



The chemical distribution in Germany

LINKING THE BEST SOLUTIONS

The chemical distribution in Germany – linking the best solutions



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Chemical distribution connects.

Rooted in Germany, active worldwide

The German chemical traders and distributors are important linchpins between chemical production and processing industry. Both small and large chemical manufacturers entrust this branch of industry with both the marketing and the safe, needs-based distribution of their products. Recipients from all different kinds of industries appreciate chemical distributors as reliable suppliers of every possible sort of chemical.

Today, in Germany, about 160 chemical distributors and importers/exporters ensure that the supply chain between producers and users of chemicals is never interrupted. This means that distributors are supplying more than six million tonnes of chemicals every year. The turnover here amounts to more than ten billion Euros providing jobs to about 6,900 employees. The German Chemical Distribution Association (VCH) represents the interests – at the national and international level – of more than 100 enterprises in this branch of industry which is largely characterised by

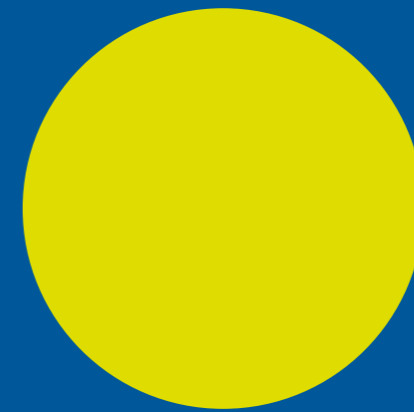
medium-sized companies. The roots of the association, and of many chemical distribution companies, go back to the beginning of the twentieth century. Already at that time, the vigorously growing German industry profited from the good business relationships of this distribution sector – both at home and abroad.

The German chemicals trade – traders, distributors and consultants with the best solutions

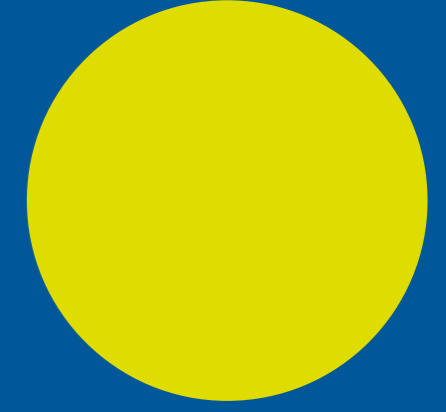
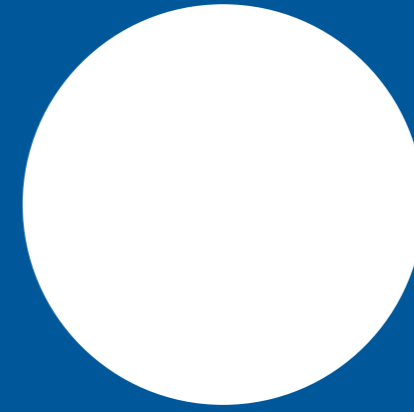
Today, German chemical distributors offer a wide portfolio of basic and speciality chemicals from all over the world. Thanks to its comprehensive service spectrum – ranging from storage, filling and transporting via mixing and recycling, through to expert application consulting – the chemical distribution sector substantially strengthens the competitive ability and innovative power of its customers.



Chemicals for innovations
Chemical
distribution markets



*At home, at work, travelling
or during leisure activities –
chemistry accompanies
our daily lives.*





From A for acetone to Z for zinc chloride – manufacturing industry uses chemicals of all kinds as raw materials, intermediate products or solvents. Roughly 4 million tons of acids and lyes, 830,000 tonnes of solvents and just as much solid material is handled every year by the German chemical distributors. In addition, there are a further 500,000 tonnes of speciality chemicals.

Without chemicals we are going nowhere.

Chemicals are the basis for a large number of innovative products and applications

Chemistry plays an important part in almost everything which excites our imagination and makes our lives pleasanter or more entertaining. There is hardly any product being manufactured today where chemicals are not involved. To this purpose, the chemical industry offers over 30,000 chemical products for customers from all sectors of industry. A large part of German chemicals sales, about 80 percent, is distributed over a strongly diversified industrial customer base. This variation in the chemical customer industries is also reflected by the very heterogeneous nature of the product ranges provided by the production-linking chemical distribution sector. It supplies raw materials and solvents for chemical production measured in kilotonnes as well as the smallest volumes of speciality chemicals for the manufacture or finishing of high-tech products.

