

FOREWORD

Scientific Industrial Association "P&M-Invest" was Russia's first private opened business operating in the field of production and marketing of fluorine containing compounds. We are always glad to participant in your new projects that are started from scientific researches and developed up to industrial scale. Our company is engaged in the manufacturing of organofluorine compounds, engineering new method of synthesis and technologies for fluorine compounds. Due to our qualified employees and available possibilities, we can react quickly, flexible and competent to our customer needs. Our products find application in the textile industry, pharmaceuticals, cosmetics, polymer industries, agrochemicals, auto-air productions and space articles. We are the owner of patents for several technologies that we can offer to you. Most of our products are exported and also have enjoyed a good reputation for their high quality as well as their competitive price.

The range of our products is being increased on a constant basis, that is why if you don't find the compound you need at a present moment or you have any questions contact us for more information

P&M Orders and Information

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(0453) 2-Iodoheptafluoropropane

Chemical Name 2-Iodoheptafluoropropane

CAS Number [677-69-0]

Structural Formula

$$\begin{array}{c} \text{CF}_3\text{CFCF}_3 \\ | \\ \text{I} \end{array}$$

Empirical Formula $\text{C}_3\text{F}_7\text{I}$

Molecular Weight 245.92

Application

- as active body in optical quantum generators
- as material in production of fluorochemicals
- as firefighting media

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	2,10
Boiling point, °C	39-40

Capacity: 300 kg per month

Packing Steel and plastic containers UN-approved, volume 30, 48, 100 and 200 L

Nº UN 2810

ALKANES

(0527) Iodopentafluoroethane

Chemical Name Iodopentafluoroethane

CAS Number [354-64-3]

Structural Formula $\text{CF}_3\text{CF}_2\text{I}$

Empirical Formula $\text{C}_2\text{F}_5\text{I}$

Molecular Weight 245.92

Application

- as active body in optical quantum generators
- as intermediate for production of fluorochemicals
- as semi-product for pharmaceutical

Quality Data

Appearance	Condensed gas
Assay, % min	99
Density, g/cm ³	2,080
Boiling point, °C	12-13

Capacity: 200 kg per month

Packing steel cylinders UN-approved, volume 14; 38 and 50 L

Nº UN 1956

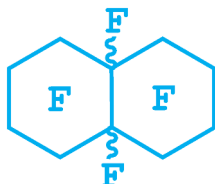
ALKANES

(0763) *cis/trans-Perfluorodecalin (Purification)*

Chemical Name cis/trans-Perfluorodecalin

CAS Number [306-94-5]

Structural Formula



Empirical Formula C₁₀F₁₈

Molecular Weight 462.08

Application

- as dielectric
- as heat-carrying agent
- in medicine as component of blood's surrogate and pervaporate liquids and others
- as intermediates in production of pharmaceuticals and cosmetics

Quality Data

Appearance	Colorless liquid
Assay, % min	99 (mixture of isomers)
Density, g/cm ³	1,906
Boiling point, °C	141-142
Melting point, °C	2-4

Capacity: 250 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN Not restricted

ALKANES

(0178) 4-Bromo-1,1,2-trifluorobut-1-ene

Chemical Name 4-Bromo-1,1,2-trifluorobut-1-ene

CAS Number [10493-44-4]

Structural Formula $\text{CF}_2=\text{CFCH}_2\text{CH}_2\text{Br}$

Empirical Formula $\text{C}_4\text{H}_4\text{BrF}_3$

Molecular Weight 188.97

Application

- as intermediate in production of organofluorine compounds
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,639
Boiling point, °C	100
Flash point, °C	17

Capacity: 50 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L

Nº UN 1993

ALKENES

(0184) 2-Bromo-3,3,3-trifluoropropene

Chemical Name 2-Bromo-3,3,3-trifluoropropene

CAS Number [1514-82-5]

Structural Formula

$$\begin{array}{c} \text{CF}_3 \\ | \\ \text{C}=\text{CH}_2 \\ | \\ \text{Br} \end{array}$$

Empirical Formula C₃H₂BrF₃

Molecular Weight 174.95

Application

- as intermediate in production of organofluorine compounds
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,686
Boiling point, °C	33-34

Capacity: 400 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L

Nº UN 1993

ALKENES

(0828) Perfluoro(4-methylpent-2-ene)

