Factory

R & D Laboratory

Pilot / small scale kilo laboratory

Total of 17m3 glass lined reactors ranging from 135L to 2250L

Centrifuges and filtration isolation equipment

1.3m3 Distillation capacity

Large vented oven drying capacity

Equipment

Item	Process Type	Material	Capacity	Press. Range	Temp. Range	Manufacturer	Location
Centrifuge	Batch	Rubber Lined	Diam. 1.2m	AP	N/A	Broadbent	Vessel house
Centrifuge	Batch	Rubber Lined	Diam. 1.2m	AP	N/A	Robertel	Vessel house
Glass Distillation Units x9	Batch	Glassware	100 lt	-1bar / AP	+20 to +200°C	QVF	Still Room
Reactor Vessel	Batch	Glass lined	136lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Reactor Vessels x5	Batch	Glass lined	450lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Reactor Vessels x4	Batch	Glass lined	900lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Reactor Vessels x3	Batch	Glass lined	1350lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Reactor Vessels x2	Batch	Glass lined	2250lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Reactor Vessel	Batch	Glass lined	2500lt	AP	-10 to +125°C	Pfaudler Balfour	Vessel house
Glass Distillation Units x2	Batch	Glassware	200lt	AP	+20 to +120°C	QVF	Stripping Room

Chemistry

Bromination
- Direct
- Oxidative
- Light Activated

Chlorination
- Direct
- Oxidative

Iodination
- Direct
- Oxidative

Diazotisation/Sandmeyer
- Halogen Addition
- Deamination

Reduction
- Hydrazine
- Sodium Borohydride

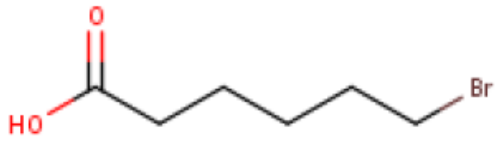
Oxidation
- Nitric Acid
- Acetic Acid/Sodium Acetate

Formylation
- Rieche
- Vilsmeier

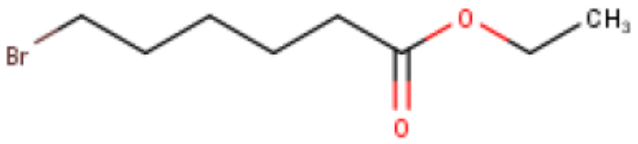
Coupling
- Suzuki
- Knoevenagel Condensation

Other Classical Chemical Reactions
- Methoxylation
- Methylation
- Demethylation
- Dehydration
- Acetylation
- Nitration
- Esterification
- Transesterification
- Halogen Exchange