Colour with function

Chemicals ensure that paints and coatings not only look attractive but also offer additional benefits: For example, nanoparticles in paint increase its scratch resistance and ensure a long-lasting surface gloss. Other additives enable coatings in the kitchen or bathroom to offer no grip for mould or bacteria. As well as such numerous functional additives, the **paint and coatings industry** also uses aqueous and organic solvents as binders and hardeners.

Mobile energy saving

Mobility and environmental protection can be reconciled thanks to chemical additives, catalysts and lightweight materials. Additives in fuel, or in tyres made of modern synthetic rubber, reduce fuel consumption and thus emissions of the greenhouse gas carbon dioxide. Furthermore, modern storage technologies – for example, on the basis of lithium-ion batteries – ensure the future growth of the **automotive industry**.

Made-to-measure materials

Plastics are part of our everyday life. Their material requirements differ greatly depending on the use for which they are foreseen. The **plastic processing industry** combines plastic granules and additives to generate products with specific properties, for example, biologically degradable plastic bags, safe and colourful children's toys or intake systems for energy saving combustion engines in cars.

Way up high

Additives improve the processing and material properties of products in the **building industry**. Just small amounts of a polymer-based liquefier permit concrete pumping up to a height of 300 metres with subsequent, programmable-to-the-minute hardening. Furthermore, this processing method reduces the volumes of water and energy required.



Chemicals are not only raw materials for many innovative products, they also contribute to their lean energy and environmentally friendly manufacturing.

Strong and glossy

In order to transform wood or straw into high value paper products, the **paper industry** uses a wide range of different chemicals to digest raw materials as well as to bleach, bond, colour and refine papers. The correct coating agent endows high-value papers with a smooth and shining surface and aromatic substances give tissue paper products a pleasant smell.

Perfect surfaces

Many working steps and complex chemical processes are necessary before primary metal can become high-grade finished metal parts or electronic components. In the **metal processing industry** and **electronics industry** metal surfaces are cleaned, degreased and etched or given electroplate finishing. High-purity chemicals with a low heavy metal content should be used here.

Power for tomorrow

High-strength carbon fibres for the rotor blades of wind turbines, high-purity chemicals for the production of solar silicon, enzymes or ionic liquids for the sustainable production of electricity from biomass – chemicals provide many different contributions for the efficient use of renewable energy sources and thus ensure the future of the **energy sector**.

Protection and glamour

The **cosmetics industry** uses numerous chemical innovations for the manufacture of well-tolerated, effective and decorative cosmetics: For example, well-tolerated sunscreens can be manufactured with micro-encapsulated light filters; and light scattering pigments as fillers for creams or powder make wrinkles disappear!

Spotlessly clean

Today, thanks to new enzymes, bleaches and polymers, washing will be just as clean at 30 to 40 degrees Celsius as used to be the case at 90 degrees. That saves energy. The **detergents and cleaning agents industry** continuously improves the effectiveness and environmental compatibility of its products using innovative chemicals.

Safe water

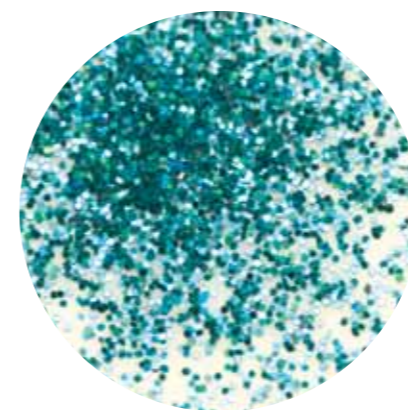
Pure water is a valuable resource. Chemicals contribute to keeping it in this condition. In **sewage works**, for example, toxic heavy metals are removed from industrial and municipal waste water using flocculants and precipitants. The **potable water industry** uses activated carbon and ion exchangers for water purification.

Tasty and healthy

From cultures for the manufacturing of milk products, via antioxidants for preservation and aromas for taste, through to vitamins and other health promoting additives – the **food industry** processes all sorts of chemical raw materials and ingredients for the manufacture of safe, tasty and healthy products.

