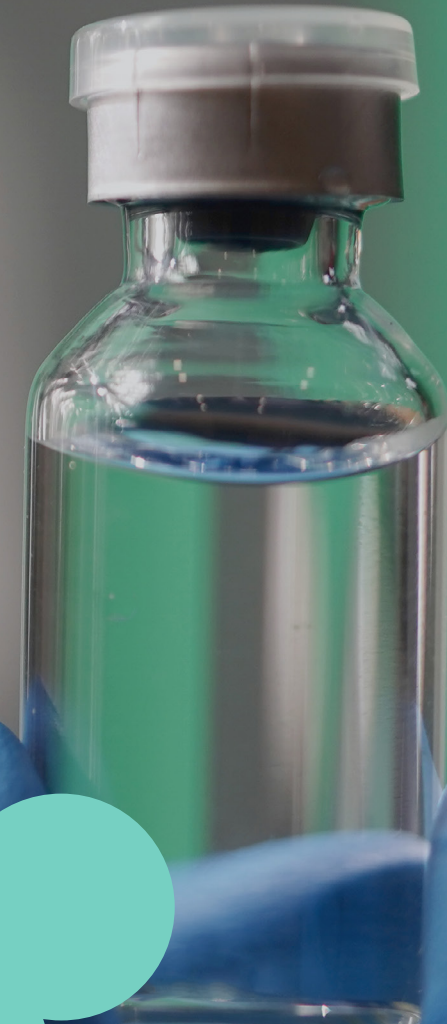



Together elevating patient care


Discover how we go beyond the essential to support the development of more desirable, safe and effective therapies that elevate the health of patients worldwide.



We bring progress to life



**Co-create therapies
that make our world
a healthier place**



Health and well-being means prevention and treatment of disease for a better quality of life. When you collaborate with dsm-firmenich, you get an expert, purpose-led partner committed to making our world a healthier place.

- Simplify the drug approvals process with our active pharmaceutical ingredients (API) portfolio elevated by Verilege™, a distinct suite of expert services and superior customer care.
- Unlock new treatment possibilities with CBtru®, an innovative drug delivery solution designed to formulate highly lipophilic molecules for optimized bioavailability, enhanced patient convenience, and improved compliance through oral solid dosage forms.
- Take advantage of our specialty excipients and ingredients portfolio to overcome formulation challenges—for both small molecules and biologic products—backed by extensive regulatory and technical know-how.
- Elevate patient compliance with a comprehensive Taste solutions offering, carefully curated for the pharmaceutical market and designed to improve the palatability and acceptance of medication.



**API portfolio
elevated by
Verilege™**

In the world of pharmaceutical innovation, managing the intricacies of regulatory compliance, ensuring ingredient quality, and meeting sustainability targets is a complex task. To help you enter, navigate, and expand in the pharmaceutical market with confidence and peace of mind, our API portfolio is elevated by Verilege™, a suite of expert services and superior customer care.

Verilege™ simplifies the drug approvals process by helping you:

- Navigate regulatory hurdles with ease.
- Count on consistent high-quality and pharma standards.
- Unlock new markets and opportunities.
- Progress health sustainably.
- De-risk your supply chain geographically.



Learn more at:
dsm-firmenich.com/verilege

Quality services



Regulatory services



API portfolio elevated by Verilege™



Sustainability services



Supply Chain services

Tailored to your needs, delivered by experts

The Verilege™ program comes in tiered service levels that can be adapted to your specific needs—whether you require basic guidance or advanced, hands-on support. Each service level is brought to life by a team of industry experts passionate about helping you succeed, so you can focus on what really matters—bringing life-changing and life-saving medicines to market.

Excellence from start to finish

Our quality services ensure we deliver consistent, high-quality APIs across our global network through:

- cGMP-certified facilities adhering to the highest manufacturing standards.
- Robust quality control processes.
- ICHQ7 compliance for reliable pharmaceutical-grade ingredients.
- Continuous investments in our facilities to better serve your needs—and ultimately patients—both now and in the future.

