

Chemicals for Pharmaceuticals

The logo for RASCHIG features the company name in a bold, green, 3D-style font. The letters are contained within a thick, green circular border that is open at the top and bottom. The background of the entire page is a light gray with faint, overlapping chemical structures and musical notation, suggesting a connection between chemistry and music.

RASCHIG

Chemistry is our Passion

RASCHIG CHEMICALS - BASIS FOR SOPHISTICATED APPLICATIONS.....

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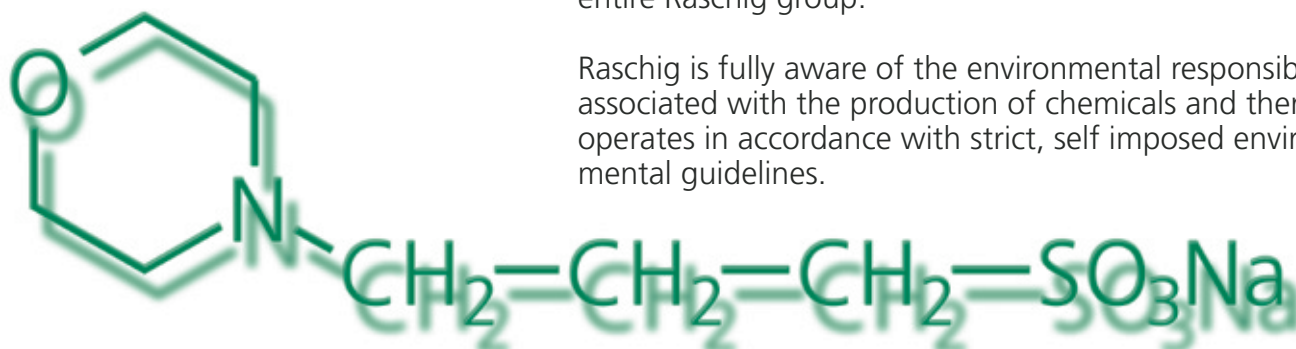
Raschig has developed over the past century into a global acting company now part of PMC (USA), and their european organisation SLIC (Speciality Leaders In Chemistry), a group of highly specialised companies. The Raschig production facilities are divided into distinct units for the manufacture of chemicals, plastics, road maintenance products as well as tower packings, with a strong emphasis on chemicals and plastics. All divisions are taking advantage of our centralised infra structure.

Today, Raschig produces more than 200 different chemical intermediates and functional chemicals. Among them are our sulfopropylated speciality products for which Raschig has an international lead. These products are well established in biotechnology, electroplating, emulsion polymerisation and other challenging aqueous applications. In addition, we produce a number of additives for the plastics and latex industries, e.g. the RALOX and RALUQUIN antioxidant brands. Our Pyridine, Piperidine and Quinoline derivatives are widely used as intermediates in the pharmaceutical and chemical industries. The Raschig product range also includes Epichlorohydrin derivatives for a variety of customers. With our multi-purpose reactors ranging from 100 to 30.000 litres we are able to meet the demand of custom synthesis.

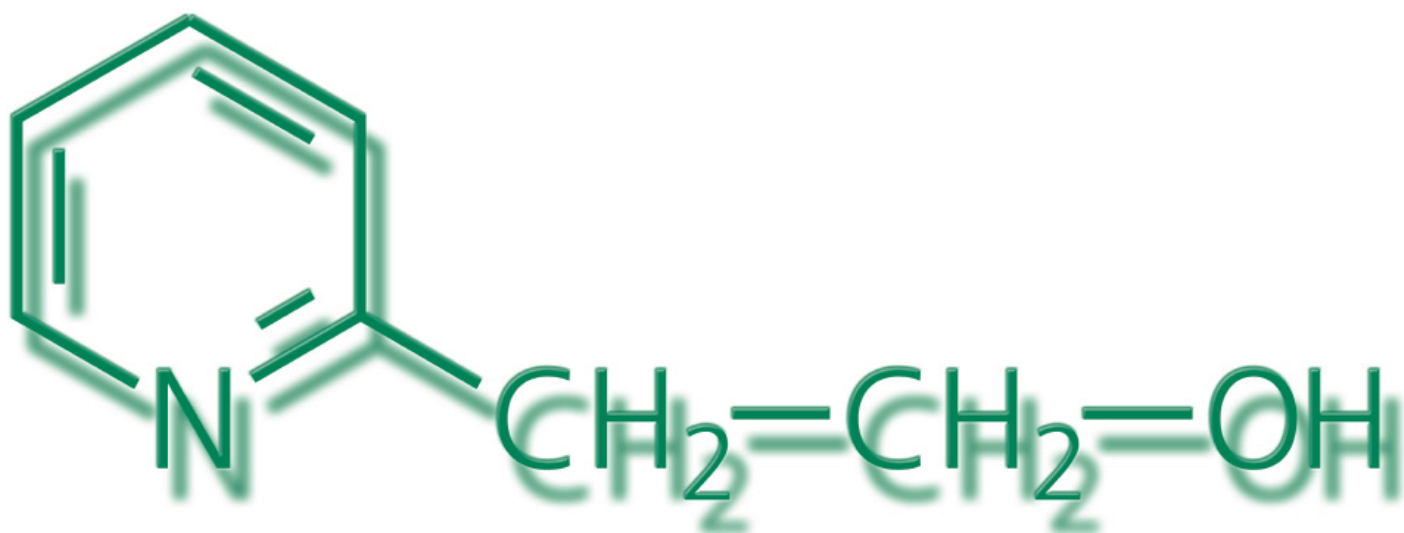
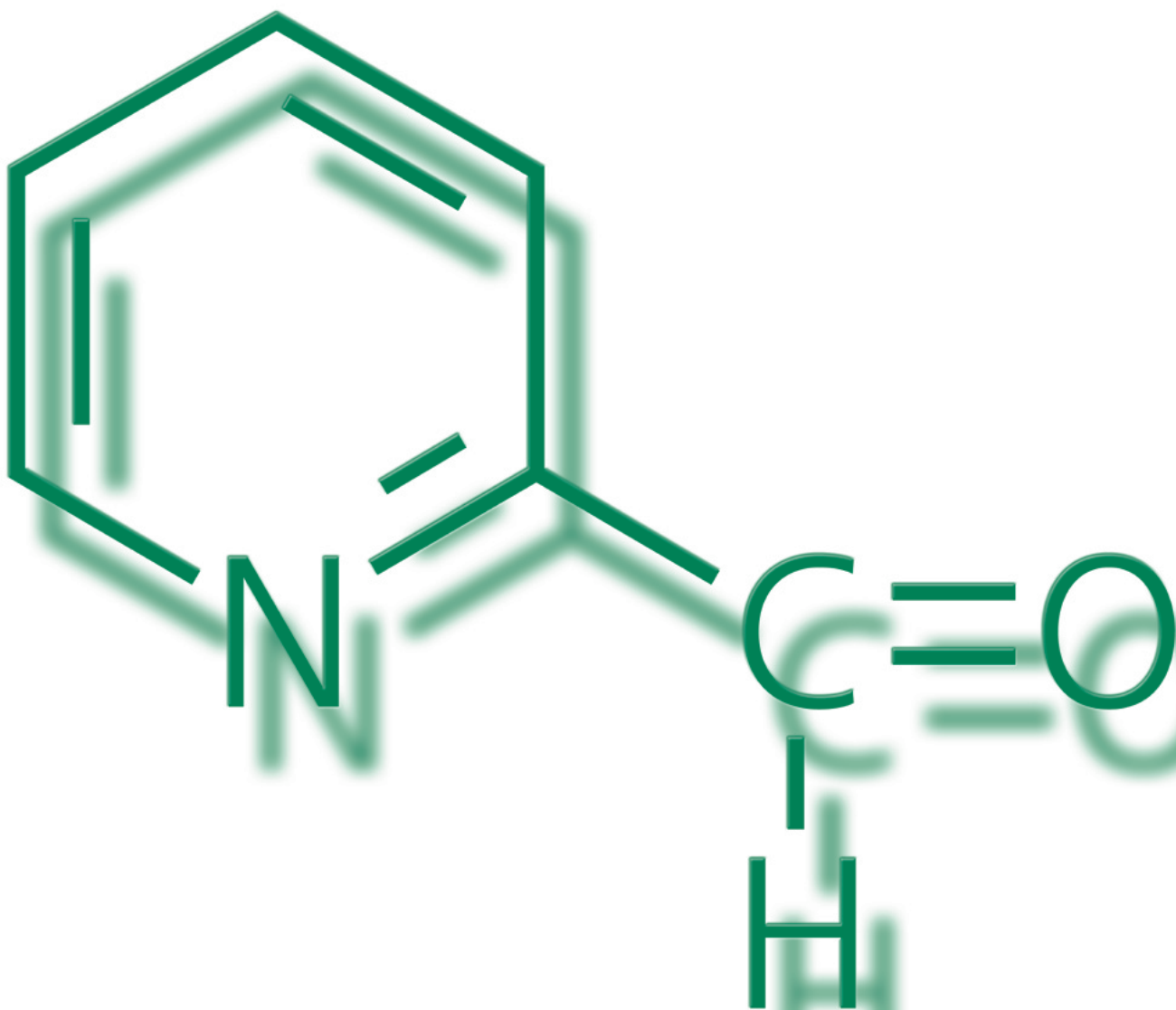
To optimise existing and develop new products, we work closely with our customers all over the world. Accordingly, Raschig is present world-wide through an efficient distribution network.