Chemistry that works

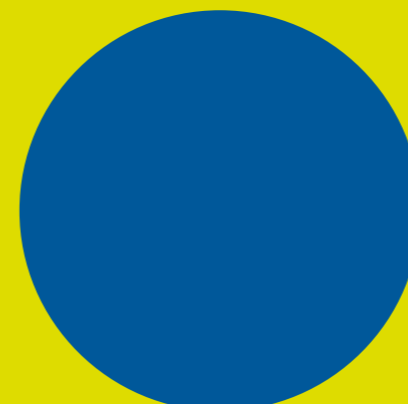
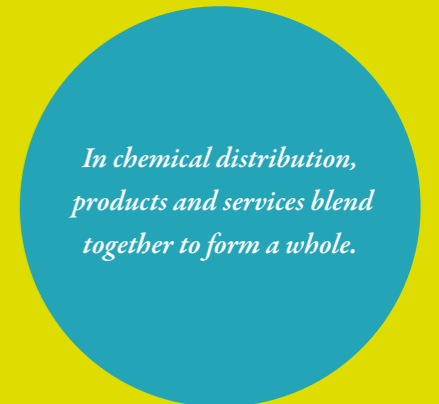
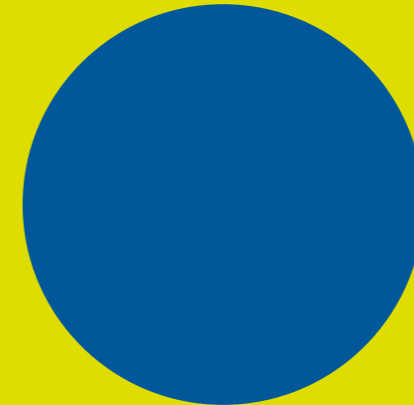
High value raw materials are the basis for effective and well tolerated drugs in the **pharmaceutical industry**. Only the correct active substances and additives permit the formulation of important pharmaceutical forms; e.g. tablets which dissolve immediately or coated tablets which enable the retarded release of an active substance – exactly the way the body needs it.





Services with quality

Achievements of chemical distribution





Safely supplied with chemicals.

Reliable service from storage to distribution

There are about 270,000 manufacturing enterprises in Germany. Many require chemicals from different manufacturers – both at home and abroad – for their products. These chemicals are made by innumerable small, medium-sized and large chemical companies. A single large chemical manufacturer may produce several thousand chemical products. There are final products among these but also many basic, large volume chemicals or preparations for further processing. The chemical distribution branch takes care of the needs-oriented and efficient distribution of the chemicals. Warehouse logistics, transport and transshipment belong to their core business.

Storage

Usually, a chemical production plant runs round the clock throughout the whole year. The demand for chemicals however can be very cyclical – for example their use in antifreeze, de-icing salts or fertilisers. Stockholding chemical distributors

offer more than 760,000 square meters of storage space throughout Germany with high environmental and safety standards for solids and fluids such as solvents, acids and lyes. Thus the chemical distribution sector supports the chemical industry as a continuous customer for their production.

At the same time, the recipients of the chemicals profit from the good purchasing conditions enjoyed by the distributors as well as the extensive product range and the regional warehousing near the customers. Customers of chemical distributors receive all the chemicals they require in a short time from one source.

Investments by the members of the Chemical Distributors Association (VCH) amount to about three percent of their annual turnover. A large proportion of this is invested in warehouse buildings and technology and in the vehicle fleet of the companies. Indeed storing and transporting chemicals and hazardous goods place the highest demands on soil and water protection as well as on occupational and operational safety.



Clear labelling is the basis for the safe handling of chemicals. The chemical distributor informs his customer through the accurate identification markings on packaging and the use of safety data sheets. The „Global Harmonised

System“ (GHS) for the classification and labelling of hazardous chemicals brings together existing systems from different sectors such as transport safety, consumer protection, occupational safety and environmental protection.



Financing

By keeping stocks of chemicals, chemical distributors also provide a financing service to their customers. Distributors purchase large batches from suppliers at home and abroad on their own account. The customer pays when he receives the chemicals or – in the case of goods on credit – with a delay. In this way, the customer can finance his purchases of chemicals through the sale of his own products.