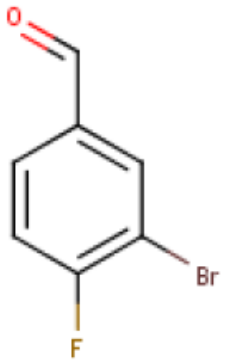
Bromine Compounds



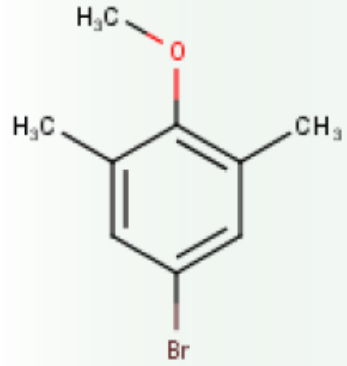
6-Bromohexanoic acid



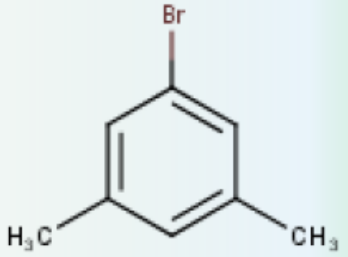
Ethyl 6-bromohexanoate



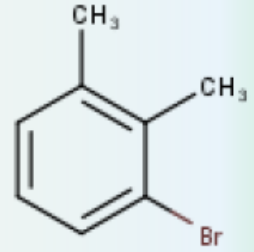
3-Bromo-4-fluorobenzaldehyde



4-Bromo-2,6-dimethylanisole

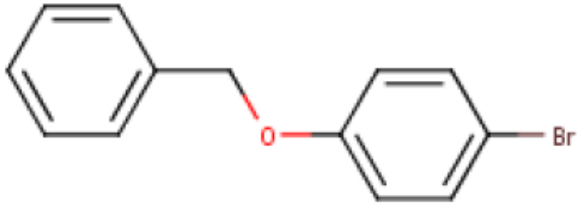


1-Bromo-3,5-dimethylbenzene

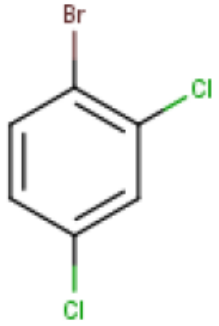


3-Bromo-1,2-dimethylbenzene

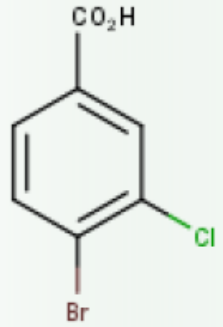
1,12-Dibromododecane



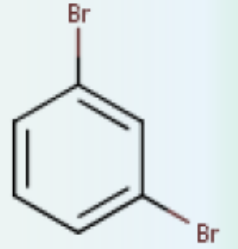
1-Bromo-4-benzyloxybenzene



1-Bromo-2,4-dichlorobenzene

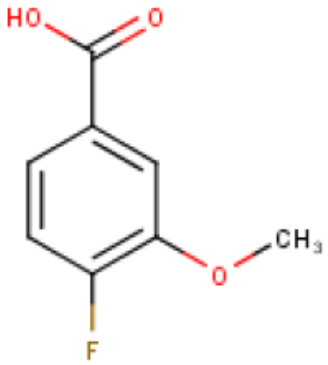


4-Bromo-3-chlorobenzoic acid

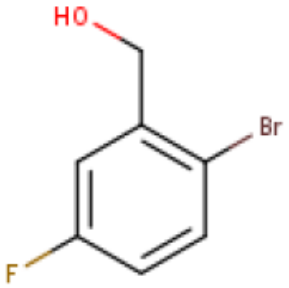


1,3-Dibromobenzene

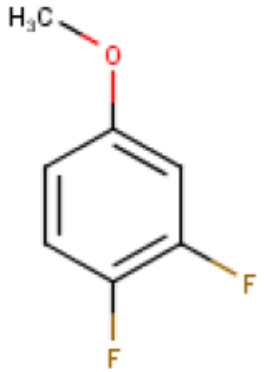
Others



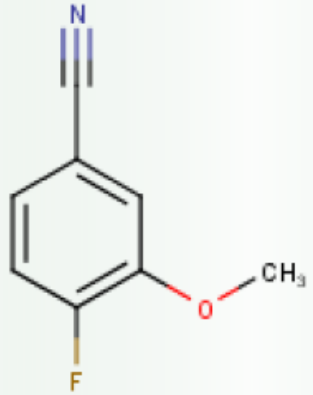
4-Fluoro-3-methoxybenzoic acid



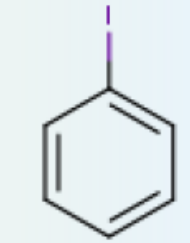
2-Bromo-5-fluorobenzyl alcohol



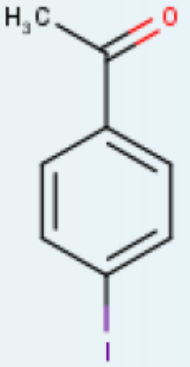
3,4-Difluoroanisole



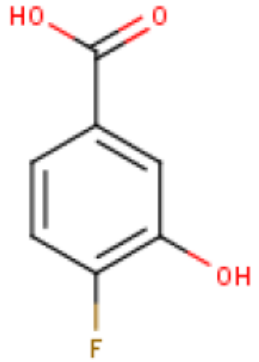
4-Fluoro-3-methoxybenzonitrile



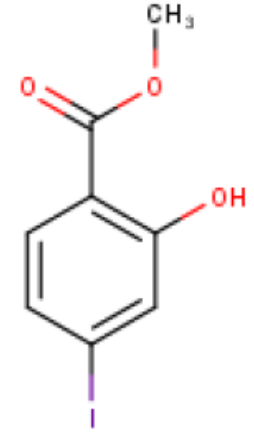
Iodobenzene



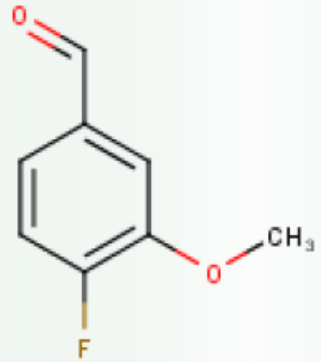
4’-iodoacetophenone



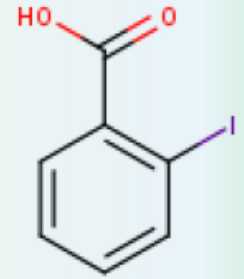
4-Fluoro-3-hydroxybenzoic acid.