Raschig demands high standards of product quality, as well as absolute reliability in terms of delivery and customer service. Here our total quality management plays a crucial role. Certification to DIN ISO 9001 has already been accomplished for certain sectors, and is in preparation for the entire Raschig group.

Raschig is fully aware of the environmental responsibility associated with the production of chemicals and therefore operates in accordance with strict, self imposed environmental guidelines.



**RASCHIG PRODUCTS FOR THE PHARMACEUTICAL,
CHEMICAL AND AGRICULTURAL INDUSTRIES**



Our product portfolio comprises more than 70 different pyridine, piperidine and quinoline derivatives, like pyridine aldehydes and 2-Vinylpyridine, which are important intermediates for the production of pharmaceuticals and numerous chemical syntheses.

The knowledge and experience gained from decades of working with all kinds of pyridine compounds have resulted in optimisation of production methods and processes. Today Raschig is able to supply high-purity grades of the type required by the pharmaceuticals industry in particular for the manufacture of drugs.

Specialities such as our pyridine aldehydes, pyridine carbinols and pyridine aldoximes have been developed and continually optimised in close liaison and constant contact with our customers.

Besides our range of pyridine, piperidine and quinoline derivatives, Raschig supplies synthetic components in other chemical classes, such as Benzylidene acetone or Cinnamic acid, used as important raw materials by the cosmetics industry, among others.

As well as intermediates, Raschig also specialises in a small number of finished products, such as the biological buffers CAPS, HEPPS, MOPS and TAPS for cell culture dishes and sulfobetaine surfactants for diagnostic applications.

Raschig's extensive chemical know-how is also available for custom synthesis. Please refer to our Custom Manufacturing brochure.