Distribution

Basic chemicals are transported in so-called bulk volumes by ship, rail or truck from their producers to the stores of the chemical distributors. From here, the distributor then prepares his delivery selecting the volume and packaging requested by his customers. For example, solvents are filled with special filling devices directly from storage tanks into bottles, drums or so called intermediate bulk containers (IBC). Modern and elaborate plant technology guarantees the necessary safety requirements here.

The services of stockholding distributors go beyond just storing, filling and delivering the chemicals. Many distribution companies produce mixtures of solvents, solid materials, acids and lyes according to their own formulations or those of the customers, or they fill the products into special packages as toll-manufacturers.

With its comprehensive range of services, the chemical distribution sector ensures the needs-oriented and efficient distribution of chemicals.

Safely packaged and labelled, the chemicals are transported from the distribution centres to the customers. The stockholding distributors mainly carry out transporting with their own special vehicles. The German chemical distributors have a fleet of more than 850 transport vehicles. They provide the highest safety standards for the transport of chemicals by road.



More than 100 enterprises in Germany concentrate on speciality distribution and the import and export of chemicals. Seven billion Euros, about two thirds of the total German chemical distribution turnover falls under this market segment. Here, the majority of the revenues are generated within the European internal market.

Services for innovative products.

Services and consulting augment the traditional business activities

Distribution stands for market knowledge, good contacts and trustworthiness. Chemical distribution is more. The modern chemical distribution has developed beyond the pure storage and transporting function to become a provider of numerous services: whether analyses and laboratory examinations, expert advice in the application of sophisticated products, as well as the development of special formulations or even a marketing concept – the chemical distribution and its highly trained staff are competent partners both for chemical producers and for the users of chemicals.

Analysing

The quality of a product is determined by the selection of suitable chemicals and the purity of the basic substances. Therefore, in the laboratories of the chemical distribution, a regular and systematic examination of the quality of the in- or outgoing goods takes place. The know-how gained from these analyses is consistently implemented in strategies for avoiding deficits. The laboratory staff are also the consultation partners for the sales department regarding all questions concerning application technology.

Consulting

Which is the best cleaning agent for this metal surface? Is that additive stable in this formulation? How can I continue to reduce the output of organic solvents in my production process? The questions surrounding the applications of

chemicals are multifaceted. Chemists and process engineers in the chemical distribution advise customers on the choice of a suitable product or develop a customer-specific formulation to solve the problem. Here, the services of the chemical distribution extend even to manufacturing the formulation and obtaining its registration for the user.

Marketing

Not only the users of chemicals but also their producers profit from the excellent market knowledge and the widely-based application know-how of the chemical distribution. A single large chemical manufacturer may produce several thousand different products. Their sale and distribution via the chemical distribution save him the costs and the risks of a company-own sales organisation. In many cases the chemical distributor even becomes the marketing partner of the chemical manufacturer for certain product groups.

Small, but also large chemical manufacturers do not often supply the complete range of chemicals which a user requires. The chemical distributor combines the product portfolios of selected manufacturers and can thus offer the customer a service from one source. At the same time, the customer also reduces his administrative expenditure for purchasing activities. The chemical distribution also offers the complete supply of an enterprise with all the chemical products it needs as a service.



Responsibility for chemicals.

Focussing on safety, environmental and health protection

The German chemical distribution wants to contribute to sustainable development and an ecologically sound utilisation of natural resources. Since 1996, the German Chemical Distribution Association participates in the worldwide „Responsible Care“ initiative. Today, about 70 enterprises in our distribution sector, representing about 80% of the total German chemical distribution turnover, have joined the programme.

“Responsible Care – Verantwortliches Handeln im Chemiehandel” means continuously enhancing one's own performance with regard to safety, health and environmental protection – and this above and beyond what legal regulations may dictate. Here, chemical distribution enterprises have set themselves ambitious targets. These are controlled within the scope of audits which are carried out every three years by an independent third party.

Twice a year, the German Chemical Distribution Association organises a Responsible Care workshop in order to promote the flow of information outside the company. There, relevant questions concerning the realisation of the programme are discussed with the presentation of "best practice" examples. The exchange of experiences concerning past accidents and emergency situations provides an important learning effect and contributes towards identifying better prevention measures.