Chemical Name Perfluoro(4-methylpent-2-ene)

CAS Number [2070-70-4]

Structural Formula

$$\begin{array}{c} \text{CF}_3\text{CFCF}=\text{CFCF}_3 \\ | \\ \text{CF}_3 \end{array}$$

Empirical Formula C₆F₁₂

Molecular Weight 300.05

Application

- as firefighting media
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,5873
Boiling point, °C	49

Capacity: 300 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L

Nº UN 1993

ALKENES

(0329) 2,2-Difluoroethanol

Chemical Name 2,2-Difluoroethanol

CAS Number [359-13-7]

Structural Formula $\text{HCF}_2\text{CH}_2\text{OH}$

Empirical Formula $\text{C}_2\text{H}_4\text{F}_2\text{O}$

Molecular Weight 82.05

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,296
Boiling point, °C	95-96
Flash point, °C	3

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 1987

ALCOHOLS

(0419) 2,2,3,3,4,4,4-Heptafluorobutan-1-ol

Chemical Name 2,2,3,3,4,4,4-Heptafluorobutan-1-ol

CAS Number [375-01-9]

Structural Formula **CF₃CF₂CF₂CH₂OH**

Empirical Formula C₄H₃F₇O

Molecular Weight 200.06

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,596
Boiling point, °C	96-97
Flash point, °C	25

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1987

ALCOHOLS

(0774) Hexafluoro-2,3-bis(trifluoromethyl)-butane-2,3-diol

Chemical Name Hexafluoro-2,3-bis(trifluoromethyl)-butane-2,3-diol
[Perfluoropinacol]

CAS Number [918-21-8]

Structural Formula

$$(\text{CF}_3)_2\text{C}(\text{OH})-\text{C}(\text{OH})(\text{CF}_3)_2$$

Empirical Formula $\text{C}_6\text{H}_2\text{F}_{12}\text{O}_2$

Molecular Weight 334.06

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	97
Density, g/cm ³	1,86
Boiling point, °C	128-129
Melting point, °C	18-20

Capacity: 50 kg per month

Packing Plastic container UN-approved, volume 5 L, 10 L

Nº UN 2810

ALCOHOLS

(0494) 1,1,1,3,3,3-Hexafluoropropan-2-ol

Chemical Name 1,1,1,3,3,3-Hexafluoropropan-2-ol

CAS Number [920-66-1]

Structural Formula

$$\begin{array}{c} \text{CF}_3\text{CHCF}_3 \\ | \\ \text{OH} \end{array}$$

Empirical Formula C₃H₂F₆O

Molecular Weight 168.04

Application

- as spirit for nitrogen- and sulphur-containing polymers
- as solvent in peptide synthesis
- as intermediate in production of potential monomers for the optical fiber
- as intermediate in production of organofluorine compounds, "Sevoflurane" and others pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	99,5
Density, g/cm ³	1,605
Boiling point, °C	59-60
Melting point, °C	-5

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L

Nº UN 2922

ALCOHOLS

(0478) 2,2,3,4,4,4-Hexafluorobutan-1-ol

Chemical Name 2,2,3,4,4,4-Hexafluorobutan-1-ol

CAS Number [382-31-0]

Structural Formula $\text{CF}_3\text{CHFCE}_2\text{CH}_2\text{OH}$

Empirical Formula $\text{C}_4\text{H}_4\text{F}_6\text{O}$

Molecular Weight 187.07

Application

- as intermediate in production of fluoroacrylates
- as intermediate in production of fluoropolymers

Quality Data

Appearance	Colorless liquid
Assay, % min	97
Density, g/cm ³	1,564
Boiling point, °C	114-116
Flash point, °C	51

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1987

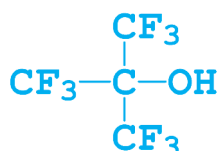
ALCOHOLS

(0740) Nonafluoro-tert-butanol

Chemical Name Nonafluoro-tert-butanol

CAS Number [2378-02-1]

Structural Formula



Empirical Formula C₄HF₉O

Molecular Weight 236.04

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,693
Boiling point, °C	44-45
Melting point, °C	-17
Flash point, °C	none

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc

Nº UN 2810

ALCOHOLS

(0717) 2,2,3,3,3-Pentafluoropropan-1-ol

Chemical Name 2,2,3,3,3-Pentafluoropropan-1-ol

CAS Number [422-05-9]

