

YOUR PARTNER FOR FINE AND SPECIALTY CHEMICALS

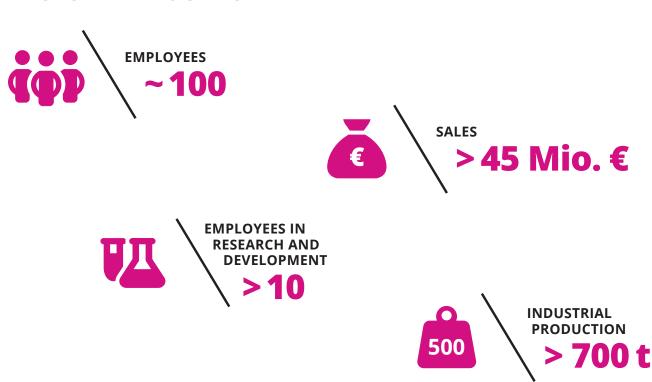
www.minascent.com

DEVELOPMENT AND MANUFACTURING SERVICES

t Minascent, we are spezialized in producing high-quality fine chemicals that add value to our customers' end products. With nearly 30years in challenging chemistry we support companies worldwide in manufacturing specialty chemical products.

Our team of ca. 100 dedicated employees works closely with partners to develop highly valued products, innovative and efficient processes, and cutting-edge technologies. As a subsidiary of the Minafin Group, benefiting from a strong international network, we serve customers in the pharmaceutical, cosmetic, animal feed, and other highly specialized industries. To ensure long-term quality and supply security, we continuously adapt our processes to meet the specific needs of our target markets. Whether providing custom-manufactured fine and specialty chemicals or offering catalogue products, we are committed to delivering excellence.

Our customers act in the pharmaceutical, cosmetic, animal feed and other highly specialized industry segments. To ensure we meet their high requirements on quality and supply security over the long term, we adapt our processes to the needs of our target groups. We supply high-quality fine and specialty chemicals manufactured to order as well as our catalogue products.



FACTS AND FIGURES



REACTIONS AND REAGENTS

MANUFACTURING SERVICES

- ISO and FAMI-QS certified manufacturing site
- Multipurpose plant with broad technical capabilities
- Capacity from grams to hundreds of tons of fine chemicals to support clients from early test phases to commercial launch
- Process development and scale-up, state of the art technical centre, kilo lab, pilot plant and a solid-state lab at Minakem

- Extended distillation and reaction capabilities
- Analytical laboratories, equipped with or having access to modern instruments and methods such as: HPLC, GC, LC-MS, GC-MS, ICP, DSC, XRD, and NMR
- Highly skilled personnel, equipped to handle demanding custom manufacturing projects
- Dedicated project management to ensure success of the projects

inascent has extensive experience in managing highly reactive materials and exothermic reactions. Our deep expertise in handling hazardous, toxic, and corrosive substances enables us to safely transform them into high-grade fine and specialty products.

We at Minascent can handle the following reactions and reagents, for instance:

TRACK RECORD PERFORMANCE

Scale-up from Lab to Launch

Process Safety

Innovation

REACTIONS AND REAGENTS

- Organometallic chemistry using various metals
- Methylation with dimethyl sulfate
- Oxidations with hydrogen peroxide
- Reductions with hydrides, hydrogen gas or hydrazine
- · Chlorinations with thionyl chloride
- Nitrations

- High pressure reactions up to 25 bar
- Protection group chemistry with DiBoc etc.
- Handling of sulfur raw materials: dimethyl sulfate, various thiols and sulfides, thiourea, sulfonyl chlorides
- Off-gas treatment of sulfur dioxide, hydrogen sulfide and other sulfur derivatives

REACTIONS AND REAGENTS

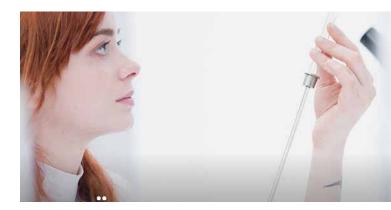


	7 (g
LAB SCALE	20 grams – 200 grams
SMALL PILOT	up to 20kg
LARGE PILOT	20 kg - 200 kg
INDUSTRIAL PRODUCTION	200 kg – 100 MT

EQUIPMENT

- Distillation laboratory for small scale production
 and process development
- Pilot plant with several stainless steel and glasslined reactors between 300 – 1,200 liters, isolation/drying with Hastelloy Nutsch and stainlesssteel filters
- More than 100 m³ reactor capacity in labs, pilot plant and production lines
- 9 multi-purpose lines with reator sizes between 2.5 m³ and 12 m³ (stainless steel, glass-lines and Hastelloy)
- Nutsch filter, filter dryer, 2 Hastelloy centrifuges
- Paddle dryer, cone dryer and tray dryer
- Distillations: short path, thin film evaporator and fractionation
- Analytical laboratories equipped with state-ofthe-art instruments, e.g., HPLC, GC, GC-MS, UV-VIS, IR, polarimeter, viscometer and DSC

inascent specializes in contract development and manufacturing of fine and specialty chemicals while also offering a diverse portfolio of catalog products. Our expertise ranges from standard formulations and custom developments to comprehensive customer support throughout the production process. Driven by innovation, we continuously research advanced solutions and expand into new markets to meet evolving industry demands.