Safety

An increase in occupational, transport and plant safety can only be achieved if all the employees involved are committed to fulfilling this target. Therefore, employees in chemical distribution are provided with corresponding training on different topics in order to be able to contribute to individual measures and to develop their own safety-related initiatives.

Product responsibility

In 2007, REACH (Registration, Evaluation and Authorisation of Chemicals), the European Chemicals Regulation, came into force. Its target is to protect health and the environment from possible chemicals-related risks. For this purpose, all chemicals must be registered of which more than one tonne are produced or imported in Europe. The chemical distribution plays an important part here: at the interface between producer, supplier and user, it gathers together all the information relevant for registration and arranges for – sometimes upon the authority of its customer – the registration with the European Chemicals Agency (ECHA) in Helsinki.

The product responsibility in the chemical distribution does not terminate with the sale of the goods. To prevent the abuse of chemicals, the chemicals distribution works together closely with the authorities beyond the legally required limits. When sensitive chemicals are sold, which could be used to manufacture narcotics or for terrorist attacks, the chemical distribution checks the reliability and purpose of use of the recipients.



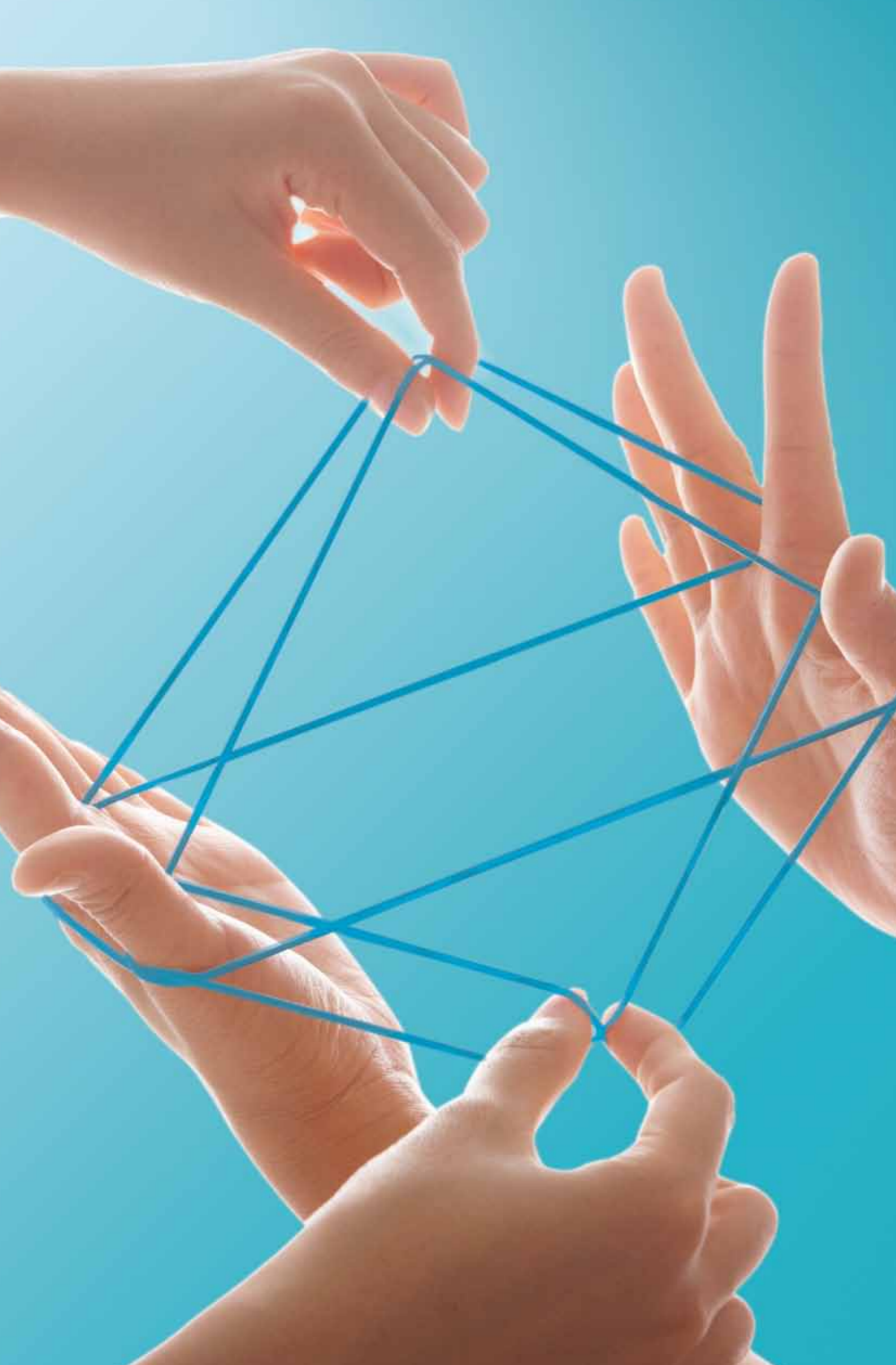
Responsible Care –

Verantwortliches Handeln im Chemiehandel

Resource conservation

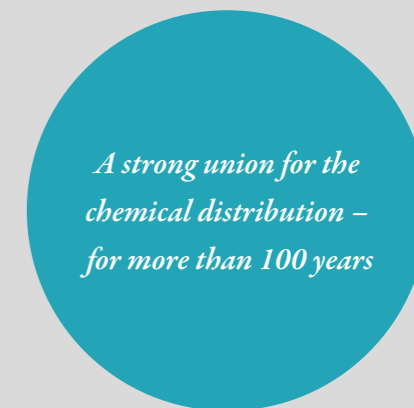
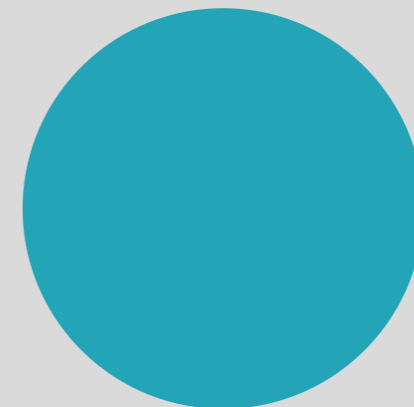
The responsible treatment of chemicals starts with ensuring their sparing use and terminates with their safe disposal and recycling. Used chemicals, for example from contaminated solvents, should be returned to the materials cycle after refining and only be disposed of by other means in exceptional cases. The chemicals distribution advises its customers about topics such as recycling and environmental protection and takes over the disposal and refining of chemicals and their packaging.





Linked for benefits

The German Chemical Distribution Association



Services for the chemical distribution.

An association for the distribution sector network