Structural Formula **CF₃CF₂CH₂OH**

Empirical Formula C₃H₃F₅O

Molecular Weight 150.05

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,505
Boiling point, °C	80-81
Flash point, °C	none

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc

Nº UN 1987

ALCOHOLS

(0789) 1H,1H,7H-Perfluoroheptan-1-ol

Chemical Name 1H,1H,7H-Perfluoroheptan-1-ol

CAS Number [335-99-9]

Structural Formula $\text{HCF}_2 (\text{CF}_2)_5 \text{CH}_2\text{OH}$

Empirical Formula $\text{C}_7\text{H}_4\text{F}_{12}\text{O}$

Molecular Weight 332.09

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,762
Boiling point, °C	169-170
Melting point, °C	-20

Capacity: 2000 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc

Nº UN Not restricted

ALCOHOLS

(0891) 1H,1H,11 H-Perfluoroundecan-1-ol

Chemical Name	1H,1H,11H-Perfluoroundecan-1-ol
CAS Number	[307-70-0]
Structural Formula	$\text{HCF}_2 (\text{CF}_2)_9 \text{CH}_2\text{OH}$
Empirical Formula	$\text{C}_7\text{H}_4\text{F}_{12}\text{O}$
Molecular Weight	532.12
Application	- as intermediate in production of organofluorine compounds

Quality Data

Appearance	Solid
Assay, % min	94
Boiling point, °C	180-181/200 mm Hg
Melting point, °C	95-97

Capacity: 200 kg per month

Packing	Plastic and steel containers UN-approved, volume 100 L, 200 L
Nº UN	Not restricted

ALCOHOLS

(1096) 3,3,3-Trifluoropropan-1-ol

Chemical Name 3,3,3-Trifluoropropan-1-ol

CAS Number [2240-88-2]

Structural Formula $\text{CF}_3\text{CH}_2\text{CH}_2\text{OH}$

Empirical Formula $\text{C}_3\text{H}_5\text{F}_3\text{O}$

Molecular Weight 114.07

Application - as intermediate in production of organofluorine compounds
for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,294
Boiling point, °C	100-101

Capacity: 50 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L,
30 L etc.

Nº UN 1987

ALCOHOLS

(0272) Decafluorobiphenyl

Chemical Name Decafluorobiphenyl

CAS Number [434-90-2]

Structural Formula



Empirical Formula C₁₂F₁₀

Molecular Weight 334.12

Application - as intermediate in production of bioactive compounds and fluoropolymers

Quality Data

Appearance	White solid
Assay, % min	99
Density, g/cm ³	1,785
Melting point, °C	68-69

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3152

BENZENE DERIVATIVES

(0476) Hexafluorobenzene

Chemical Name Hexafluorobenzene

CAS Number [392-56-3]

Structural Formula



Empirical Formula C₆F₆

Molecular Weight 186.06

Application

- as heat-carrying agent
- as dielectric
- as solvent
- as material in production of pharmaceuticals, pesticides, heat- and radiation-resistant plastics, rubbers, films, oils, lubricates and others.

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,616
Boiling point, °C	80-81
Melting point, °C	4-6
Flash point, °C	10

Capacity: 250 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1993

BENZENE DERIVATIVES

(0524) Iodopentafluorobenzene

Chemical Name Iodopentafluorobenzene

CAS Number [827-15-6]

Structural Formula



Empirical Formula C_6F_5I

Molecular Weight 293.96

Application

- as heat-carrying agent
- as dielectric
- as solvent
- as material in production of pharmaceuticals, pesticides, heat- and radiation-resistant plastics, rubbers, films, oils, lubricates and others.

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	2,212
Boiling point, °C	166
Melting point, °C	-29

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3334

BENZENE DERIVATIVES

(0638) 4-Methylheptafluorotoluene

Chemical Name 4-Methyl-2,3,5,6-tetrafluorobenzotrifluoride

CAS Number [778-35-8]

Structural Formula



Empirical Formula C₈H₃F₇

Molecular Weight 232.10

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,528
Boiling point, °C	143-145
Flash point, °C	41

Capacity: 50 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1993

BENZENE DERIVATIVES

(0700) Pentafluorophenol

Chemical Name Pentafluorophenol

CAS Number [771-61-9]

