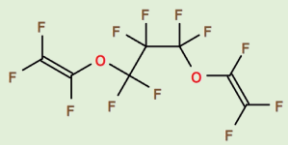
Revision 15. Nov. 2024

[Classification by use]

3-1. Functional monomer and crosslinking agent

No.	Chemical formula (Classification)	Name	CAS No.	Remarks
1	 **$C_6F_5CH=CH_2$ (Benzene derivative)**	**2,3,4,5,6-Pentafluoro styrene**	**653-34-9**	Pentafluorostyrene copolymer raw material characterized by the click-reaction with thiols.
2	 **$CF_2=CHI$ (Alkene)**	**1,1-Difluoro-2-iodoethylene**	**2925-16-8**	High-speed peroxide cure fluoroelastomer crosslinking monomer.
3	 **$CF_2BrCFBrO$-$CF_2CF(CF_3)OCF_2CF_2CN$ (Ether)**	**8,9-Dibromo-Perfluoro (5-methyl-4,7-dioxanonanenitrile)**		Crosslinking monomer of heat resistant perfluoroelastomer; Prefluoro(cyanovinyl ether) monomer precursor. Good long-term storage stability, small inhibition at polymerization by isomers.
4	 **$CF_2=CFOCF_2CF_2Br$ (Ether)**	**2-Bromotetrafluoroethyl trifluorovinyl ether**	**85737-06-0**	Crosslinking monomer for proxide curable fluoroelastomer. Excellent copolymerizability, homogeneous distribution.
5	 **$CF_2=CFOCF_2CF_2CF_2O$-$CF=CF_2$ (Ether)**	**Perfluoro(1,3-bis (vinyloxy)propane)**	**13846-22-5**	Peroxide curable perfluorelastomer crosslinking monomer.

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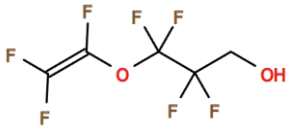
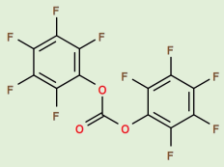
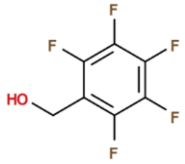
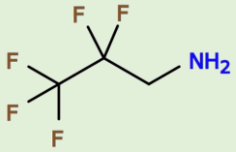
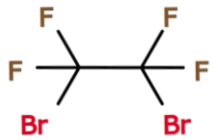
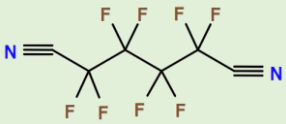
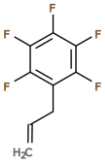
6	 **CF_2=CFO-$CF_2CF_2CH_2OH$ (Ether)**	**2,2,3,3-Tetrafluoro-3-(1,2,2-trifluoroetheny-loxy)-propan-1-ol**	**136403-80-0**	Linear perfluoropolyether raw material, for fingerprint preventive coating.
7	 **C6F5OCOOC6F5 (Benzene derivative)**	**Bis(pentafluorophenyl) carbonate (abb. PFPC)**	**59483-84-0**	Raw material monomer for functional polycarbonate that attracts attention as a material for drug delivery systems.
8	 **$C_6F_5CH_2Br$ (Benzene derivative)**	**2,3,4,5,6-Pentafluorobenzyl bromide**	**1765-40-8**	GC analysis of trace amino acids and oligopeptides using a simple chemical modification method.
9	 **$CF_3CF_2CH_2NH^2$ (Amine)**	**2,2,3,3,3-Pentafluoropropylamine**	**422-03-7**	Short-chain Rf amide groups can provide high solvent permeation flow rate and excellent solute blocking performance in organic solvent permeable reverse osmosis membranes.
10	 **$BrCF_2CF_2Br$ (Alkane)**	**1,2-Dibromotetrafluoro ethane**	**124-73-2**	A method for synthesizing bis(trifluorovinyl ether)-based compounds from general-purpose 1,2-dibromotetrafluoroethane and a polymerization method by cyclodimerization.
11	 **$NC(CF_2)_4CN$ (Carboxylic acid and derivative)**	**Octafluoroadipodinitrile (abb. OFAN)**	**376-53-4**	Aromatic bisamiderazone crosslinking agents were investigated to improve the heat resistance of conventional cyano group-containing heat-resistant perfluoroelastomers and aromatic bisaminophenol crosslinked systems.
12	 **CH_2=$CHCH_2C_6F_5$ (Benzene derivative)**	**Allyl pentafluorobenzene (abb.APFB)**	**1736-60-3**	We investigated the plasma polymerization of APFB on PI film in detail, and obtained a coating film with a fluorine content equivalent to that of pentafluorostyrene. It also showed much better heat resistance than pentafluorostyrene.

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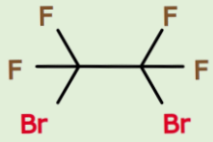
13	 **$BrCF_2CF_2Br$** (Carboxylic acid and derivative)	**1,2-Dibromotetrafluoroethane**	**124-73-2**	The O2-free synthesis of TFE by debromination of 1,2-dibromotetrafluoroethane. Furthermore, cyanotetrafluoropropionate with high industrial added value was obtained from TFE.
14	 **$CF_2=CFCF_2OSO_2F$** (Carboxylic acid and derivative)	**Pentafluoroallyl fluorosulfate (abb. FAFS)**	**67641-28-5**	We have proposed a simple synthesis method for vinyl monomers with two carboxyl groups. This is expected to improve the mechanical properties and ionic conductivity of electrolyte polymers.

* Please contact us for product details.