The roots of the German Chemical Distribution Association (Verband Chemiehandel or VCH) reach back more than 100 years. In Berlin in 1903, the "Verein der Drogen- und Chemikaliengroßhändler" (Society for Wholesalers of Drugs and Chemicals) was founded as the first chemical distribution association with the aim of strengthening the position of both the individual members – and also the whole sector – by a cooperation between similar firms.

Today, domiciled in Cologne, the VCH is the organisation of the production-connecting chemical distributors in Germany with a special emphasis on the stockholding distribution trade, the export/importers and the chemical speciality distributors. The association has more than 100 member companies who together generate a turnover of about twelve billion Euros per annum.

The VCH stands up for the rights and commercial interests of the chemical wholesalers and foreign distribution companies in Germany. It represents the interests of its members and their sector of industry towards all responsible bodies of the authorities and the economy. Furthermore, it promotes the exchange of economic and technical information within the chemicals distribution as well as beyond the borders of the association.

Informs

As well as the lobbying work for the complete chemical distribution sector, the association understands its work mainly as being a central point of contact for services and information for its members. Classical topics within the chemical distribution are the storage of chemicals with the associated laws and regulations, the laws concerning protection from chemicals and occupational safety, the placing

on the market of substances and preparations, the transport of hazardous goods as well as environmental protection and closed loop recycling management. Members receive regular circulars from the association on these subjects. In addition, circulars are sent out concerning specific questions of the foreign distribution of chemicals and annual statistics about the sector of industry showing the developments which the chemical distribution is undergoing. Seminars and training courses round off the information provided for members and, if necessary, discussion groups on current interest issues are convened.

With the publications series "customer information", the association informs the users of chemicals about technical and legal matters and thus supports its members with their public relations work.