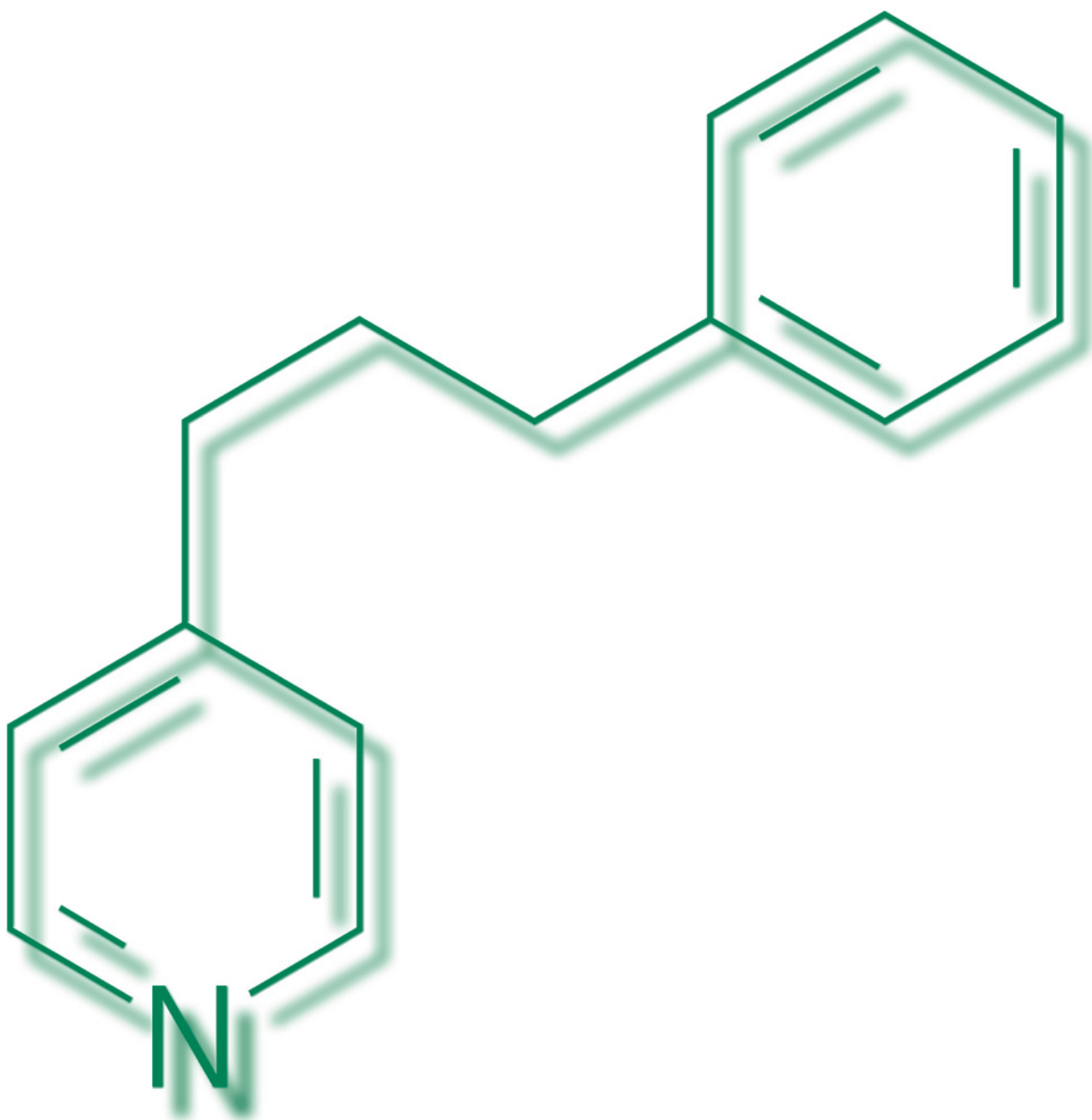
Overview Functional Groups

Product name:	Page	Alcohol	Aldehyde	Amide	Amine	Ammonium	C-C-Double and Triple Bonds	Carboxylic Acid / Ester / Salt	Ether	Glycidyl Compound	Halogen Compound	Ketone	Oxime	Phenolic Compound	Pyridinium	Sulfonate
2-Acetylpyridine	15											•				
3-Acetylpyridine	15											•				
4-Acetylpyridine	15											•				
2-Allylphenol	26						•							•		
2-Aminomethylpyridine	11				•											
3-Aminomethylpyridine	11				•											
4-Aminomethylpyridine	11				•											
2-Benzoylpyridine	15											•				
4-Benzoylpyridine	15											•				
2-Benzylaminopyridine	12				•											
Benzylidene acetone	26					•						•				
4-Benzylpiperidine	19				•											
2-Benzylpyridine	10															
4-Benzylpyridine	10															
CAPS = 3-Cyclohexylaminopropanesulfonic acid	24				•											•
3-Chloro-1-propanol	23	•									•					
Cinnamic acid	26						•	•								
DCP = 1,3-Dichloro-2-propanol	24	•									•					
5,7-Dichloro-8-hydroxy-2-methylquinoline	21										•			•		
5,7-Dichloro-8-hydroxyquinoline	22										•			•		
2,6-Dimethylpiperidine	19				•											
1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine	22															
Dipicolinic acid	17							•								
4-Ethylaminomethylpyridine	11				•											
1-Ethylpiperidine	18				•											
2-Ethylpiperidine	19				•											
2-Ethylpyridine	9															
4-Ethylpyridine	10															
1-Formylpiperidine	21				•											
GAM = 3-Chloropropanediol-1,2	24	•									•					
HEPPS = 1-(2-Hydroxyethyl)-4-(3-sulfopropyl)piperazine	22	•			•											•
2-(2-Hydroxyethyl)-piperidine	20	•			•											
2-(2-Hydroxyethyl)-pyridine	13	•														
3-Hydroxymethylpyridiniumhydrogen-L(+)-tartaric acid salt	12	•						•							•	
8-Hydroxyquinaldine	21															
Isonicotinic acid	17							•								
Isonicotinic acid N-oxide	14							•							•	
1-Methylpiperidine	18				•											
2-Methylpiperidine	18				•											
3-Methylpiperidine	18				•											
4-Methylpiperidine	18				•											
1-Methylpiperidine-2-methanol	20	•			•											
1-Methylpiperidine-3-methanol	20	•			•											
MOPS = 3-Morpholinopropanesulfonic acid	23				•				•							•
MOPS-Na	23				•				•							•
MPA = 2-(2-Hydroxyethyl)-1-methylpiperidine	20	•			•											
Nicotinic acid N-oxide	14							•							•	
PAM chloride = 1-Methylpyridinium-2-aldoxime chloride	16										•		•		•	
PESA = 2-(4-Pyridinyl)-ethanesulfonic acid	17															•
PGE = Phenylglycidylether	26								•	•						

Overview Functional Groups

Product name:	Page	Alcohol	Aldehyde	Amide	Amine	Ammonium	C-C-Double and Triple Bonds	Carboxylic Acid / Ester / Salt	Ether	Glycidyl Compound	Halogen Compound	Ketone	Oxime	Phenolic Compound	Pyridinium	Sulfonate
4-(3-Phenylpropyl)pyridine = 4-PPP	10															
2-Picoline	9															
3-Picoline	9															
4-Picoline	9															
2-Picoline N-oxide	13														•	
3-Picoline-N-oxide	13														•	
4-Picoline-N-oxide	13														•	
Picolinic acid	16							•							•	
Picolinic acid N-oxide	14							•							•	
Piperidine	17				•											
Piperidine hydrochloride	18					•				•						
2-Piperidinemethanol	19	•			•											
3-Piperidinemethanol	19	•			•											
4-Piperidinemethanol	20	•			•											
PPS = 3-Pyridiniumpropanesulfonate	17														•	•
1,3-Propanesultone	23															•
Pyridine	9															
2-Pyridinealdoxime = P2A	16												•			
3-Pyridinealdoxime	16												•			
4-Pyridinealdoxime	16												•			
2-Pyridinecarboxaldehyde	14		•													
3-Pyridinecarboxaldehyde	14		•													
4-Pyridinecarboxaldehyde	15		•													
2-Pyridinemethanol	12	•														
3-Pyridinemethanol	12	•														
4-Pyridinemethanol	12	•														
Pyridine-N-oxide	13														•	
RALOX 35 = 3-(3,5-Di-tert.butyl-4-hydroxyphenyl)propionic acid methylester	27							•							•	
RALOX BHT = 2,6-Di-tert.butyl-p-cresol	27														•	
RALOX TMQ Monomer	22				•		•									
RALUFON DL = N,N-Dimethyl-N-lauryl-N-(3-sulfopropyl)ammonium betaine	24					•										•
RALUFON DM = N,N-Dimethyl-N-myristyl-N-(3-sulfopropyl)ammonium betaine	25					•										•
RALUFON DS = N,N-Dimethyl-N-stearyl-N-(3-sulfopropyl)ammonium betaine	25					•										•
RALUQUIN = Ethoxyquin	22				•			•								
SPA = Acrylic acid-(3-sulfopropyl)ester, K-salt	25						•	•								•
SPE = N,N-Dimethyl-N-methacryloxyethyl-N-(3-sulfopropyl)ammonium betaine	25					•	•	•								•
SPM = Methacrylic acid-(3-sulfopropyl) ester, K-salt	25						•	•								•
TAPS = 3-[Tris-(hydroxymethyl)methylamino]propanesulfonic acid	25	•			•											•
TEBAC = Benzyltriethylammoniumchloride	27					•				•						
1,2,3,4-Tetrahydroquinoline	21				•											
TMAC = Tetramethylammoniumchloride	24					•				•						
2-Tridecylpyridine	10															
2-Undecylpyridine	10															
2-Vinylpyridine	11						•									

**Raschig Chemicals -
Basis for sophisticated applications.....**



RASCHIG CHEMICALS FOR PHARMACEUTICALS

Product name
Chemical name
CA Number
Empirical formula
Molecular weight

Chemical Structure

Product description
Main application

1. Pyridine Compounds

1.1 Pyridines with aliphatic, aromatic or olefinic side chains

Pyridine

Azabenzene

110-86-1



Pyridine; basic solvent, intermediate for the chemical-, agro- and pharmaceutical industry, catalyst for chemical reactions; corrosion inhibitor.

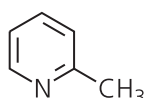
C_5H_5N

79.1 g/Mol

2-Picoline

2-Methylpyridine

109-06-8



Pyridine derivative; intermediate in the pharmaceutical, photo, dye, polymer, rubber and agro industry; basic solvent.

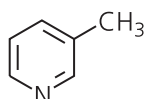
C_6H_7N

93.13 g/Mol

3-Picoline

3-Methylpyridine

108-99-6



Pyridine derivative; basic solvent and additive for photosensitizers; intermediate in the agro-, pharmaceutical-, photo-, electroplating-, resins- and chemical

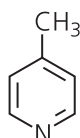
C_6H_7N

93.13 g/Mol

4-Picoline

4-Methylpyridine

108-89-4



Pyridine derivative; basic solvent, photosensitizer additive, intermediate for dye-, pharmaceutical-, agro-, resin- and waterproof products.

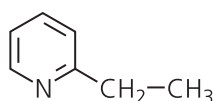
C_6H_7N

93.13 g/Mol

2-Ethylpyridine

2-Ethylpyridine

100-71-0



Pyridine derivative; basic solvent; intermediate in the pharmaceutical industry.

C_7H_9N

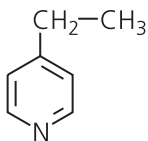
107.16 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

4-Ethylpyridine

4-Ethylpyridine

536-75-4



Pyridine derivative; mainly used as an intermediate.

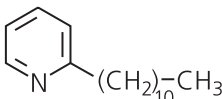
C_7H_9N

107.16 g/Mol

2-Undecylpyridine

2-Undecylpyridine

80401-50-9



Pyridine derivative; water insoluble base.

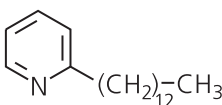
$C_{16}H_{27}N$

233.39 g/Mol

2-Tridecylpyridine

2-Tridecylpyridine

33912-24-2



Pyridine derivative; water insoluble base.

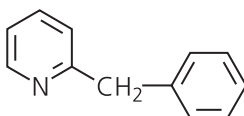
$C_{18}H_{31}N$

261.45 g/Mol

2-Benzylpyridine

2-(Phenylmethyl)pyridine

101-82-6



Functional pyridine; intermediate mainly used in the pharmaceutical industry.

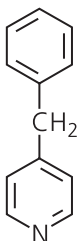
$C_{12}H_{11}N$

169.23 g/Mol

4-Benzylpyridine

4-(Phenylmethyl)pyridine

2116-65-6



Pyridine derivative; intermediate for the agro- and pharmaceutical industry; reagent in the flavour & fragrance area, used in analytical applications and in the electroplating industry.

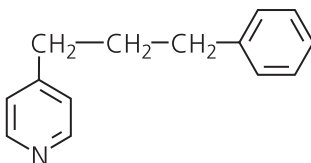
$C_{12}H_{11}N$

169.23 g/Mol

4-(3-Phenylpropyl)pyridine

4-PPP

2057-49-0



Pyridine derivative; catalyst for the manufacture of fireproof PU foams, aromatic polycarbonates and phenol-isocyanate resins. Intermediate for pharmaceutical applications.

