Safety, Health, Environment

Concise Report for 1999

Henkel

Contents

SHE Report

Since 1992, the Henkel Group has been presenting its report on safety, health and the environment (SHE) at the same time as its Annual Report. The SHE Report appears in alternate years as a comprehensive version and a concise version. This is the first such concise report.

Responsibility for safety, health and the environment anchored in Henkel's Code of Conduct

"Henkel companies have a systematic approach to safety, health and environmental management in order to achieve continuous performance improvement. This is consistent with our commitment to contribute to sustainable development.

We manage these matters as any other critical business activity, set targets for improvement and measure, appraise and report on performance. In addition to complying with applicable laws, we should continuously strive to make improvements in the key areas of products, production, occupational safety, management systems, employee motivation and technology transfer."

From the Henkel Group Code of Conduct

Our cover

Maize is one of the raw materials used to produce alkyl polyglycosides (APG). These very mild surfactants were developed by Henkel and are made exclusively from vegetable raw materials (starch and fat).

APGs were so successful that Cognis is to be honored with the Wöhler Prize for resource-saving processes. This prize from the Association of German Chemists is endowed with DM 20,000 and will be presented at the ACHEMA trade fair at the end of May 2000.

Ecological leadership is based on operating profitably

Henkel assigns a high priority to safety, health and the environment (SHE). Our SHE Management System, which will have been introduced throughout the Group by 2001, helps us to achieve continuous improvement – with very positive results. This is confirmed, for instance, in a comparative study of 50 of the world's biggest chemical companies by an independent institute, which placed Henkel at the top of the list. Since the last such study in 1996, when we occupied second place, the Company has made above-average progress in all ten evaluated ecological fields.

At the same time, we are not a "green company" that focuses on maximizing environmental parameters while neglecting profits and shareholder value. We are committed to sustainable development, placing equal emphasis on ecological, economic and social aspects.

A critical public judges us on our success in achieving a balance between these three aspects. This is essential if we are to consolidate and improve our competitiveness in the now largely globalized markets, thus assuring commercial success and sufficient profits to secure the Company's future.

When accidents are analyzed, the links between ecological, economic and social factors become especially apparent. Accidents always involve suffering on the part of the people involved and considerable economic loss for the company. They are often associated with operational malfunctions and the resultant potential environmental risks and loss of production. We are therefore extending our systems for recording occupational accidents and setting a further reduction in accident figures as a Group objective for the coming years.

Dr. Hans-Dietrich Winkhaus

Dr. Wolfgang Gawrisch

Parallel to the named objectives, we will continue to reduce emissions. In the spirit of sustainable development, we also intend to place greater emphasis on applying scientific knowledge of the diversity of natural species and their complex community characteristics in new, intelligent product developments. We will be looking at both terrestrial and marine ecosystems.

We are convinced that this framework will enable us to continue to shape our products and production in a way which will ensure a balance between economy and ecology.

Dr. Hans-Dietrich Winkhaus
President and Chief Executive Officer

Dr. Wolfgang Gawrisch
Corporate Vice President Research/Technology

Henkel in brief: Company profile

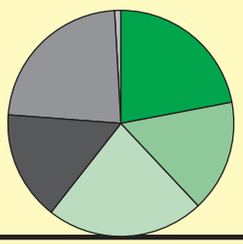
Henkel is an internationally operating organization with a widely diversified product portfolio. The Company counts among the world's oldest and most successful brand manufacturers of household cleaners and body care products. Henkel's chemical and engineering products business is similarly characterized by decades of experience and leading market positions.

The Henkel Group has a presence in 75 countries. In 1999, sales of the Henkel Group amounted to 11.36 billion euro, of which 23 percent were generated in Germany and 77 percent outside Germany. The parent company is Henkel KGaA in Düsseldorf. Henkel is one of the German companies with the most business activities abroad.

Henkel has a total of 56,400 employees, 41,000 of them outside Germany, and 15,400 in Germany. Düsseldorf-Holthausen is the Group's biggest production site and Group headquarters.