Regular inspections by various authorities, such as:



What you can get:

- ✓ Multi-year quality agreements
- ✓ Commitment to change notifications and change management controls
- ✓ Analytical test methods and expert services as needed
- ✓ Access to audit reports and site auditing
- ✓ Nitrosamine risk assessments
- ✓ Individualized quality support

Reduce complexity while increasing compliance

Our regulatory services can help streamline and accelerate regulatory filings and product approvals with:

- Comprehensive documentation, including up-to-date dossiers for global registrations—such as CEPs, US DMFs, Japanese DMFs, and China DMFs—along with access to the API section of marketing authorization approvals worldwide, and support for direct API registrations where required.
- Standard and customizable statements tailored to meet specific market and customer needs.
- Personalized assistance with regulatory submissions and documentation to ensure compliance with ICH, US FDA, EMA, and other regional standards.
- Project-based collaboration to develop compliant drugs, including regulatory documentation gap assessments and regulatory strategy expertise.



Elevate patient health sustainably

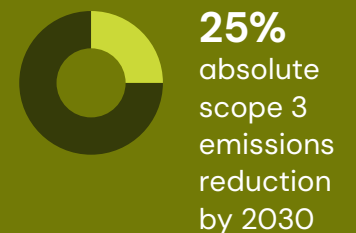
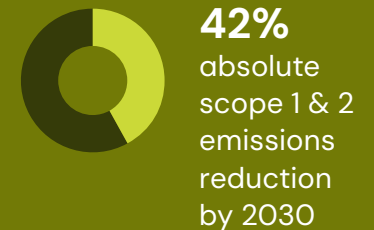
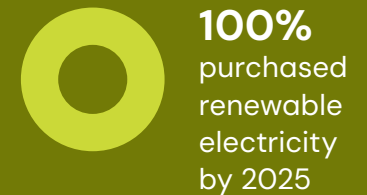
We go beyond pharma compliance with solutions that make sustainable progress possible, supporting you with:

- Life Cycle Assessments (LCAs) expertise in accordance with ISO 14040/44 standards, quantifying the environmental impact of our solutions. We develop greenhouse gas (GHG) emission reduction roadmaps at site and ingredient levels, helping you to advance your decarbonization efforts.
- Transparent information sharing, providing access to our primary data, sustainability targets, and certifications (EcoVadis, SBTi), enabling you to assess dsm-firmenich as a supplier and make informed purchasing decisions.
- Our Imp'Act Card™ program offers detailed, science-based metrics on the environmental footprint of our products at an ingredient level, including traceability, certifications, and social impact data (Sedex).
- Expertise and customized support for sustainability questionnaires, emission calculations, or joint development of a sustainable solution.



Onward to net-zero

Progressing toward our science-based targets



Net-zero greenhouse gas emissions by 2045

A worldwide network of strategically located production facilities

Our supply chain services ensure access to high-quality APIs via:

- A worldwide network of strategically located production facilities.
- Assuring delivery with Good Distribution Practice (GDP) requirements.
- Help de-risking your supply chain geographically.
- Supporting your drug development pipeline.





Ingredients for pharmaceutical use (APIs and excipients)

Product Code	Product
--------------	---------

Vitamin A

50 1754 5	Retinyl Palmitate 250 CWS/F Ph
50 1626 2	Retinyl Palmitate 1.7 MIUg Ph ⁴
50 1227 9	Dry Vitamin A Acetate 500 B
50 1829 3	Retinyl Palm1.7MIU/G BHA/BHT Ph

Vitamin E

50 1657 7	Dry Vitamin E 50% CWS/S Ph
50 1626 0	dl- α -Tocopheryl Acetate Ph ⁴
50 1674 1	all-rac- α -Tocopherol Ph ⁴

Vitamin D

50 1621 2	Dry Vitamin D3 100 SD/S Ph
50 1647 3	Dry Vitamin D3 100 CWS Ph
50 1752 4	Vitamin D3 1.0 MIU/g Ph
50 1626 3	Vitamin D3 Crystalline Ph ⁴

Vitamin K1

50 1822 5	Dry Vitamin K1 5% SD Ph
04 3501 5	Vitamin K1 ⁴
50 1322 4	Vitamin K1 API (US DMF only) ⁴

Vitamin B1

04 2947 3	ROCOAT Thiamine Mononitrate 33 1/3%
50 1625 7	Thiamine Hydrochloride Ph ⁴
50 1841 4	Thiamine Mononitrate Ph

1 This product is manufactured under Good Manufacturing Practice (GMP-1) standards for drug product intermediates, in accordance with EudraLex Volume 4, ensuring consistent high quality and compliance with EU regulations.