$C_{14}H_{15}N$

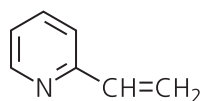
197.28 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

2-Vinylpyridine

2-Ethenylpyridine

100-69-6



Functional pyridine; (co-) monomer for: tyre cord, fuel additives, ion exchange resins, antistatics; intermediate for the chemical-, pharmaceutical- and photo industry; for improving the affinity towards dyes.

C_7H_7N

105.14 g/Mol

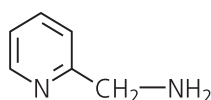
1. Pyridine Compounds

1.2 Pyridine derivatives with aminic side chains

2-Aminomethylpyridine

2-Picolylamine

3731-51-9



Functional pyridine used as an intermediate in the pharmaceutical industry.

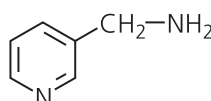
$C_6H_8N_2$

108.14 g/Mol

3-Aminomethylpyridine

3-Picolylamine

3731-52-0



Functional pyridine; mainly used as intermediate in the pharmaceutical- and agro industry.

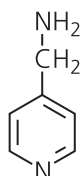
$C_6H_8N_2$

108.14 g/Mol

4-Aminomethylpyridine

4-Picolylamine

3731-53-1



Functional pyridine; intermediate for the agro-, photo-, pharmaceutical- and chemical industry.

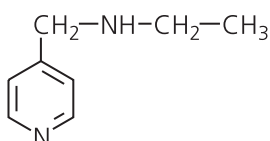
$C_6H_8N_2$

108.14 g/Mol

4-Ethylaminomethylpyridine

Ethyl (4-picolyl) amine

33403-97-3



Functional pyridine; mainly used as an intermediate in the pharmaceutical industry.

$C_8H_{12}N_2$

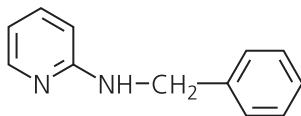
136.19 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

2-Benzylaminopyridine

N-Benzyl-2-pyridinamine

6935-27-9



Functional pyridine; intermediate in the chemical and pharmaceutical industry; used in antibacterial applications.

$C_{12}H_{12}N_2$

184.24 g/Mol

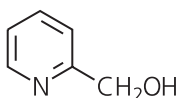
1. Pyridine Compounds

1.3 Pyridine derivatives with alcoholic side chains

2-Pyridinemethanol

2-Hydroxymethylpyridine

586-98-1



Functional pyridine; intermediate mainly used in the pharmaceutical industry.

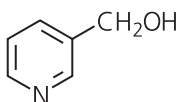
C_6H_7NO

109.13 g/Mol

3-Pyridinemethanol

3-Hydroxymethylpyridine

100-55-0



Functional pyridine; pharmaceutical ingredient, intermediate for the pharmaceutical and agro industry; electroplating additive, crosslinker for epoxy resins in permanent magnets.

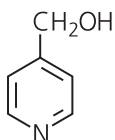
C_6H_7NO

109.13 g/Mol

4-Pyridinemethanol

4-Hydroxymethylpyridine

586-95-8



Functional pyridine; intermediate in the pharmaceutical industry, C-terminal protecting group for peptide synthesis, ingredient for thickeners for tooth paste, incorporated into polyisocyanates used for crosslinking.

C_6H_7NO

109.13 g/Mol

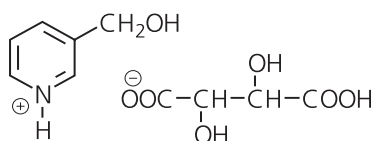
Pyridine-3-carbinol-L(+)-tartrate

3-Hydroxymethylpyridiniumhydrogen-L(+)-tartaric acid salt

6164-87-0

$C_{10}H_{13}NO_7$

259.21 g/Mol



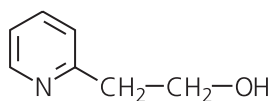
Quaternized pyridine derivative; pharmaceutical substance: vasodilator and blood lipid decreasing agent.

RASCHIG CHEMICALS FOR PHARMACEUTICALS

2-(2-Hydroxyethyl)-pyridine

Pyridine-2-ethanol

103-74-2



Functional pyridine used as an intermediate in the dye, polymer and pharmaceutical industry; additive for the dye and photo industry.

C_7H_9NO

123.16 g/Mol

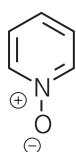
1. Pyridine Compounds

1.4 Pyridine-N-oxide derivatives

Pyridine-N-oxide

Pyridine-1-oxide

694-59-7



Quaternized functional pyridine; intermediate for the synthesis of 2- and 4-substituted pyridines.

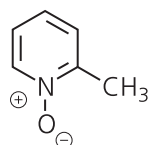
C_5H_5NO

95.10 g/Mol

2-Picoline N-oxide

2-Methylpyridine N-oxide

931-19-1



Development Product

Quaternized pyridine derivative; intermediate in the chemical- and pharmaceutical industry; auxiliary in the photo- and electroplating industry.

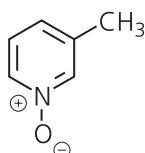
C_6H_7NO

109.13 g/Mol

3-Picoline N-oxide

3-Methylpyridine-N-oxide

1003-73-2



Quaternized pyridine derivative; catalyst, additive for electroplating baths; intermediate for the chemical-, pharmaceutical- and agro industry.

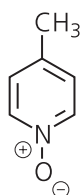
C_6H_7NO

109.13 g/Mol

4-Picoline N-oxide

4-Methylpyridine-N-oxide

1003-67-4



Development Product

Quaternized pyridine derivative; intermediate.

C_6H_7NO

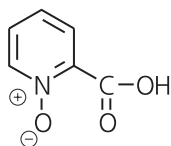
109.13 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

Picolinic acid N-oxide

Pyridine-2-carboxylic acid N-oxide

824-40-8



Development Product

Quaternized functional pyridine; intermediate.

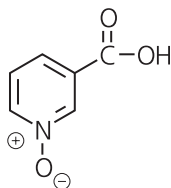
$C_6H_5NO_3$

139.11 g/Mol

Nicotinic acid N-oxide

Pyridine-3-carboxylic acid N-oxide

2398-81-4



Development Product

Quaternized functional pyridine, intermediate in the pharmaceutical and chemical industry.

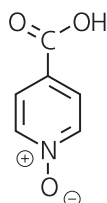
$C_6H_5NO_3$

139.11 g/Mol

Isonicotinic acid N-oxide

Pyridine-4-carboxylic acid N-oxide

13602-12-5



Development Product

Quaternized functional pyridine; intermediate in the pharmaceutical and chemical industry.

$C_6H_5NO_3$

139.11 g/Mol

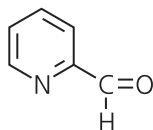
1. Pyridine Compounds

1.5 Pyridine derivatives with carbonyl functions

2-Pyridinecarboxaldehyde

Picolinaldehyde

1121-60-4



Functional pyridine; intermediate in the pharmaceutical-, dye-, photo-, cosmetic- and fuel industry.

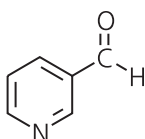
C_6H_5NO

107.11 g/Mol

3-Pyridinecarboxaldehyde

Nicotinaldehyde

500-22-1



Functional pyridine; pharmaceutical ingredient; intermediate for the pharmaceutical- and agro industry.

C_6H_5NO

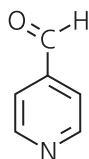
107.11 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

4-Pyridinecarboxaldehyde

Isonicotinaldehyde

872-85-5



Functional pyridine; intermediate for the pharmaceutical-, dye- and agro industry; flavouring additive for coffee, electroplating additive, corrosion inhibitor.

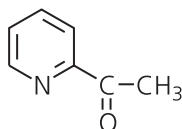
C_6H_5NO

107.11 g/Mol

2-Acetylpyridine

Methyl 2-pyridyl ketone

1122-62-9



Functional pyridine; flavouring agent and intermediate mainly for the pharmaceutical industry.

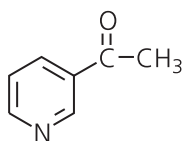
C_7H_7NO

121.14 g/Mol

3-Acetylpyridine

Methyl 3-pyridyl ketone

350-03-8



Functional pyridine; intermediate mainly for the pharma industry; used in the flavour and fragrance industry.