Sales by business sector, 1999

in million euro

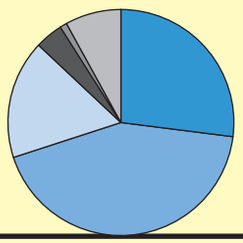


Adhesives	2,501	22%
Cosmetics/Toiletries	1,814	16%
Detergents/Household Cleaners	2,574	23%
Industrial and Institutional Hygiene/Surface Technologies	1,769	15%
Chemical Products (Cognis)	2,605	23%
Other	98	1%
Total Sales	11,361	100%

Sales by region, 1999

by customer location

in million euro



Germany	2,584	23%
Rest of Europe	5,129	45%
North America	1,857	16%
Latin America	540	5%
Africa	182	2%
Asia/Australia	1,069	9%
Total Sales	11,361	100%

Five business sectors

Henkel's operations are organized in five business sectors: Adhesives, Cosmetics/Toiletries, Detergents/Household Cleaners, Industrial and Institutional Hygiene/Surface Technologies and Chemical Products (Cognis).

Henkel's **Adhesives** business sector operates worldwide, focusing on both brand-name and industrial products. In 1999, its do-it-yourself business was very successful in Great Britain.

The **Cosmetics/Toiletries** business sector took a major step forward in 1999 by entering the North American toiletries market. In Europe, Henkel is one of the leading suppliers. The core segments of this business sector are hair cosmetics, body care and, hair salon products.

Detergents/Household Cleaners made substantial progress last year, especially in Europe. Henkel is a pioneer in new technologies, as demonstrated by its introduction of detergent tabs in the international markets.

The **Industrial and Institutional Hygiene/Surface Technologies** business sector now combines the systems operations of Henkel-Ecolab and Surface Technologies. Despite stagnating markets, Henkel has increased its market share by introducing innovative product systems and making significant improvements in existing products.

The **Chemical Products** business sector has become a legally independent entity under the company name, Cognis. Its core businesses are Oleochemicals, Care Chemicals and Organic Specialties.

SHE Management: uniform standards worldwide

Henkel has been introducing quality management systems that conform to the international ISO 9000 standards at its sites throughout the world for a number of years. The concept of "Henkel quality" goes further than this, however. It covers safety, health and environmental protection (SHE) in equal measure.

The corresponding requirements are defined in 15 Henkel SHE Standards* and 55 associated Corporate SHE Guidelines. The Management Board has decided that they shall be implemented throughout the Group by the year 2001. The individual business sectors will carry out the process of implementation as their businesses dictate.

The SHE officers at the Henkel sites integrate the SHE requirements into documented procedures and work instructions. In doing so, they take into account site-specific factors (such as the range of products manufactured there and the applicable national and local regulatory requirements) and assign responsibility to specific employees.

Business Sectors

The Henkel Group's business activities are organized into five distinct sectors with worldwide responsibility for specific markets.

Adhesives

Consumer and Craftsmen Adhesives: Wallpaper pastes; ceiling, wall covering and tile adhesives; home decoration products; sealants; polyurethane foam fillers; cyanoacrylates; contact adhesives; wood glues; PVC pipe adhesives; flooring adhesives; building chemicals; coatings; roofing products; glue sticks, glue rollers, correction rollers, adhesive tapes.

Industrial and Packaging Adhesives: Packaging and labeling adhesives; shoe adhesives; cigarette adhesives; bookbinding adhesives; adhesives for the wood processing industry; laminating adhesives; adhesives for nonwovens; leather board.

Engineering Adhesives: Reactive adhesives; high-performance sealants; sealing systems; assembly adhesives.

Cosmetics/Toiletries

Toilet soaps; bath and shower products; deodorants; skin creams; skincare products; dental care and oral hygiene products; hair shampoos and conditioners; hair colorants; hair styling and permanent wave products; perfumes and fragrances; hair salon products.

Detergents/Household Cleaners

Heavy-duty detergents; specialty detergents; fabric softeners; dishwashing products; household cleaners; scouring agents; floor and carpet care products; bath and toilet cleaners; glass cleaners and lens wipes; furniture and kitchen care products; shoe care and laundry conditioning products; plant care products.

Industrial and Institutional Hygiene/ Surface Technologies

Henkel-Ecolab: Products, appliances, equipment, systems and services for cleaning, laundry care, maintenance, sanitizing and disinfecting applications at major industrial and institutional customers, in the food and beverage, pharmaceutical and cosmetics industries and in the agricultural sector.

Surface Technologies: Products and application systems for the chemical surface treatment of metals and metal substitutes; lubricants; cleaning products; corrosion inhibitors; products for conversion processing and for the treatment of cooling, process and waste water; process control and metering equipment; antifreeze agents and corrosion inhibitors for motor vehicle cooling systems; CFC substitutes for cleaning applications. Specialty products for the automotive industry: polyurethane adhesives and elastomer sealants, epoxide structural adhesives, PVC and polyacrylate plastisols, dispersion adhesives, hotmelt adhesives and corrosion protection waxes.