2 Please contact your dsm-firmenich representative for more information.

3 Currently available for use in the manufacturing of investigational pharmaceutical preparations (clinical research); will be available for use in the manufacturing of drug products by the end of 2025.

4 Product supported by microbiological and endotoxin risk assessment statement as standard documentation for sensitive use applications.

Product Code	Product
--------------	---------

Vitamin B2

50 1626 1	Riboflavin 5'-Phosphate Ph (origin France)
50 1751 3	Riboflavin 5'-Phosphate Ph (origin India)
50 1775 4	Riboflavin Universal Ph

Vitamin B3

04 8784 8	Niacinamide
50 1629 1	Niacinamide Ph (US DMF only)

Vitamin B5

50 1776 0	Calcium D-Pantothenate Ph
50 1625 8	D-Panthenol Ph ⁴

Vitamin B6

04 2945 7	ROCOAT Pyridoxine Hydrochloride 33 1/3%
50 1646 0	Pyridoxine Hydrochloride Ph ⁴ (origin Germany)

Vitamin B7

50 1626 4	D-Biotin Ph ⁴
50 1728 9	Biotin 1% Trit Ph

Vitamin B9

50 1625 9	Folic Acid Ph ⁴
-----------	----------------------------

Vitamin B12

50 1823 8	Vitamin B12 1% Ph
50 1823 5	Vitamin B12 0.1% Ph
50 1630 0	Vitamin B12 Crystalline Ph

Product Code	Product
--------------	---------

Vitamin C

04 0809 3	Ascorbic Acid Fine Granular
50 1645 0	Ascorbic Acid Fine Powder Ph ⁴
50 1625 5	Ascorbic Acid Ph ⁴
50 1775 7	Calcium Ascorbate Ph
50 1625 6	Sodium Ascorbate Ph ⁴
04 0815 8	Sodium Ascorbate Fine Granular Ph
50 0976 6	Ascorbic Acid Ultra Fine Powder ⁴
04 2511 7	Coated Ascorbic Acid, Type EC
50 0774 7	Ascorbic Acid 95% Granulation
50 1842 4	Ascorbic Acid 90% Granulation Ph

Beta-Carotene

50 1434 4	β -Carotene Crystalline Ph
50 1438 7	β -Carotene 30% FS Ph
50 1435 2	BetaTab® 20% S Ph

Intermediate / drug-delivery solution

50 1830 0	CBtru® ³
-----------	---------------------

Benzodiazepines²

04 3967 3	Clonazepam
50 0553 1	Clonazepam JP
04 4064 7	Bromazepam
05 00552 3	Bromazepam JP
04 4181 3	Flunitrazepam

Antifungals²

50 1071 3	Flucytosine
-----------	-------------

Benzamides²

04 0555 8	Moclobemide
-----------	-------------

Enhancing drug formulations with specialty excipients

Drug formulation is growing more complex with increasingly challenging API properties, drug delivery systems, and patient population requirements.

We offer a range of specialty excipients—including vitamins, vitamin derivatives, flavors, and taste modulators—and partner with our customers to find the right solution for the development of safe and effective drug formulations.

Take your drug product to another level with our expertise in vitamins, vitamin derivatives, antioxidants, and Taste solutions.

Enhance small molecule formulations

Improve the profile of small molecule drug products with our high quality antioxidants, from enhanced API protection to lower risk of nitrosamine formation.