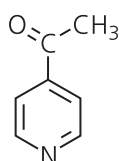
C_7H_7NO

121.14 g/Mol

4-Acetylpyridine

Methyl 4-pyridyl ketone

1122-54-9



Functional pyridine; intermediate for the agro-, photo-, pharmaceutical- and chemical industry.

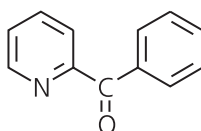
C_7H_7NO

121.14 g/Mol

2-Benzoylpyridine

Phenyl 2-pyridyl ketone

91-02-1



Functional pyridine; intermediate in the pharmaceutical, agro, fragrance and photo industry.

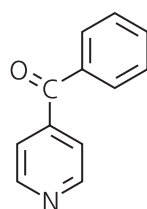
$C_{12}H_9NO$

183.21 g/Mol

4-Benzoylpyridine

Phenyl 4-pyridyl ketone

14548-46-0



Functional pyridine; mainly used as an intermediate in the pharmaceutical industry.

$C_{12}H_9NO$

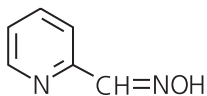
183.21 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

2-Pyridinealdoxime

Pyridine-2-carbaldoxime

873-69-8



Functional pyridine; intermediate in the pharmaceutical and polymer industry, metal complexing agent, catalyst, stabilizer for peroxides, part of thermochromic inks etc., photo developing additive.

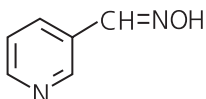
$C_6H_6N_2O$

122.13 g/Mol

3-Pyridinealdoxime

Pyridine-3-carbaldoxime

1193-92-6



Functional pyridine; intermediate for the pharmaceutical industry.

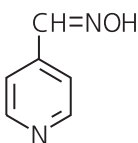
$C_6H_6N_2O$

122.12 g/Mol

4-Pyridinealdoxime

Pyridine-4-carbaldoxime

696-54-8



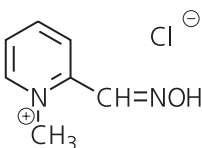
Functional pyridine; pharmaceutical intermediate for the synthesis of antidotes against poisoning by phosphoric acid esters.

$C_6H_6N_2O$

122.13 g/Mol

PAM chloride

51-15-0



Quaternized functional pyridine; pharmaceutical ingredient, antidote against poisoning by phosphoric acid esters (cholin esterase reactivator).

$C_7H_9ClN_2O$

172.62 g/Mol

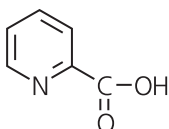
1. Pyridine Compounds

1.6 Pyridine derivatives with acid functions

Picolinic acid

Pyridine-2-carboxylic acid

98-98-6



Functional pyridine; intermediate for the pharmaceutical- and cosmetic industry; metal complexing agent for various applications, additive in electroplating baths.

$C_6H_5NO_2$

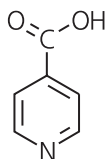
123.11 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

Isonicotinic acid

Pyridine-4-carboxylic acid

55-22-1



Functional pyridine; intermediate for the pharmaceutical-, agro- and dye industry.

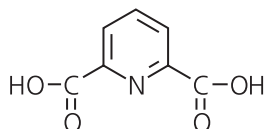
$C_6H_5NO_2$

123.12 g/Mol

Dipicolinic acid

Pyridine-2,6-dicarboxylic acid

499-83-2



Functional pyridine; chelating agent for transition metal ions, stabilizer for organic peroxides, textile bleaching and plastics, enzyme inhibitor in biochemistry; bifunctional monomer and pharmaceutical intermediate.

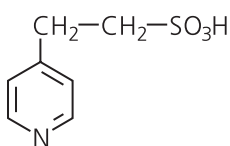
$C_7H_5NO_4$

167.12 g/Mol

PESA

4-Pyridineethanesulphonic acid

53054-76-5



Functional pyridine; intermediate in the photo industry (gelatine hardener), pharmaceutical industry, detergent industry; additive in the electroplating industry.

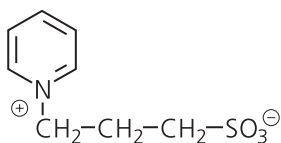
$C_7H_9NO_3S$

187.22 g/Mol

PPS

1-(3-Sulfopropyl)-pyridinium betaine

15471-17-7



Quaternized functional pyridine; additive for electroplating baths, for protein renaturation.

$C_8H_{11}NO_3S$

201.25 g/Mol

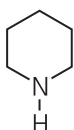
2. Piperidine Compounds

2.1 Piperidine derivatives with aliphatic and aromatic side chains

Piperidine

Hexahydropyridine

110-89-4



Piperidine; pharmaceutical intermediate, agricultural intermediate; raw material for vulcanizing agents, catalyst for organic reactions.

$C_5H_{11}N$

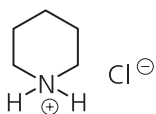
85.15 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

Piperidine hydrochloride

Piperidinium hydrochloride

6091-44-7



Quaternized piperidine; pharmaceutical intermediate, intermediate for the photo industry, catalyst for certain chemical reactions, part of formulations for flame retarding textiles.

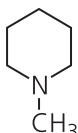
$C_5H_{12}ClN$

121.61 g/Mol

1-Methylpiperidine

N-Methylpiperidine

626-67-5



N-alkylated piperidine used as an intermediate in the pharmaceutical-, agro-, photo-, polymer- and chemical industry; solvent and catalyst.

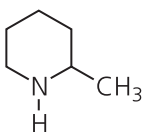
$C_6H_{13}N$

99.18 g/Mol

2-Methylpiperidine

2-Methylpiperidine

109-05-7



Piperidine derivative; intermediate in the pharma- and agro industry; catalyst, corrosion inhibitor and additive for fuel against inflammation and for fatty acid esters during sulfonation to prevent coloring.

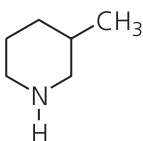
$C_6H_{13}N$

99.18 g/Mol

3-Methylpiperidine

3-Methylpiperidine

626-56-2



Piperidine derivative; intermediate in the pharmaceutical-, agro- and cosmetic industry; template for the manufacture of molecular sieves.

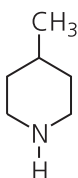
$C_6H_{13}N$

99.18 g/Mol

4-Methylpiperidine

4-Methylpiperidine

626-58-4



Piperidine derivative; intermediate for the pharmaceutical industry; catalyst for various applications, surface treatment agent for copper in printed circuit boards, stabilizer for polyvinylalcohol spinning solutions; template for molecular sieves.

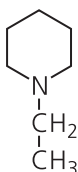
$C_6H_{13}N$

99.18 g/Mol

1-Ethylpiperidine

1-Ethylpiperidine

766-09-6



N-alkylated piperidine, intermediate for the chemical and pharmaceutical industry; catalyst and complexing agent.

$C_7H_{15}N$

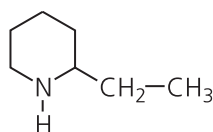
113.20 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

2-Ethylpiperidine

2-Ethylpiperidine

1484-80-6



Piperidine derivative; intermediate for the pharmaceutical and agro industry.

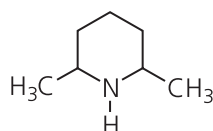
$C_7H_{15}N$

113.20 g/Mol

2,6-Dimethylpiperidine

cis-2,6-Dimethylpiperidine

504-03-0



Piperidine derivative (cis isomer); intermediate for the pharmaceutical industry, catalyst for polymerisations, surface treating agent for copper in printed cir-

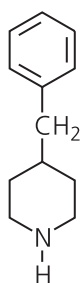
$C_7H_{15}N$

113.2 g/Mol

4-Benzylpiperidine

4-(Phenylmethyl)piperidine

31252-42-3



Functional piperidine; mainly used as an intermediate in the pharmaceutical industry.

$C_{12}H_{17}N$

175.28 g/Mol

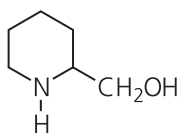
2. Piperidine Compounds

2.2 Piperidine derivatives with alcoholic side chains

2-Piperidinemethanol

2-Hydroxymethylpiperidine

3433-37-2



Piperidine derivative; carbon dioxide acceptor, catalyst, additive for the photo industry, intermediate for the agro- and pharma industry.