Chemical Products (Cognis)

Oleochemicals: Fatty acids; glycerine and fatty acid derivatives; fatty alcohols and their derivatives; food and feedstuff additives; natural-source vitamin E and carotenoids.

Care Chemicals: Products for the cosmetics, toiletries and pharmaceutical industries and for the detergents and household cleaners industry; aroma chemicals/perfume compositions.

Organic Specialty Chemicals: Base materials and additives for plastics, paints and coatings; auxiliary products for textile, leather and paper production; specialty products for mining, oil drilling, and for lubricants, plant care formulations and the construction industry.

Inorganic Products: Silicates.

*** More information on the topics marked (i) can be found on the Internet: www.henkel.de (and soon at www.henkel.com)**

Products

Adhesives

The Pritt stick celebrated its 30th birthday by becoming even more environmentally compatible. In 1999, a new formulation was introduced, based almost entirely on renewable raw materials.

The 2-component universal systems from Liofol are a solvent-free innovation in the field of laminating adhesives. They no longer have to be heated to 70 degrees Celsius but can be used when lukewarm. They cure much faster and satisfy food regulation requirements. Their worldwide roll-out is planned for this year.

EMICODE EC1 is an emissions quality mark for flooring primers, leveling compounds and adhesives. The aim is to reduce the amount of harmful substances in the air indoors. Henkel has enjoyed considerable success with Thomsit products, which qualify for the EMICODE EC1 rating. They now account for 60 percent of the total volume of Thomsit flooring installation products.

Cosmetics/Toiletries

Henkel's competitive position has been successfully built up on a platform of long-term research, resulting in a continuous flow of product innovations and improvements for the hair care brands Palette, Poly Country Colors, Poly Vital Colors, Poly Brilliance, Igora Royal, Viton and Poly Re-Nature Creme. Research and development, selection of raw materials, test methods, and assessment criteria in the Düsseldorf and Hamburg laboratories are all subject to uniform standards that apply worldwide.

The face care series Diadermine is proving especially successful. It is the market leader in Spain, occupies a respectable third place in France, and is now also available in Germany. Diadermine's success is based on the biomimetic principle. In effect, it mimics the skin's biological systems; it can therefore stimulate the skin and exert a positive influence on its natural energy.

Detergents/Household Cleaners

Together with the German allergy and asthma association (Deutscher Allergie- und Asthmabund e.V.), Henkel has developed a new generation heavy-duty detergent, which is marketed under the name Persil Sensitiv. The new detergent is ideal for everyone who has sensitive skin or is allergic to fragrances, as it contains nothing that is known to irritate the skin or air passages. Fragrances and colorants, for example, have been excluded. Persil Sensitiv contains special skin-compatible surfactants, is supplied in the form of Megaperls so that it is dust-free when being measured out and leaves no residues after rinsing. These benefits were demonstrated by analyses and dermatological trials involving volunteers with sensitive skin. Following the initial market launch in Germany and Austria, a date is to be set for the roll-out in Europe.

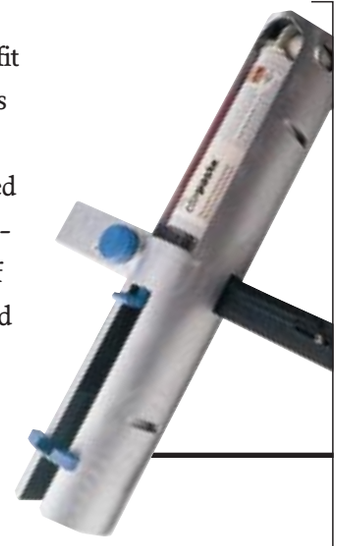
With the new Pril 2 in 1, Henkel researchers have succeeded in combining Pril's ability to dissolve grease with the advantages of hand soap – easy dispensing and use. In diluted form, Pril 2 in 1 is a powerful dishwashing detergent. Undiluted, it is an antibacterial hand soap. Pril 2 in 1 is available in Germany, Austria and Switzerland.

Industrial and Institutional Hygiene (Henkel-Ecolab)

Henkel-Ecolab has developed a new system for small-scale users of automatic dishwashers. The system makes use of especially reliable and effective paste products. The dispenser ensures that the optimum amount of product is added.