Methyl 2-hydroxy-4-iodobenzoate

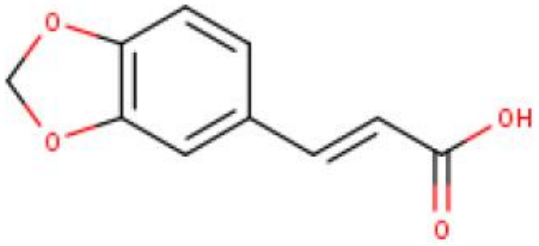


4-Fluoro-3-methoxybenzaldehyde

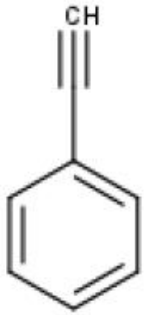


2-Iodobenzoic acid

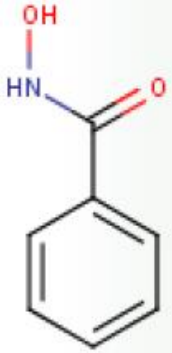
Others



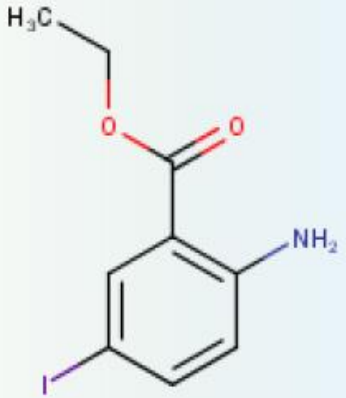
3,4-(Methylenedioxy) cinnamic acid



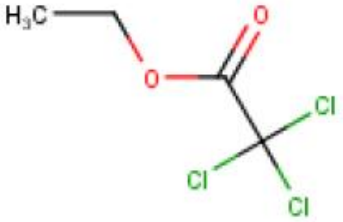
Phenylacetylene



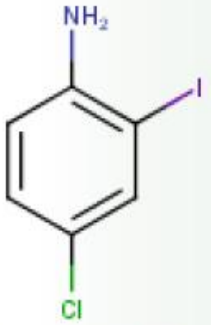
Benzhydroxamic acid



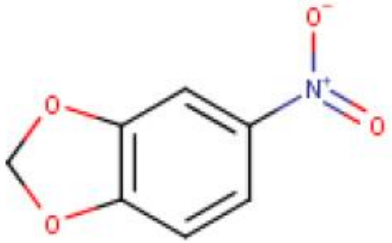
Ethyl 2-amino-5-iodobenzoate



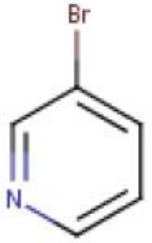
Ethyl trichloroacetate



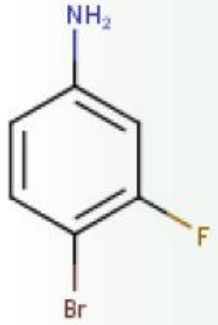
4-Chloro-2-iodoaniline



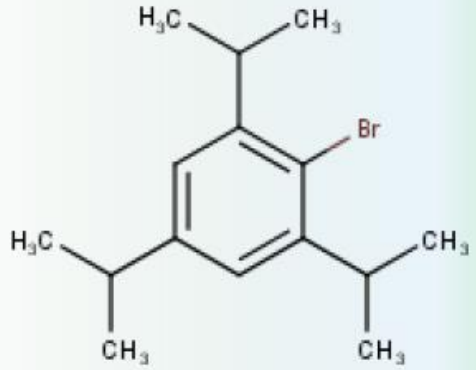
1,2-Methylenedioxy-4-nitrobenzene



3-Bromopyridine



4-Bromo-3-fluoroaniline



2-Bromo-1,3,5-triisopropylbenzene