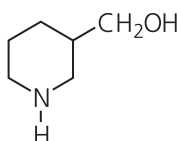
$C_6H_{13}NO$

115.18 g/Mol

3-Piperidinemethanol

3-Hydroxymethylpiperidine

4606-65-9



Functional piperidine; intermediate mainly for the pharmaceutical industry.

$C_6H_{13}NO$

115.18 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

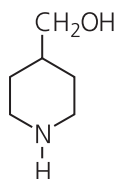
4-Piperidinemethanol

4-Hydroxymethylpiperidine

6457-49-4

$C_6H_{13}NO$

115.18 g/Mol



Functional piperidine; intermediate mainly for the pharmaceutical industry.

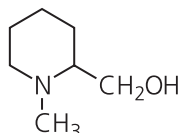
1-Methylpiperidine-2-methanol

2-Hydroxymethyl-N-methylpiperidine

20845-34-5

$C_7H_{15}NO$

129.20 g/Mol



Functional piperidine; intermediate mainly used in the pharmaceutical industry.

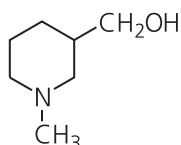
1-Methylpiperidine-3-methanol

3-Hydroxymethyl-N-methylpiperidine

7583-53-1

$C_7H_{15}NO$

129.20 g/Mol



Piperidine derivative; intermediate mainly for the pharmaceutical industry.

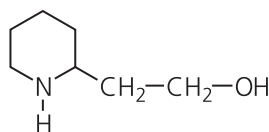
2-(2-Hydroxyethyl)-piperidine

Piperidine-2-ethanol

1484-84-0

$C_7H_{15}NO$

129.20 g/Mol



Functional piperidine used as an intermediate e.g. in the pharmaceutical industry. Used as gas wash adsorbent for carbon dioxide.

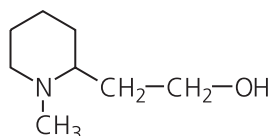
MPA

1-Methyl-2-piperidineethanol

533-15-3

$C_8H_{17}NO$

143.23 g/Mol



Functional piperidine; mainly used as an intermediate in the pharmaceutical industry.

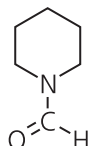
2. Piperidine Compounds

2.3 Further Piperidine derivatives

1-Formylpiperidine

Piperidine-1-carboxaldehyde

2591-86-8



Amide used as solvent, complexing agent and catalyst; used in the polymer-, dye-, photo- and chemical industry. Intermediate for the chemical- and agro indus-

$C_6H_{11}NO$

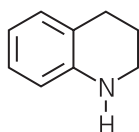
113.16 g/Mol

3. Quinoline Compounds

1,2,3,4-Tetrahydroquinoline

1,2,3,4-Tetrahydroquinoline

635-46-1



Hydrogenated quinoline derivative; intermediate in the chemical-, polymer-, agro-, dye- and pharma industry; basic solvent with high boiling point.

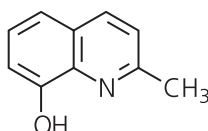
$C_9H_{11}N$

133.19 g/Mol

8-Hydroxyquinaldine

2-Methyl-8-quinolinol

826-81-3



Functional quinoline; intermediate for the dye-, pharmaceutical- and agro industry; used as stabilizer for polymers and oils, anti fogging agent in the photoindustry, electroplating additive, its complexes as antifouling coatings and corrosion inhibitors.

$C_{10}H_9NO$

159.19 g/Mol

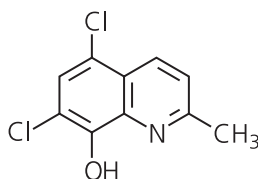
5,7-Dichloro-8-hydroxyquinaldine

5,7-Dichloro-8-hydroxy-2-methylquinoline

72-80-0

$C_{10}H_7Cl_2NO$

228.08 g/Mol



Functional quinoline; pharmaceutical substance with antiseptic and antifungal properties.

RASCHIG CHEMICALS FOR PHARMACEUTICALS

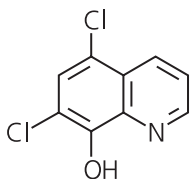
5,7-Dichloro-8-hydroxy-quinoline

5,7-Dichloro-8-quinolinol

773-76-2

$C_9H_5Cl_2NO$

214.05 g/Mol



Functional quinoline; pharmaceutical substance with antiseptic, antiamebic and antifungal properties.

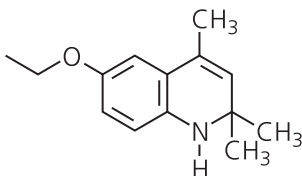
RALUQUIN

6-Ethoxy-2,2,4-trimethyl-1,2-dihydroquinoline

91-53-2

$C_{14}H_{19}NO$

217.31 g/Mol



Aminic antioxidant mainly used for the stabilisation of vitamins, feedstuff and fish meal.

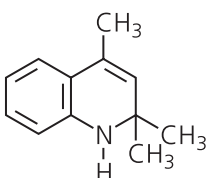
RALOX TMQ Monomer

1,2-Dihydro-2,2,4-trimethylquinoline

147-47-7

$C_{12}H_{15}N$

173.26 g / mol



Partially hydrogenated quinoline derivative; intermediate for dyes in the photo-dye- and plastics industry; antioxidant and light stabiliser; intermediate in the agro industry.

4. Further Heterocyclic Compounds

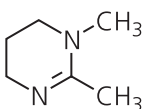
1,2-Dimethyl-1,4,5,6-tetrahydropyrimidine

Pyrimidine, 1,4,5,6-tetrahydro-1,2-dimethyl-

4271-96-9

$C_6H_{12}N_2$

112.17 g/Mol



Alkyl-substituted pyrimidine derivative mainly used in the pharmaceutical industry.

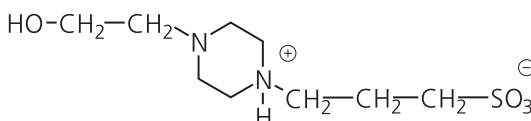
HEPPS

N-(2-Hydroxyethyl)-N'-(3-sulfo-propyl)-piperazine

16052-06-5

$C_9H_{20}N_2O_4S$

252.33 g/Mol



Biological buffer for biochemical and analytical applications etc.; (pKa = 8.0 at 20°C).

RASCHIG CHEMICALS FOR PHARMACEUTICALS

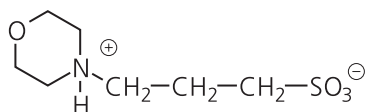
MOPS

3-Morpholino propanesulfonic acid

1132-61-2

$C_7H_{15}NO_4S$

209.26 g/Mol



Biological buffer for cell cultures, biological productions, electrophoresis, diagnostics, tissue studies, blotting techniques, chromatography etc.
(pKa = 7.2 at 20 °C).

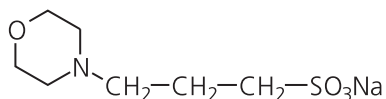
MOPS Na-salt

3-Morpholino propanesulfonic acid, sodium salt

71119-22-7

$C_7H_{14}NNaO_4S$

231.30 g/Mol



Biological buffer for cell cultures, biological productions, electrophoresis, diagnostics, tissue studies, blotting techniques, chromatography etc.
(pKb abt. 7 at 20 °C).

1,3-Propanesultone

1,2-Oxathiolane-2,2-dioxide

1120-71-4

$C_3H_6O_3S$

122.14 g/Mol



Reactive intermediate for the mild and defined incorporation of sulfonate-groups into organic molecules. Used in the polymer-, dye-, galvano- and pharmaceutical industry.

5. Aliphatic Compounds

5.1 Halogen containing compounds

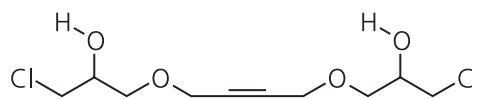
BCE

2-Butyne-1,4-diol bis chlorhydrin ether

68876-96-0

$C_{10}H_{16}Cl_2O_4$
(main product, mixture)

271.13 g/Mol



Intermediate for electroplating products; chemosterilant for male rodents.