The purDOS automatic dispensing system has been developed for professional washing machines with a capacity of 5 to 30 kilograms in hospitals, hotels, laundries, and homes for senior citizens. Users and the environment benefit from its accuracy and simple handling, as well as savings in packaging volumes and storage space.

The Henkel-Ecolab joint venture has initiated a safety training program for employees and customers. The training CD-ROM contains a set of slides. Training courses can be individually tailored to the participants' requirements in handling, transport or storage of Henkel-Ecolab products.



Surface Technologies

A chromate-free aluminum pretreatment in the automotive industry? Henkel Surface Technologies has made it possible to dispense with the previously essential ingredient. Chromate protects against corrosion and ensures excellent paint adhesion. The products Alodine 2040 and Alodine 2080, which are used by subcontractors and by Audi in the production of its A8 model and the new A2 subcompact car, make chromate-containing pretreatment products superfluous. The procedure has enabled Henkel's customers to achieve significant cuts in the costs of treating wastewater and waste. The occupational safety measures necessitated by the cancerogenic chromate can be dispensed with. The environment also benefits from the low treatment temperatures.

Surface Technologies has also created a new class of neutral cleaning products, known as P3-neutracare. These products contain considerably more efficient washing active substances. Thanks to their broader application spectrum, previously essential additives such as defoamers are no longer needed. The consequence is reduced pollution of water and wastewater.

Chemical Products (Cognis)

Cognis specialists have developed a modular kit consisting of four products for regenerating soil and ensuring that it remains healthy. Farmers, foresters, and landscape gardeners can combine them at will to optimally suit their own purposes. The new Cognis products prevent fertile soil from being eroded. They stabilize the soil's water balance and maintain the oxygen-water balance in the root zone. Plants are able to absorb more nutrients, so less fertilizer needs to be applied. The roots are surrounded by a protective layer, and the parts of the plant above the surface are strengthened. As a result, the plants are more resistant to disease, and smaller amounts of plant protection products are needed. The name of this modular kit is Soil Cure. One of its components is alkyl polyglycoside (APG). Cognis developed this surfactant, which is obtained from raw materials (starch and fat) derived from plants and is mainly used in the development of cosmetic products, detergents and household cleaners.

Steps toward sustainability

How the experts view Henkel SHE Management

"There can be no doubt that Henkel is now the world's leading company in terms of environmentally compatible production and environmental management."
The experts of the Hamburg Environment Institute in the Top 50 Study, 1999.

Putting safety to the test

Between 1997 and the end of 1999, the Henkel Group's SHE experts carried out 183 SHE audits, each taking several days, at 147 Henkel production sites throughout the world (see pages 12 to 15). They thereby clearly exceeded the target of 136 audited sites by the end of 1999 that had been set by Henkel's Management Board. In the year 2000, the program will be extended to include another 41 sites. In addition, follow-up audits at already inspected sites will be started.

The benefits for Henkel: A high level of safety for employees, neighbors, and the environment, as well as cost savings at the sites as a result of fewer accidents and less lost production time, for example.