Structural Formula



Empirical Formula C_6HF_5O

Molecular Weight 184.07

Application

- as material in production of vulcanizing fluorine-containing elastomers
- as promoter in peptide synthesis
- as material in production of pharmaceuticals, herbicides and others
- as intermediates in production of fluorochemicals

Quality Data

Appearance	White solid
Assay, % min	99
Density, g/cm ³	1,757
Boiling point, °C	143
Melting point, °C	34-36
Flash point, °C	72

Capacity: 250 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 2923

BENZENE DERIVATIVES

(0735) Pentafluorothiophenol

Chemical Name Pentafluorothiophenol

CAS Number [771-62-0]

Structural Formula



Empirical Formula C₆HF₅S

Molecular Weight 200.13

Application - as intermediates in production of fluorochemicals

Quality Data

Appearance	Colorless liquid
Assay, % min	97
Density, g/cm ³	1,572
Boiling point, °C	143-144
Melting point, °C	-24
Flash point, °C	51

Capacity: 40-50 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 2920

BENZENE DERIVATIVES

(0965) 2,3,5,6-Tetrafluorophenol

Chemical Name 2,3,5,6-Tetrafluorophenol

CAS Number [769-39-1]

Structural Formula



Empirical Formula $C_6H_2F_4O$

Molecular Weight 166.07

Application

- as material in production of vulcanizing fluorine-containing elastomers
- as promoter in peptide synthesis
- as material in production of pharmaceuticals, herbicides and others
- as intermediates in production of fluorochemicals

Quality Data

Appearance	White solid
Assay, % min	98
Boiling point, °C	141-142
Melting point, °C	37-39
Flash point, °C	79

Capacity: 200 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1759

BENZENE DERIVATIVES

(0156) 2-Bromotetrafluoroethyl trifluorovinyl ether

Chemical Name 2-Bromotetrafluoroethyl trifluorovinyl ether

CAS Number [85737-06-0]

Structural Formula $\text{BrCF}_2\text{CF}_2\text{OCF}=\text{CF}_2$

Empirical Formula $\text{C}_4\text{BrF}_7\text{O}$

Molecular Weight 276.94

Application

- as intermediate in production of organofluorine compounds
- as monomer in polymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,82
Boiling point, °C	55

Capacity: 250 kg per month

Packing Plastic container UN-approved, volume 10 L

Nº UN 2810

ETHERS

(0501) 1,1,2,3,3,3-Hexafluoropropyl methyl ether

Chemical Name 1,1,2,3,3,3-Hexafluoropropyl methyl ether

CAS Number [382-34-3]

Structural Formula $\text{CF}_3\text{CHFCF}_2\text{OCH}_3$

Empirical Formula $\text{C}_4\text{H}_4\text{F}_6\text{O}$

Molecular Weight 182.07

Application

- as intermediate in production of organofluorine compounds
- as solvent
- as frothing agent in production of polyurethane foam
- as propellant
- as antifreeze (cooling liquid)

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,419
Boiling point, °C	52-53

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1993

ETHERS

(0880) Perfluoro(propyl vinyl ether)

Chemical Name Perfluoro(propyl vinyl ether)

CAS Number [1623-05-8]

Structural Formula $\text{CF}_2=\text{CFOCF}_2\text{CF}_2\text{CF}_3$

Empirical Formula $\text{C}_5\text{F}_{10}\text{O}$

Molecular Weight 266.04

Application

- as intermediate in production of organofluorine compounds
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99,5
Density, g/cm ³	1,581
Boiling point, °C	35-36
Melting point, °C	-70

Capacity: 300 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3271

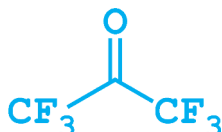
ETHERS

(0472) Hexafluoroacetone

Chemical Name Hexafluoroacetone

CAS Number [684-16-2]

Structural Formula



Empirical Formula C₃F₆O

Molecular Weight 166.02

Application

- as intermediate in production of organofluorine compounds for pharmaceuticals
- monomer in fluoropolymer production

Quality Data

Appearance	Gas
Assay, % min	98
Density, g/cm ³	1,320
Boiling point, °C	-28
Melting point, °C	-129