3-Chloro-1-propanol

1-Chloro-3-hydroxypropane

627-30-5

C_3H_7ClO

94.54 g/Mol



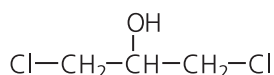
Reactive chloro-hydroxy intermediate for pharmaceuticals, waxes, resins and adhesives.

RASCHIG CHEMICALS FOR PHARMACEUTICALS

DCP

1,3-Dichloro-2-propanol

96-23-1



Chlorinated solvent, reactive chloro intermediate e.g. for the modification of amines, alcohols and carboxylic acids, C3-building block.

$\text{C}_3\text{H}_6\text{Cl}_2\text{O}$

128.99 g/Mol

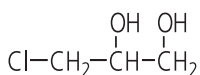
GAM

Glycerine-alpha-monochloro-hydrin

96-24-2

$\text{C}_3\text{H}_7\text{ClO}_2$

110.54 g/Mol

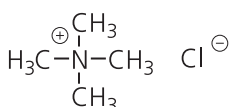


Chlorinated solvent, reactive chloro intermediate e.g. for the modification of amines, alcohols, polymers and carboxylic acids, C3-building block in cosmetics, surfactants, pharmaceuticals, modified biopolymers and agro products.

TMAC

Tetramethylammonium chloride

75-57-0



Quaternary ammonium salt mainly used as phase transfer catalyst for various reactions.

$\text{C}_4\text{H}_{12}\text{ClN}$

109.60 g/Mol

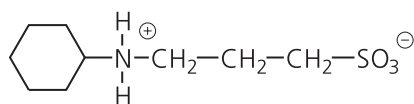
5. Aliphatic Compounds

5.2 Sulfopropylated compounds

CAPS

3-(Cyclohexylamino)-propane sulfonic acid

1135-40-6



Biological buffer for cell cultures, biological productions, electrophoresis, diagnostics, tissue studies, blotting techniques, chromatography etc. (pKa = 10.4 at 20 °C).

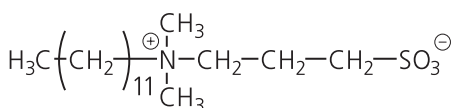
$\text{C}_9\text{H}_{19}\text{NO}_3\text{S}$

221.32 g/Mol

RALUFON DL

N,N-Dimethyl-N-dodecyl-N-(3-sulfopropyl) ammonium betaine

14933-08-5



Sulfobetaine surfactant for protein solubilisation in medical, biological and diagnostic applications; dispersing auxiliary for inorganic materials.

$\text{C}_{17}\text{H}_{37}\text{NO}_3\text{S}$

335.54 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

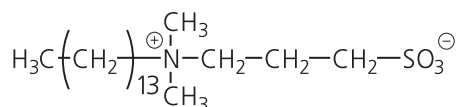
RALUFON DM

N,N-Dimethyl-N-tetradecyl-N-(3-sulfopropyl) ammonium betaine

14933-09-6

C₁₉H₄₁NO₃S

363.59 g/Mol



Sulfobetaine surfactant for protein solubilisation in medical, biological and diagnostic applications; dispersing auxiliary for inorganic materials, electroplating additive.

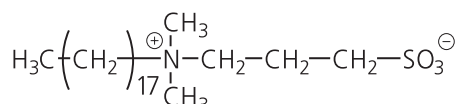
RALUFON DS

N,N-Dimethyl-N-octadecyl-N-(3-sulfopropyl) ammonium betaine

90459-46-4 / 13177-41-8

C₂₃H₄₉NO₃S

419.72 g/Mol



Sulfobetaine surfactant for latex and aggressive cleansers; additive for electroplating baths.

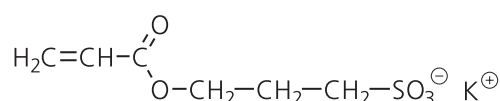
SPA

(3-Sulfopropyl)-acrylate, potassium salt

31098-20-1

C₆H₉KO₅S

232.30 g/Mol



Functional monomer for aqueous dispersions, hydrogels, ion exchange resins, adhesives, photographic layers, antistatics, thickeners and polyelectrolytes.

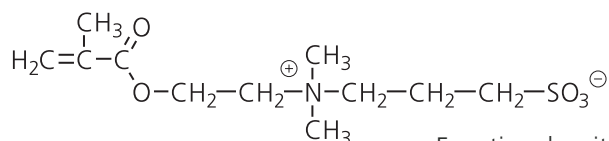
SPE

N,N-Dimethyl-N-(2-methacryloxyethyl)-N-(3-sulfopropyl) ammonium betaine

3637-26-1

C₁₁H₂₁NO₅

279.4 g/Mol



Functional zwitterionic monomer for hydrogels, antistatics, adhesives, emulsions, paints and inks. Forms zwitterionic polymer chains with net charge zero.

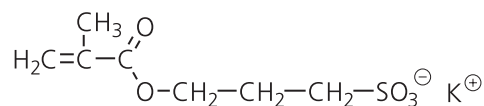
SPM

(3-Sulfopropyl-methacrylate, potassium salt

31098-21-2

C₇H₁₁KO₅S

246.3 g/Mol



Functional sulfonate monomer for aqueous dispersions, hydrogels, ion exchange resins, paper coatings, adhesives, antistatics, thickeners and polyelectrolytes etc.

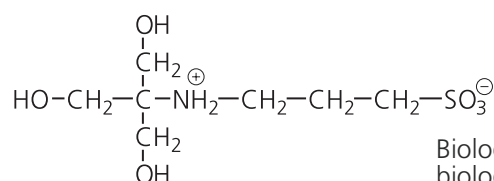
TAPS

[(Tris-hydroxymethyl)methyl]amino-3-propane sulfonic acid

29915-38-6

C₇H₁₇NO₆S

243.28 g/Mol



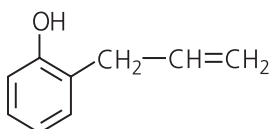
Biological buffer for cell cultures, biological productions, electrophoresis, diagnostics, tissue studies, blotting techniques, chromatography etc. (pKa = 8.4 at 20 °C).

6. Aromatic Compounds

2-Allylphenol

o-Allylphenol

1745-81-9



Reactive allyl intermediate for the pharmaceutical- and the polymer-industry.

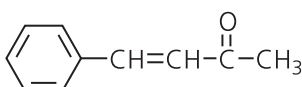
$C_9H_{10}O$

134.18 g/Mol

Benzylidene acetone

4-Phenyl-3-buten-2-one

122-57-6



Aromatic ketone; intermediate for organic syntheses e.g. for the fragrance industry, the pharmaceutical industry, additive for electroplating baths.

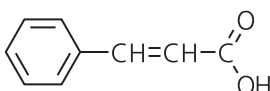
$C_{10}H_{10}O$

146.19 g/Mol

Cinnamic acid

3-Phenylacrylic acid

621-82-9



Aromatic carboxylic acid; intermediate for the fragrance-, pharmaceutical-, cosmetic-, polymer-, agro- and electroplating industry.

$C_9H_8O_2$

148.16 g/Mol

4-Hydroxybenzylidene acetone

4-(4-Hydroxyphenyl)-3-buten-2-one

3160-35-8

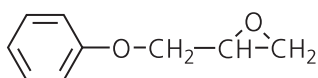
$C_{10}H_{10}O_2$

162.19 g/Mol

PGE

Phenyl glycidyl ether

122-60-1



Glycidyl ether used as reactive diluent in epoxy resins; adhesion promoter for PVC, acrylic resins and PUR, stabiliser for chlorinated hydrocarbons; pharmaceutical intermediate.

$C_9H_{10}O_2$

150.18 g/Mol

RASCHIG CHEMICALS FOR PHARMACEUTICALS

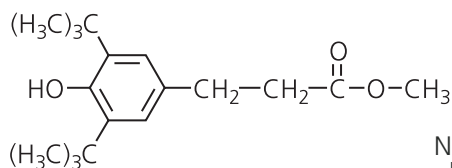
RALOX 35

3-(3,5-Di-tert.-butyl-4-hydroxy-phenyl)-propionic acid methylester

6386-38-5

$C_{18}H_{28}O_3$

292.41 g/Mol



Non staining sterically hindered phenolic antioxidant used e.g. in polyolefins. Raw material for the synthesis of a variety of chemical compounds.