Drive innovation in biologics

Our ingredients can support the formulation of biologics—including preventing protein aggregation, reducing viscosity in monoclonal antibody solutions, acting as adjuvants in vaccines, and providing nutrients in cell cultures.

Improve patient convenience and therapy compliance through Taste solutions

We offer a wide portfolio of taste solutions, including flavors and extracts across a broad range of tonalities, Taste modulators, and encapsulation technologies, designed to help improve patient convenience and therapy compliance.



Elevating compliance: A comprehensive Taste offering, carefully curated for pharma

The pharmaceutical industry is under increasing pressure to develop more patient-friendly dosage forms. The rise of pill fatigue—especially in chronic disease management—and conditions like dysphagia have significantly impacted patient compliance. On top of that, over 60% of APIs are considered to be bitter, making taste a key factor in adherence and supporting better treatment outcomes.²

Our portfolio of taste solutions can help you develop better tasting pharmaceuticals for improved therapy compliance with:

- **Flavors and extracts** across a broad range of tonalities, including citrus, mint, vanilla and brown notes, and fruits.
- **Taste modulators**, such as bitter blockers, off-notes maskers, sensates, as well as sweetness and mouthfeel enhancers, including a proprietary receptor-based discovery technology that enables fast screening and creation of taste receptor-specific maskers and blockers.
- **Encapsulation technologies**, that provide longer shelf life, resistance to moisture, oxygen, higher temperatures and a controlled (or optimized) flavor release.



Learn more at:
dsm-firmenich.com/pharma-taste-solutions



Innovative drug delivery solutions

Transform patient care with CBtru®

CBtru® is an innovative drug delivery solution making a new era in modern medicine possible—one that unlocks the true potential of highly lipophilic molecules.

- **Make oral solid dosage forms a reality**—a more patient-centric delivery format with wider applicability.
- **Enable higher API loading**—meaning lower daily dosages and more convenience for patients.
- **Optimize bioavailability** in solid oral dosage forms—paving the way for more patient-friendly delivery systems, like tablets and capsules.
- **Proven safe and well-tolerated**—in human clinical trials.

Confidence in sustained release with TheraPEA™

The development of long-acting drug formulations presents several challenges, particularly when it comes to ensuring the balance between safety, efficacy, and patient compliance.

Our TheraPEA™ drug delivery technology is an advanced biodegradable polyester amide platform. Designed for optimal performance, TheraPEA™ delivers consistent near-linear release rates (lasting weeks to months) in just one dose and exceptional processing flexibility. Whether you're seeking controlled release solutions or customizable processing options, TheraPEA™ technology provides the ideal solution for your needs—sustainable, reliable, and versatile.



Learn more at:
dsm-firmenich.com/CBtru



Scan to learn more about
TheraPEA

Partner with dsm-firmenich

We're here to help you create patient-centric solutions that allow treatments to meet their full potential.

Together, let's partner for successful drug development and elevate patient health.

Contact us to get started



Disclaimer

This brochure does not constitute a recommendation or guidance for decisions concerning the purchase, use or application of products and does not relieve the user of the product of the obligation to undertake its own suitability, performance or quality testing. This brochure is provided on an "as is" basis. Although the information set forth in this brochure is presented in good faith and believed to be correct, dsm-firmenich and its affiliated companies (hereinafter "dsm-firmenich") makes no representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature with respect to information or the products to which information refers. No information set forth in this brochure constitutes a solicitation or offer, or invitation to conclude any legal act of any kind whatsoever. The content of any purchase contract (i.e. technical data, price and applications of the products of dsm-firmenich) concerning the purchase of dsm-firmenich products is constituted only by the purchase agreement as such and integral parts thereof (specifications in this brochure never form part of a contract). All trademarks, product names, symbols and graphics appearing in this brochure are the property of dsm-firmenich unless indicated otherwise. All dsm-firmenich trademarks are either registered trademarks or trademarks of dsm-firmenich group of companies in the netherlands and/or other countries. No license to or right in any such trademarks, trade names, trade secrets, products or other proprietary rights of dsm-firmenich is granted or conferred to any party without a written agreement.

We bring progress to life