Capacity: 800 kg per month

Packing Steel cylinders UN-approved, volume 14, 38, 50 L

Nº UN 2420

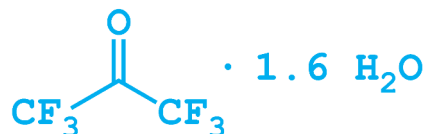
CARBONYL COMPOUNDS

(0473) Hexafluoroactetone sesquihydrate

Chemical Name Hexafluoroactetone sesquihydrate

CAS Number [13098-39-0]

Structural Formula



Empirical Formula C₃F₆O•1,6H₂O

Molecular Weight 194.85

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,98
Boiling point, °C	104-106
Melting point, °C	18-20

Capacity: 1000 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 2552

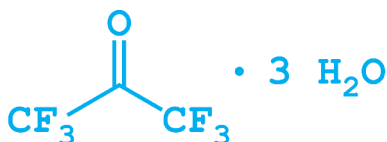
CARBONYL COMPOUNDS

(0474) Hexafluoroacetone trihydrate

Chemical Name Hexafluoroacetone trihydrate

CAS Number [34202-69-2]

Structural Formula



Empirical Formula $\text{C}_3\text{F}_6\text{O} \cdot 3\text{H}_2\text{O}$

Molecular Weight 220.05

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,579
Boiling point, °C	105-106
Melting point, °C	18-21
Flash point, °C	none

Capacity: 1000 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 2552

CARBONYL COMPOUNDS

(0113) Bromodifluoroacetic acid

Chemical Name Bromodifluoroacetic acid

CAS Number [354-08-5]

Structural Formula



Empirical Formula C₂HBrF₂O₂

Molecular Weight 174.93

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	White solid
Assay, % min	98
Boiling point, °C	77-78/80 mm Hg
Melting point, °C	40

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3261

CARBOXYLIC ACID DERIVATIVES

(1414) Chlorodifluoroacetic anhydride

Chemical Name Chlorodifluoroacetic anhydride

CAS Number [2834-23-3]

Structural Formula $(\text{ClCF}_2\text{CO})_2\text{O}$

Empirical Formula $\text{C}_4\text{Cl}_2\text{F}_4\text{O}_3$

Molecular Weight 242.94

Application - as intermediate in production of building-block materials

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,395
Boiling point, °C	93-96

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3265

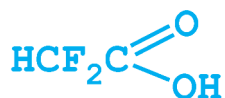
CARBOXYLIC ACID DERIVATIVES

(0324) Difluoroacetic acid

Chemical Name Difluoroacetic acid

CAS Number [381-73-7]

Structural Formula



Empirical Formula C₂H₂F₂O₂

Molecular Weight 96.03

Application

- as intermediate in production of organofluorine compounds for pharmaceuticals and agroindustry
- as intermediate in production of building-block materials

Quality Data

Appearance	Colorless liquid
Assay, % min	97
Density, g/cm ³	1,526
Boiling point, °C	132-134
Melting point, °C	-1

Capacity: 300-350 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3265

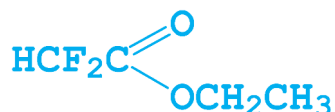
CARBOXYLIC ACID DERIVATIVES

(0369) Ethyl difluoroacetate

Chemical Name Ethyl difluoroacetate

CAS Number [454-31-9]

Structural Formula



Empirical Formula $C_4H_6F_2O_2$

Molecular Weight 124.09

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,242
Boiling point, °C	98-99
Flash point, °C	25

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 1992

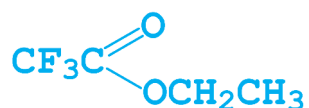
CARBOXYLIC ACID DERIVATIVES

(0391) Ethyl trifluoroacetate

Chemical Name Ethyl trifluoroacetate

CAS Number [383-63-1]

Structural Formula



Empirical Formula C₄H₅F₃O₂

Molecular Weight 142.08

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99,5
Density, g/cm ³	1,192
Boiling point, °C	62

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 1993

CARBOXYLIC ACID DERIVATIVES

(1238) Ethyl 4,4,4-trifluorocrotonate

Chemical Name Ethyl 4,4,4-trifluorocrotonate

CAS Number [25597-16-4]

Structural Formula



Empirical Formula $\text{C}_6\text{H}_7\text{F}_3\text{O}_2$

Molecular Weight 168.12

Application

- as intermediate in production of organofluorine compounds
- as intermediate in production of building-block materials