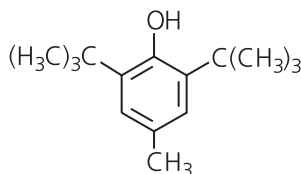
RALOX BHT

2,6-Di-tert.-butyl-4-methylphenol

128-37-0

$C_{15}H_{24}O$

220.35 g/Mol



Non staining sterically hindered phenolic antioxidant with a broad range of applications in food and feedstuff, rubber, plastics, lubricants, pharmaceuticals, perfumes, cosmetics etc. Polymerisation inhibitor.

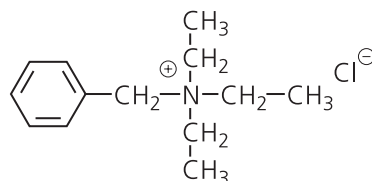
TEBAC

N,N,N-Triethyl-benzenemethan-aminium chloride

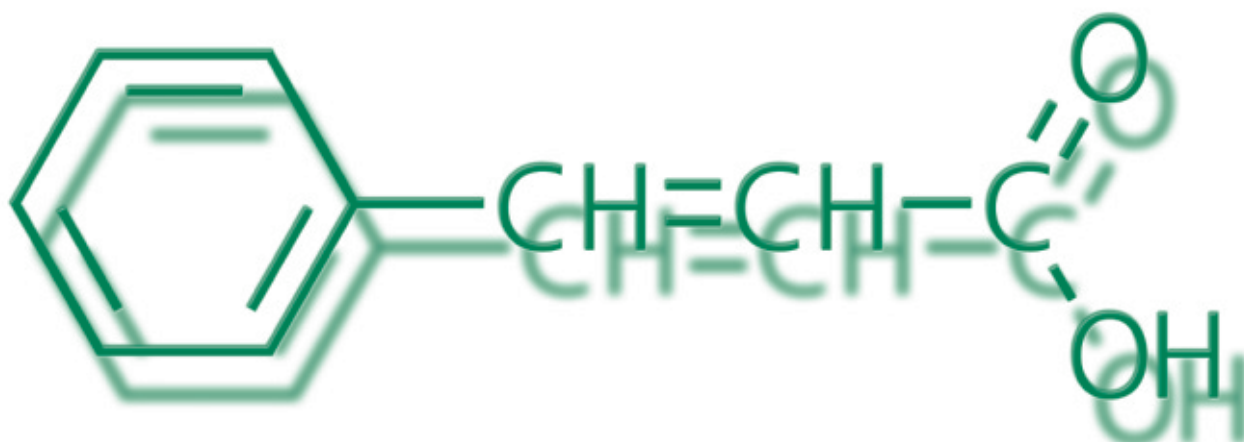
56-37-1

$C_{13}H_{22}ClN$

227.78 g/Mol



Quaternary ammonium salt; phase transfer catalyst, catalyst, antistatic, plasticiser, additive for toners and paper, biocide.



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Product	CA Number	Formula	Page
2-Acetylpyridine	1122-62-9	C ₇ H ₇ NO	15
3-Acetylpyridine	350-03-8	C ₇ H ₇ NO	15
4-Acetylpyridine	1122-54-9	C ₇ H ₇ NO	15
2-Allylphenol	1745-81-9	C ₉ H ₁₀ O	26
2-Aminomethylpyridine	3731-51-9	C ₆ H ₈ N ₂	11
3-Aminomethylpyridine	3731-52-0	C ₆ H ₈ N ₂	11
4-Aminomethylpyridine	3731-53-1	C ₆ H ₈ N ₂	11
BCE	68876-96-0	C ₁₀ H ₁₆ Cl ₂ O ₄	23
2-Benzoylpyridine	91-02-1	C ₁₂ H ₉ NO	15
4-Benzoylpyridine	14548-46-0	C ₁₂ H ₉ NO	15
2-Benzylaminopyridine	6935-27-9	C ₁₂ H ₁₂ N ₂	12
Benzylidene acetone	122-57-6	C ₁₀ H ₁₀ O	26
4-Benzylpiperidine	31252-42-3	C ₁₂ H ₁₇ N	19
2-Benzylpyridine	101-82-6	C ₁₂ H ₁₁ N	10
4-Benzylpyridine	2116-65-6	C ₁₂ H ₁₁ N	10
CAPS	1135-40-6	C ₉ H ₁₉ NO ₃ S	24
3-Chloro-1-propanol	627-30-5	C ₃ H ₇ ClO	23
Cinnamic acid	621-82-9	C ₉ H ₈ O ₂	26
DCP	96-23-1	C ₃ H ₆ Cl ₂ O	24
5,7-Dichloro-8-hydroxyquinaldine	72-80-0	C ₁₀ H ₇ Cl ₂ NO	21
5,7-Dichloro-8-hydroxyquinoline	773-76-2	C ₉ H ₅ Cl ₂ NO	22
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1-Ethylpiperidine	766-09-6	C ₇ H ₁₅ N	18
2-Ethylpiperidine	1484-80-6	C ₇ H ₁₅ N	19
2-Ethylpyridine	100-71-0	C ₇ H ₉ N	9
4-Ethylpyridine	536-75-4	C ₇ H ₉ N	10
1-Formylpiperidine	2591-86-8	C ₆ H ₁₁ NO	21
GAM	96-24-2	C ₃ H ₇ ClO ₂	24
HEPPS	16052-06-5	C ₉ H ₂₀ N ₂ O ₄ S	22
4-Hydroxybenzylideneacetone	3160-35-8	C ₁₀ H ₁₀ O ₂	26
2-(2-Hydroxyethyl)-piperidine	1484-84-0	C ₇ H ₁₅ NO	20
2-(2-Hydroxyethyl)-pyridine	103-74-2	C ₇ H ₉ NO	13
8-Hydroxyquinaldine	826-81-3	C ₁₀ H ₉ NO	21
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Isonicotinic acid N-oxide	13602-12-5	C ₆ H ₅ NO ₃	14
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2-Methylpiperidine	109-05-7	C ₆ H ₁₃ N	18
3-Methylpiperidine	626-56-2	C ₆ H ₁₃ N	18
4-Methylpiperidine	626-58-4	C ₆ H ₁₃ N	18
1-Methylpiperidine-2-methanol	20845-34-5	C ₇ H ₁₅ NO	20
1-Methylpiperidine-3-methanol	7583-53-1	C ₇ H ₁₅ NO	20
MOPS	1132-61-2	C ₇ H ₁₅ NO ₄ S	23
MOPS Na-salt	71119-22-7	C ₇ H ₁₄ NNaO ₄ S	23
MPA	533-15-3	C ₈ H ₁₇ NO	20
Nicotinic acid N-oxide	2398-81-4	C ₆ H ₅ NO ₃	14

Product	CA Number	Formula	Page
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PESA	53054-76-5	$C_7H_9NO_3S$	17
PGE	122-60-1	$C_9H_{10}O_2$	26
4-(3-Phenylpropyl)pyridine	2057-49-0	$C_{14}H_{15}N$	10
2-Picoline	109-06-8	C_6H_7N	9
3-Picoline	108-99-6	C_6H_7N	9
4-Picoline	108-89-4	C_6H_7N	9
2-Picoline N-oxide	931-19-1	C_6H_7NO	13
3-Picoline N-oxide	1003-73-2	C_6H_7NO	13
4-Picoline N-oxide	1003-67-4	C_6H_7NO	13
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Piperidine hydrochloride	6091-44-7	$C_5H_{12}ClN$	18
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3-Piperidinemethanol	4606-65-9	$C_6H_{13}NO$	19
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3-Pyridinealdoxime	1193-92-6	$C_6H_6N_2O$	16
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3-Pyridinecarboxaldehyde	500-22-1	C_6H_5NO	14
4-Pyridinecarboxaldehyde	872-85-5	C_6H_5NO	15
2-Pyridinemethanol	586-98-1	C_6H_7NO	12
3-Pyridinemethanol	100-55-0	C_6H_7NO	12
4-Pyridinemethanol	586-95-8	C_6H_7NO	12
Pyridine-N-oxide	694-59-7	C_5H_5NO	13
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Notes