Networking

As well as the annual members meeting, the VCH offers three specialist departments as well as regional and technical working groups for exchanging information about chemical distribution. Meetings, workshops and discussion groups continually provide the chance to look beyond one's own company and explore the technical and expert questions affecting the whole sector and to develop relations with other companies in this respect.

The economic and specialist cooperation with the important suppliers of the chemical distribution is promoted by the VCH through a close cooperation with the German Chemical Industry Association. Here, numerous technical problems are discussed together, joint positions prepared or solutions to problems developed within joint working groups.



Experts in dialogue

The VCH offers its members three specialist departments as well as regional and technical working groups as dialogue platforms.

Specialist departments

- :: Domestic distribution
- :: Foreign distribution
- :: Chemical distribution and recycling

Technical working groups

- :: Transport of hazardous goods
- :: Hazardous substances
- :: Technology and the environment
- :: Waste management and recycling law
- :: Life Sciences

Regional working groups

- :: North Germany
- :: North-Rhine Westphalia
- :: East Germany
- :: South Germany



An international network.

National and international connections for the German chemical distribution

The state, its legislative institutions and executive bodies are reliant on extensive factual information from the economic community. Therefore, the VCH supports advisory boards, and committees in their work and thus makes their voice heard in the interest of chemical distributors.

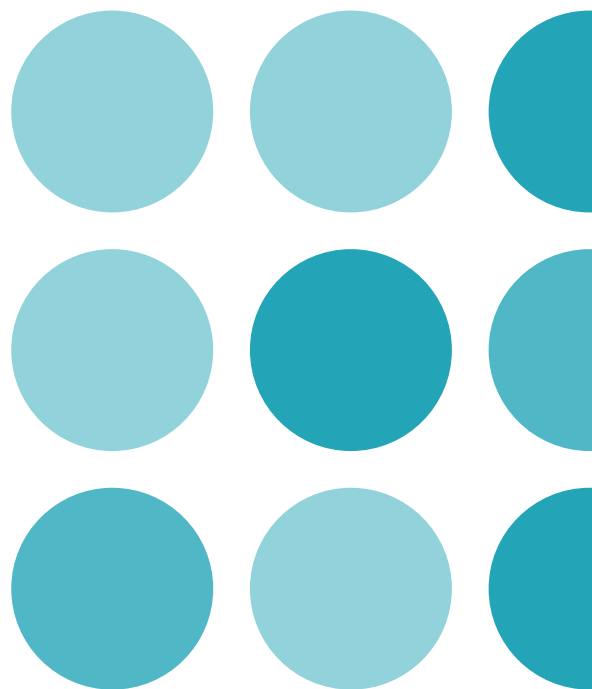
The basis for these activities is the work of the association's four own technical working groups. These concern themselves with proposed legislation and technical problems ranging from the transport of hazardous goods and the hazardous substance, pollution, plant operation and waste management laws, through to exchanging information on special subjects such as medications, foodstuffs and cosmetics. The working groups prepare the regular participation of the VCH, among others, in the Committee for the Transport of Hazardous Substances at the Federal Ministry of Transport, as well as in the Committees for Hazardous Substances and for Occupational Safety at the Federal Ministry of Labour and Social Affairs. Furthermore, the VCH also works together with all other relevant ministries in matters concerning chemical distribution.

The VCH is a member of the BGA, the Federation of German Wholesale, Foreign distribution and Services and, on the national level, it works together closely with the German Chemical Industry Association (VCI).

Successful lobby work requires cooperation in a spirit of partnership at the international level. Here, the VCH is regularly and intensively involved in all committees of the European umbrella organisation the European Association of Chemical Distributors (FECC) which provides the European chemical distributors with a voice in the bodies and committees of the European Union, in particular with the EU Commission. In topics which concern several business segments, the VCH is represented by EuroCommerce in Brussels, the European distribution organisation.

With regard to the Responsible Care activities, the networking of the VCH even goes beyond Europe's borders. A programme for responsible action in chemical distribution (Responsible Care/Distribution) was developed in the International Council of Chemical Distribution Associations (ICCTA). Under the umbrella of the ICCTA, the VCH also cooperates in international conventions of, for example, the WHO, the UNEP or the OECD.





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