Minascent's DIBOC products, including DIBOC itself and an extensive array of derivatives, are recognized for their exceptional quality and compatibility with a wide range of building blocks. This makes them the preferred choice for complex biochemical and pharmaceutical applications, where precision and reliability are paramount. With a focus on maintaining high standards, we ensure that our portfolio meets the diverse needs of the most demanding industries.



CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
24424-99-5	Diboc	di- <i>tert</i> -Butyl dicarbonate & tailor-made solutions	×°°°°×°×
79099-07-3	Boc-Piperidone	N-Boc-4-piperidone	Boc
57260-71-6	Boc-Piperazine	N-Boc-piperazine	Boc ^{-N} -H
144978-12-1	Boc-Pyr-OEt	(S)-ethyl-N-Boc-pyroglutamate	O COOEt Boc
13726-69-7	Boc-Hydroxyproline	N-Boc-(2S, 4R)-4-hydroxyproline	
11652-20-1	Boc-Glycinate	<i>tert-</i> butyl <i>N-</i> Boc-glycinate	Boc N O(Bu
870-46-2	Carbazate	<i>tert-</i> butyl carbazate (Boc-hydrazide)	Boc NH2





Our hydrazine product line features various derivatives, carefully crafted to serve a wide spectrum of industrial, pharmaceutical, and research applications. Our portfolio is designed to meet the specific needs of our clients, ensuring outstanding efficiency, reliability, and safety in even the most intricate chemical reactions and processes. With a commitment to excellence, we continue to provide solutions that support the success of our customers across various sectors.

CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
51859-98-4	Flubine	2-fluorobenzylhydrazine	F N ^{-NH2}
20570-96-1	Benzylhydrazine	benzylhydrazine dihydrochloride	N ^r ^{NH} ₂ H 2×HCl
624-84-0	Formylhydrazine	hydrazinecarboxaldehyde	H ^N N ^{NH} 2
870-46-2	Carbazate	<i>tert</i> -butyl carbazate (Boc-hydrazide)	Boc N ^{NH2}







Minascent offers a diverse range of carboxylic acid derivatives, serving as essential building blocks in the synthesis of fine chemicals, pharmaceuticals, agrochemicals, and polymers. Emphasizing high purity, selectivity, and versatility, our products are designed to support a broad spectrum of chemical processes, from innovative small-scale R&D to robust large-scale production. With these derivatives, we cater to the evolving needs of industries requiring precision and scalability in their manufacturing workflows.



CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
104-97-2	CPPC	3-cyclopentylpropanoyl chloride	C
4023-34-1	CPCC	cyclopropanecarbonyl chloride	√ [°] _{Cl}
3779-29-1	Diester (CBDCE)	diethyl 1,1-cyclobutanedicarboxylate	CO ₂ Et
5445-51-2	Diacid	1,1-Cyclobutanedicarboxylic acid	
3721-95-7	CYBUS	cyclobutanecarboxylic acid	CO ₂ H
5006-22-4	CBCC	cyclobutanecarbonyl chloride	coci
55561-02-9	Thiopivalic acid	trimethylthioacetic S-acid	О



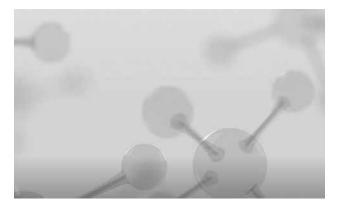
Advanced sulfur reagents

Minascent's advanced sulfur reagents offer exceptional performance, ensuring efficiency and precision in complex reactions. By supporting innovation and enhancing process capabilities, our sulfur reagents contribute to advancements across multiple industries, from pharmaceuticals to advanced materials. These high-performance chemicals are designed to meet the most demanding requirements, driving innovation and efficiency across a variety of industries.

CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
766-92-7	Benzyl-methyl-sulfide	benzyl methyl sulfide	C S
14094-12-3	TBMSO	<i>tert</i> -butyl methyl sulfone	
29529-99-5	Triazine	6-(dibutylamino)-1,3,5-triazine-2,4-dithiol	$\overset{HS}{\underset{N}{\bigvee}} \overset{N}{\underset{N}{\bigvee}} \overset{N(^{''Bu})_2}{\underset{SH}{\overset{N}{\bigvee}}}$
51392-54-2	MNBS	methyl (3-nitrobenzyl) sulfide	O ₂ N
55561-02-9	Thiopivalic acid	trimethylthioacetic S-acid	SH

Selenium Chemistry

Minascent has gained extensive experience over the years in handling selenium, organometallic selenium salts (such as MeSeLi), and selenium dioxide, ensuring safe and precise processing. Our expertise includes the development of specialized synthesis routes, controlled reaction conditions, and stringent safety measures.





