

## Intermediates for Pharmaceutical production



For more information, please visit:

<https://intermediates.basf.com>

Or scan the QR code.

[info.intermediates@basf.com](mailto:info.intermediates@basf.com)

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BASF Intermediates



## Products and Solutions for the Pharmaceutical Industry

 **BASF**

We create chemistry

## **BASF offers expertise across the entire pharmaceutical value chain**

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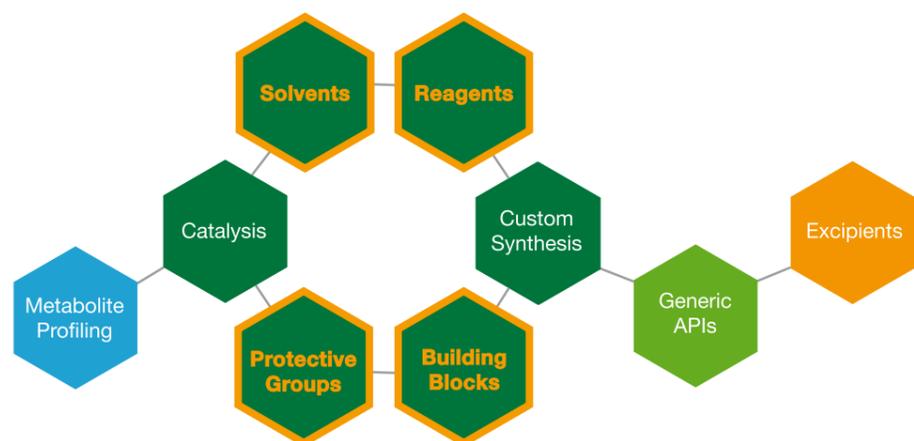
It is often the simple solution that sorts out a complex problem. At BASF, we know that innovation, speed-to-market and cost-effectiveness are key to pharmaceutical companies. With expertise across the entire value chain, we deliver on all three accounts, from lab to launch.



## BASF Intermediates

BASF Intermediates develops, produces and markets the world's largest portfolio of chemical intermediates products. This portfolio of more than 700 products comprises top quality **reagents, protective groups, building blocks and solvents** for chemical synthesis in the pharmaceutical industry.

- High product quality
- Seamless production capability up to commercial scale
- Stable supply with a global network
- Regulatory documents support
- Customized solutions



[Drug Discovery](#) > [Preclinical Studies](#) > [Clinical Phases I-III](#) > [API Manufacturing](#) > [Drug Formulation](#)  
 Our offering focuses on specific phases of the pharmaceutical value chain but is usually not confined to one phase

## Market leadership in the pharmaceutical industry

### Technical expertise and the ability to offer a broad range of products for active pharmaceutical ingredient (API) production

BASF Intermediates has one of the most extensive technology platforms needed to manufacture specialties for the pharmaceutical industry. Our technology portfolio spans the whole range from classical to modern technologies such as phosgene chemistry, hydrogenations, amination and enantioselective biotransformations.



### Unparalleled dedication to quality

All products of the Intermediates division are manufactured under ISO 9001 conditions. The Quality System of BASF's Intermediates division is based on the following:

- ISO 9001:2015 or comparable quality management system
- Quality, safety, health & environment - (QSHE) policy
- Documented procedures

BASF's quality system also includes the following processes and procedures:

- Procedure for handling changes
- Non-conformance management (NCM) system
- Suitable buildings, facilities and hi-tech process equipment
- Process control during production

**The Quality System** of the Intermediates division is certified according to the international DIN ISO 9001:2015 standard or comparable quality management system.



## Global production network

To support global and local demand, BASF Intermediates has 12 sites globally producing chemicals for the pharmaceutical industry. A strong local presence enables us to meet the growing demand of originators, generic manufacturers and Contract Manufacturing Organizations (CMOs) in Asia.



## Featured products by 4 major functions for API synthesis

**Reagents** - BASF's portfolio includes organic reagents and inorganic specialty reagents, and specialty bases that facilitate reactions with high selectivity. To support your development work from lab to launch, all reagents are available in quantities from kilograms to tons.

**Solvents** - BASF produces high-quality solvents that meet the specific needs of the pharmaceutical industry.

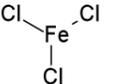
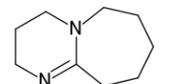
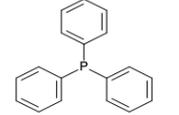
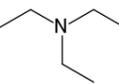
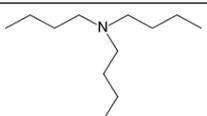
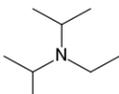
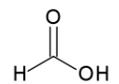
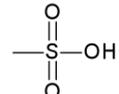
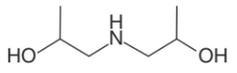
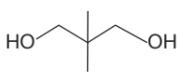
**Protective Groups** - In numerous complex synthesis routes for APIs, some functional groups have to be shielded against conversion in a specific reaction step. For this purpose, BASF offers a range of compounds that provide the necessary protection in your transformations. Various types of functions, ranging from alcohols to amines, can be protected.