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,125
Boiling point, °C	113-114
Flash point, °C	25

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3272

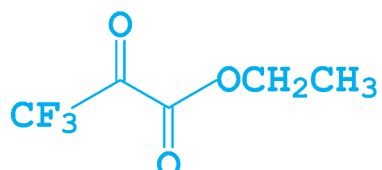
CARBOXYLIC ACID DERIVATIVES

(0394) Ethyl trifluoropyruvate

Chemical Name Ethyl trifluoropyruvate

CAS Number [13081-18-0]

Structural Formula



Empirical Formula C₅H₅F₃O₃

Molecular Weight 170.09

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,283
Boiling point, °C	100-102
Flash point, °C	31

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3272

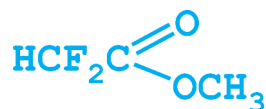
CARBOXYLIC ACID DERIVATIVES

(0596) Methyl difluoroacetate

Chemical Name Methyl difluoroacetate

CAS Number [433-53-4]

Structural Formula



Empirical Formula C₃H₄F₂O₂

Molecular Weight 110.06

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,272
Boiling point, °C	86-87
Flash point, °C	19

Capacity: 250 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3272

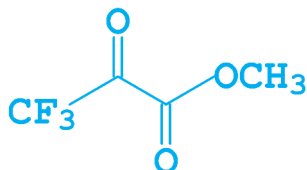
CARBOXYLIC ACID DERIVATIVES

(0623) Methyl trifluoropyruvate

Chemical Name Methyl trifluoropyruvate

CAS Number [13089-11-7]

Structural Formula



Empirical Formula $C_4H_3F_3O_3$

Molecular Weight 156.06

Application

- as intermediate in production of organofluorine compounds
- as material in synthesis of semiproducts for pharmaceuticals

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,528
Boiling point, °C	84-86
Flash point, °C	26

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3272

CARBOXYLIC ACID DERIVATIVES

(0427) Heptafluorobutyric anhydride

Chemical Name Heptafluorobutyric anhydride

CAS Number [336-59-4]

Structural Formula $(\text{CF}_3\text{CF}_2\text{CF}_2\text{CO})_2\text{O}$

Empirical Formula $\text{C}_8\text{F}_{14}\text{O}_3$

Molecular Weight 410.06

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,665
Boiling point, °C	108-109
Melting point, °C	-43
Flash point, °C	none

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3265

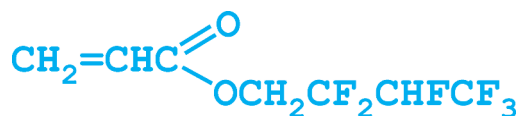
CARBOXYLIC ACID DERIVATIVES

(0479) 2,2,3,4,4,4-Hexafluorobutyl acrylate

Chemical Name 2,2,3,4,4,4-Hexafluorobutyl acrylate

CAS Number [54052-90-3]

Structural Formula



Empirical Formula $\text{C}_7\text{H}_6\text{F}_7\text{O}_2$

Molecular Weight 236.11

Application

- as intermediate in production of organofluorine compounds
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,389
Boiling point, °C	40-43/8 mm Hg
Flash point, °C	60

Capacity: 200 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3272

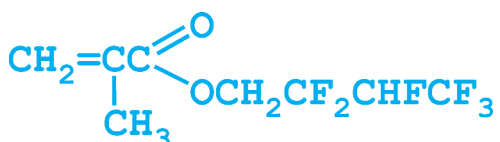
CARBOXYLIC ACID DERIVATIVES

(0480) 2,2,3,4,4,4-Hexafluorobutyl methacrylate

Chemical Name 2,2,3,4,4,4-Hexafluorobutyl methacrylate

CAS Number [36405-47-7]

Structural Formula



Empirical Formula C₈H₈F₆O₂

Molecular Weight 250.14

Application

- as intermediate in production of organofluorine compounds
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,352
Boiling point, °C	70/50 mm Hg
Flash point, °C	56

Capacity: 200 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3272

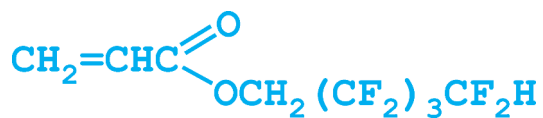
CARBOXYLIC ACID DERIVATIVES

(0665) 1H,1H,5H-Octafluoropentyl acrylate

Chemical Name 1H,1H,5H-Octafluoropentyl acrylate

CAS Number [376-84-1]