Fine and specialty reagents

The fine and specialty reagents portfolio focuses on, but is not limited to, advanced aromatic compounds, offering versatile solutions for a broad spectrum of applications. From high-performance materials to pharmaceuticals, cosmetics, and specialty chemicals, our range includes phenols, aromatic heterocycles, and specialized linkers. These high-quality reagents are designed to meet the unique needs of our customers, ensuring reliability and excellence across industries that demand precision and innovation.

CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
625-84-3	DMP	2,5-dimethylpyrrole	H H
22104-62-7	DMAB	(±)-4-(dimethylamino)-3-methylbutan-2-one	
136-77-6	Hecinol	4-hexylresorcin	но он
5396-38-3	ТВА	4- <i>tert</i> -butylanisole	
442200-41-1	crosslinker	N,N'-diethyl-1,3-bis(acrylamido)-propane	J' ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
65193-87-5	Cyanoacetate	2-cyanoethyl 3-oxobutyrate	° ° L L _O CN
95306-64-2	Pyridinone	4-amino-5-methylpyridin-2(1H)-one	H ₂ N H
42882-31-5	NEA	(±)-α-methyl-1-naphthalenemethylamine	NH2
85633-96-1	CNK-acid	(±)-4-(4-chloro-3-nitrophenyl)-3-methyl-4- oxobutanoic acid	O ₂ N CI
533-31-3	Sesamol	3,4-(Methylenedioxy)phenol	HO



Cyclopropane derivatives

Building upon our extensive cyclobutane portfolio, Minascent is proud to expand its range with an increasingly diverse selection of cyclopropane derivatives. Known for their high reactivity, these compounds offer unparalleled versatility across various applications. Our continuous efforts in innovation and process optimization ensure that we deliver commercially scalable solutions, maintaining consistent quality to meet the evolving demands of both established and emerging markets. With this expansion, we are strengthening our portfolio to better address the dynamic needs of industries worldwide.

CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
4023-34-1	CPCC	cyclopropanecarbonyl chloride	√ ^{CI}
5911-08-0	СМСР	(chloromethyl)cyclopropane	√CI
7051-34-5	ВМСР	(bromomethyl)cyclopropane	\ → Br







Minascent offers a comprehensive range of cyclobutane derivatives, known for their distinctive structural and chemical properties. These versatile compounds find applications across various industries, including pharmaceuticals and consumer goods. With ongoing improvements in synthetic methodologies and a focus on commercial scalability, we continue to enhance the reliability and performance of our cyclobutane derivatives, providing efficient solutions to meet the needs of our clients.

CAS No.	PRODUCT	CHEMICAL NAME	STRUCTURE
3721-95-7	CYBUS	cyclobutanecarboxylic acid	CO ₂ H
5006-22-4	CBCC	cyclobutanecarbonyl chloride	coci
3779-29-1	Diester (CBDCE)	diethyl 1,1-cyclobutanedicarboxylate	CO ₂ Et
5445-51-2	Diacid	1,1-cyclobutanedicarboxylic acid	
4415-82-1	Carbinol	cyclobutyl carbinol	ОН
2987-17-9	Carboxaldehyde	cyclobutyl carboxaldehyde	сно



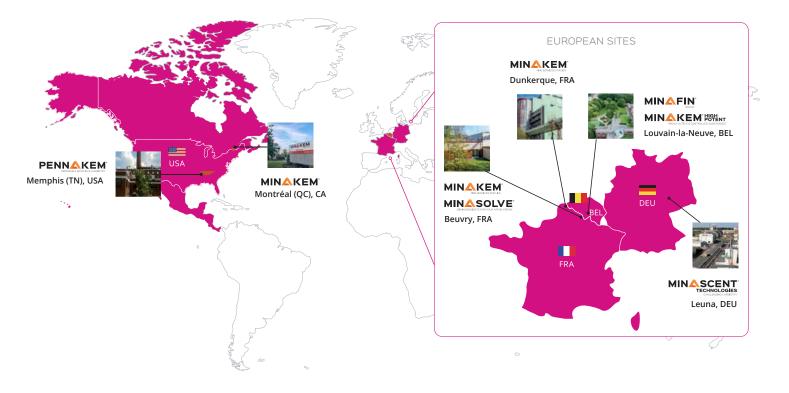
Do you have special requirements?

As your specialty chemicals expert, we look forward to providing you with a customized solution! Let's discuss your specific needs in person.

MINASCENT IS PART OF THE MINAFIN GROUP.



Minafin is a group of global fine chemical developers and manufacturers and has an industrial presence in 5 countries, comprising 6 factories and 6 R&D labs.





Minascent Technologies is the Challenging Chemistry Division within the Minafin Group.

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