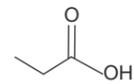
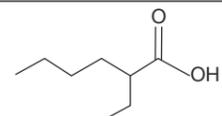
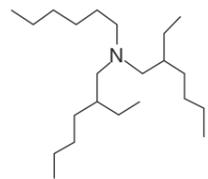
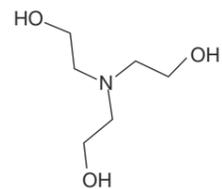
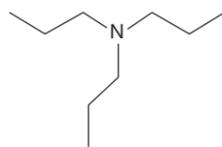
**Building Blocks** - BASF's innovative technology platform and our extensive expertise in biocatalysis enable us to manufacture a wide range of building blocks. Our offerings include a large number of chiral intermediates and non-chiral specialties, e.g. heterocycles and acid chlorides.



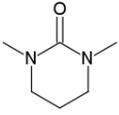
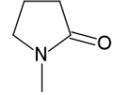
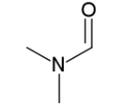
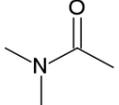
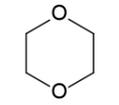
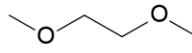
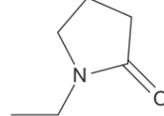
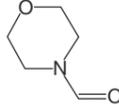
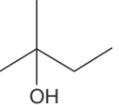
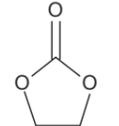
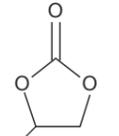
# Product Portfolio

## Reagents

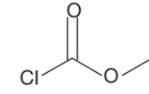
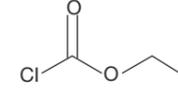
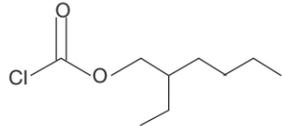
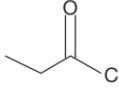
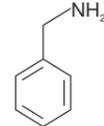
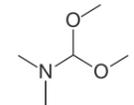
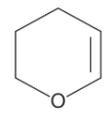
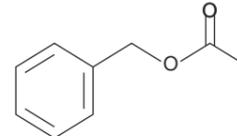
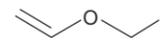
Product name Trade Name	Form	Chemical Structure	CAS Number
Ferric Chloride	12% solution		7705-08-0
Diazabicycloundecene DBU	-		6674-22-2
Triphenyl phosphine TPP	Pellets		603-35-0
Triethylamine TEA	-		121-44-8
Tributylamine TBA	-		102-82-9
N-Ethyl-diisopropylamine DIPEA	-		7087-68-5
Formic acid	99-100% 94% in water 85% in water		64-18-6
Methanesulfonic acid	70% aqueous solution 100% anhydrous form		75-75-2
N-Methylmorpholine	-		109-02-4
N-Methylpyrrolidine	-		120-94-5
Diisopropanolamine	-		110-97-4
Neopentylglycol NPG	-		2223-82-7

Product name Trade Name	Form	Chemical Structure	CAS Number
Propionic acid	-		79-09-4
2-Ethylhexanoic acid	-		149-57-5
Tri(2-ethylhexyl)amine T2EHA	-		1860-26-09
Triethanolamine TEOA	-		102-71-69
Tripropylamine TPA	-		102-69-99

## Solvents

Product name Trade Name	Chemical Structure	CAS Number
N,N'-Dimethyl propylene urea <i>DMPU</i>		7226-23-5
N-Methylpyrrolidone <i>NMP</i>		872-50-4
N,N-Dimethylformamide <i>DMF</i>		68-12-2
N,N-Dimethylacetamide <i>DMAc</i>		127-19-5
Tetrahydrofuran <i>THF</i>		109-99-9
1,4-Dioxane <i>DX</i>		123-91-1
Monoglyme		110-71-4
N-Ethylpyrrolidone		2687-91-4
N-Formylmorpholine		4394-85-8
tert.-Amyl alcohol		75-85-4
Ethylene carbonate		96-49-1
Propylene carbonate		108-32-7

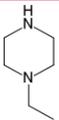
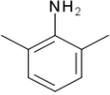
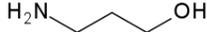
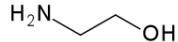
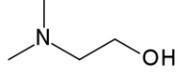
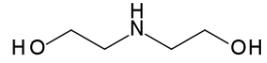
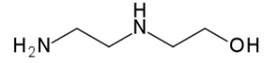
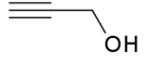
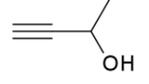
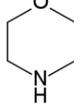
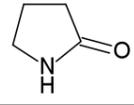
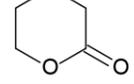
## Protective Groups