Structural Formula



Empirical Formula $\text{C}_8\text{H}_6\text{F}_8\text{O}_2$

Molecular Weight 286.12

Application

- as intermediate in production of organofluorine compounds
- as monomer in polymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,481
Boiling point, °C	122/140 mm Hg
Flash point, °C	71

Capacity: 300 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3082

CARBOXYLIC ACID DERIVATIVES

(0723) Pentafluoropropionic acid

Chemical Name Pentafluoropropionic acid

CAS Number [422-64-0]

Structural Formula



Empirical Formula C₃HF₅O₂

Molecular Weight 164.03

Application

- as intermediate in production of pharmaceuticals
- as monomer in fluoropolymer production

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,570
Boiling point, °C	96-97

Capacity: 500 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3265

CARBOXYLIC ACID DERIVATIVES

(0716) Pentafluoropropionic anhydride

Chemical Name Pentafluoropropionic anhydride

CAS Number [356-42-3]

Structural Formula $(\text{CF}_3\text{CF}_2\text{CO})_2\text{O}$

Empirical Formula $\text{C}_6\text{F}_{10}\text{O}_3$

Molecular Weight 310.05

Application

- as intermediate in production of pharmaceuticals
- as intermediate in production of building-block materials

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	1,589
Boiling point, °C	72-74

Capacity: 70 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 3265

CARBOXYLIC ACID DERIVATIVES

(1095) 3,3,3-Trifluoropropionic acid

Chemical Name 3,3,3-Trifluoropropionic acid

CAS Number [2516-99-6]

Structural Formula



Empirical Formula $\text{C}_3\text{H}_3\text{F}_3\text{O}_2$

Molecular Weight 128.05

Application - as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	97
Density, g/cm ³	1,450
Boiling point, °C	140
Melting point, °C	10-12

Capacity: 50 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 3265

CARBOXYLIC ACID DERIVATIVES

(0330) 2,2-Difluoroethylamine

Chemical Name 2,2-Difluoroethylamine

CAS Number [430-67-1]

Structural Formula $\text{HCF}_2\text{CH}_2\text{NH}_2$

Empirical Formula $\text{C}_2\text{H}_5\text{F}_2\text{N}$

Molecular Weight 81.07

Application - as intermediate in production of building-block materials

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,15
Boiling point, °C	68-69

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

Nº UN 2735

AMINES

(0914) 2,3,5,6-Tetrafluoroaniline

Chemical Name 2,3,5,6-Tetrafluoroaniline

CAS Number [700-17-4]

Structural Formula



Empirical Formula C₆H₃F₄N

Molecular Weight 165.09

Application - as intermediate in production of organofluorine compounds for pharmaceuticals

Quality Data

Appearance	White solid
Assay, % min	98
Density, g/cm ³	1,744
Boiling point, °C	156-158
Melting point, °C	31-32
Flash point, °C	62

Capacity: 100 kg per month

Packing Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.

No UN 2941

AMINES

(1311) Trimethyl(pentafluoroethyl)silane

Chemical Name	Trimethyl(pentafluoroethyl)silane
CAS Number	[124898-13-1]
Structural Formula	$\text{CF}_3\text{CF}_2\text{Si}(\text{CH}_3)_3$
Empirical Formula	$\text{C}_5\text{H}_9\text{F}_5\text{Si}$
Molecular Weight	192.20
Application	- as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	98
Density, g/cm ³	1,05
Boiling point, °C	70

Capacity: 100 kg per month

Packing	Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.
Nº UN	1993

SILANES

(1111) Trimethyl(trifluoromethyl)silane

Chemical Name	Trimethyl(trifluoromethyl)silane
CAS Number	[81290-20-2]
Structural Formula	CF₃Si (CH₃)₃
Empirical Formula	C ₄ H ₉ F ₃ Si
Molecular Weight	142.20
Application	- as intermediate in production of organofluorine compounds

Quality Data

Appearance	Colorless liquid
Assay, % min	99
Density, g/cm ³	0,9626
Boiling point, °C	54-55
Flash point, °C	-10

Capacity: 500 kg per month

Packing	Plastic container UN-approved, volume 10 L, 20 L, 30 L etc.
Nº UN	1993

SILANES