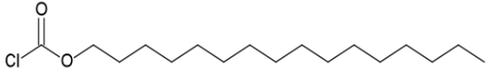
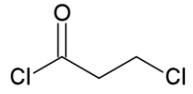
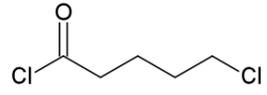
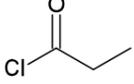
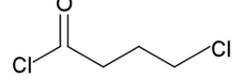
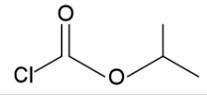
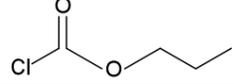
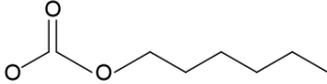
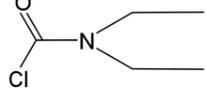
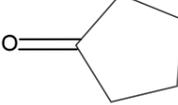
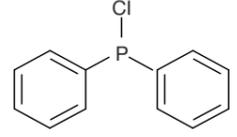
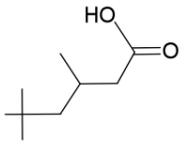
Product name Trade Name	Chemical Structure	CAS Number
Methyl chloroformate		79-22-1
Ethyl chloroformate		541-41-3
2-Ethylhexyl chloroformate		24468-13-1
Pivaloyl chloride		3282-30-2
Valeroyl chloride		638-29-9
Benzylamine		100-46-9
N,N-Dimethylformamide dimethylacetal <i>DMF-DMA</i>		4637-24-5
3,4-Dihydro-2H-pyran <i>DHP</i>		110-87-2
Benzyl chloroformate		501-53-1
Ethylvinylether		109-92-2

## Building Blocks

Product name Trade Name	Chemical Structure	CAS Number
(R)-1-(1-Naphthyl)ethylamine		3886-70-2
(R)-1-Phenylethylamine		3886-69-9
(S)-1-Phenylethylamine		2627-86-3
(R)-Mandelic acid		611-71-2
(R)-3-Aminobutan-1-ol		61477-40-5
Ethylenediamine		107-15-3
N,N'-Diisopropylethylenediamine		121-05-1
Diethylenetriamine		111-40-0
Diethylamine		109-89-7
2-(Diethylamino)ethylamine		100-36-7
Dipropylamine		142-84-7
n-Propylamine		107-10-8

Product name Trade Name	Chemical Structure	CAS Number
3-(Dimethylamino) propylamine DMAPA		109-55-7
3-(Diethylamino) propylamine		104-78-9
n-Butylamine		109-73-9
tert-Butylamine		75-64-9
Cyclopentylamine		1003-03-8
N-Octylamine		111-86-4
Pyrrolidine		123-75-1
Imidazole		288-32-4
N-Methylimidazole		616-47-7
Piperidine		110-89-4
Piperazine		110-85-0
N-Methylpiperazine		109-01-3

Product name Trade Name	Chemical Structure	CAS Number
N-Ethylpiperazine		5308-25-8
2,6-Xylidine		87-62-7
3-Amino-1-propanol		156-87-6
Monoethanolamine		141-43-5
N,N-dimethylethanolamine		108-01-0
Diethanolamine		111-42-2
N-(2-Aminoethyl)ethanolamine		111-41-1
Propargyl alcohol		107-19-7
3-Butyne-2-ol		2028-63-9
Isobutyleneoxide		558-30-5
Morpholine		110-91-8
2-Pyrrolidone		616-45-5
Delta-Valerolactone		542-28-9
Methyl formate		107-31-3

Product name Trade Name	Chemical Structure	CAS Number
Cetyl chloroformate		26272-90-2
3-Chloropropionyl chloride		625-36-5
5-Chlorovaleroy chloride		1575-61-7
Propionyl chloride		79-03-8
4-Chlorobutyryl chloride		4635-59-0
Isopropyl chloroformate		108-23-6
Propyl chloroformate		109-61-5
n-Hexyl chloroformate		6092-54-2
Diethylcarbamoyl chloride		88-10-8
Cyclopentanone <i>Cpon</i>		120-92-3
Diphenylchlorophosphine <i>DPCP</i>		1079-66-9
i-Nonanoic acid		3302-10-1

## Sustainable Development at BASF

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BASF has a history of more than 150 years and a track record that shows chemistry is an enabler for new ideas and solutions to address global challenges.

Sustainability is at the core of BASF's purpose: "We create chemistry for a sustainable future." Growing demand is putting an increasing strain on our planet, and we are already consuming more than the Earth can regenerate. Sustainability is therefore crucial for our future. BASF defines sustainability as balancing economic success with social and environmental responsibility, both today and in the future.