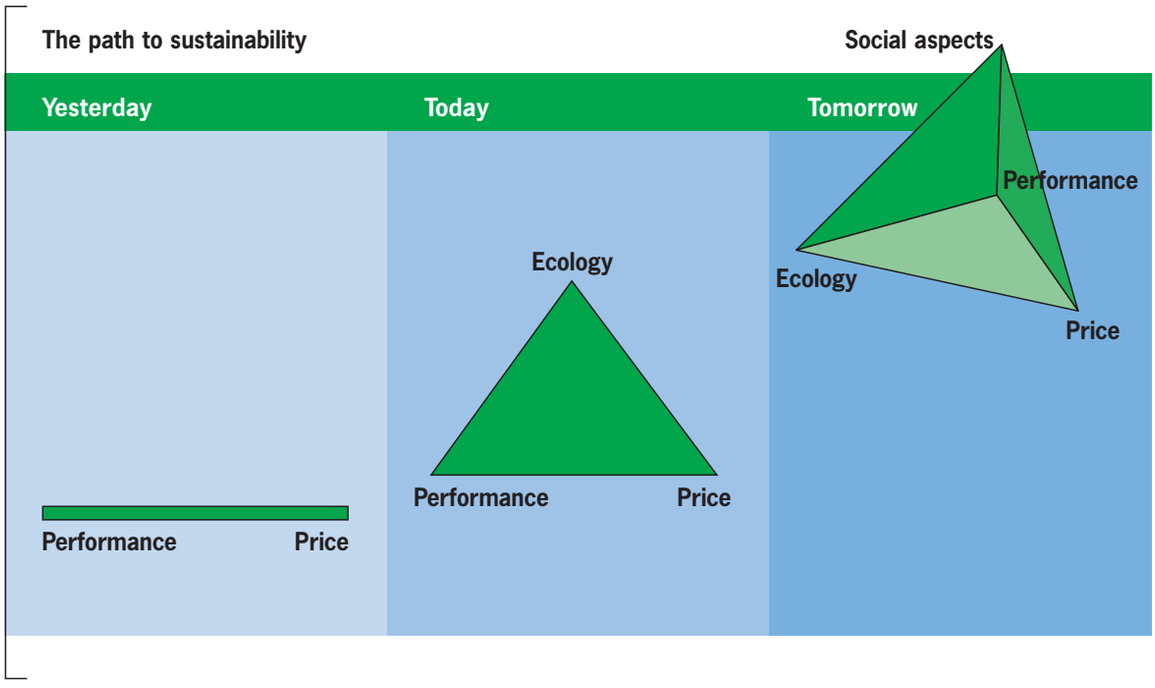
Lending a hand

Henkel traditionally supports social and cultural activities. In doing so, the Company has found that financial aid is especially effective when it goes to projects in which employees are personally involved. Henkel has therefore launched a new initiative under the name "Mitarbeiter im Team" (employees team up), whereby it participates in employees' projects, takes up their ideas, follows their advice and makes use of their competence and their knowledge of local needs.

Henkel employees take part in a wide variety of projects. In Germany, for example, there are employees who work in groups which help addicts and others who support children dying from AIDS. One employee even took on the

Focusing on sustainable development

"The central aim of sustainability is to safeguard and improve ecological, economic and social efficiency. These are interdependent, and no single aspect can be optimized in isolation without casting doubt on the development process as a whole."
Commission of Inquiry of the lower house of the German parliament on the subject of protecting mankind and the environment. (Commissions of Inquiry are an institution of the parliament of the Federal Republic of Germany, set up to examine complex issues with the help of scientists and persons who have relevant practical experience.)



Sustainability presents new challenges. Henkel intends to take a proactive approach in converting these challenges into competitive advantages. The correct balance between ecological, economic and social aspects ensures business success and projects an attractive image.

MIT Miteinander im Team
MITmachen - MIThelfen Eine Initiative von Henkel

"vacation job" of improving the miserable conditions in a Romanian orphanage for small children by installing sanitation facilities. In this case Henkel provided financial help, as well as clothing, household cleaners and cosmetics.

In India, the Karaikal site has involved local small farms in an agricultural development and promotion program. Among the services Henkel provides are carrying out soil analyses and supplying seed.

The Henkel Group companies Manco and Loctite in the USA have introduced the following idea: For each pack of Quick Tite adhesive that is sold, the Susan G. Komen foundation receives a contribution of 5 cents to combat breast cancer.

Succeeding as a family business

The International Institute for Management Development (IMD) in Lausanne, Switzerland, is one of the world's leading business schools. In 1999, the IMD named Henkel as the winner of its Family Business Award. To qualify for the award, a company must be run by at least the third generation of the family, it must be internationally successful, and its products must be leaders in their markets. Another evaluation criterion is its commitment to social causes.

IMD wants its prize to draw attention to the often underestimated role of family businesses. In the western world such businesses account for between 45 and 70 percent of the gross national product.

Ranking highest ecologically

By continuously improving the environmental compatibility of its products and production processes, Henkel has reached a very high standard. We are pleased when others notice this.

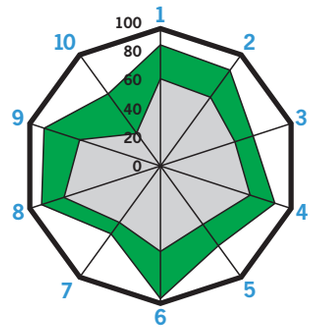
In 1999, for the third time, the Hamburg Environmental Institute evaluated the ecological performance of 50 of the world's largest chemical groups. After coming in second in 1994 and 1996, Henkel was ranked number one by a wide margin this time around.

Qualifying for the Dow Jones Sustainability Group Index

The Henkel Group is included in the world's first index whose portfolio is made up of companies that operate in accordance with the principles of sustainable development and whose economic performance is expected to be better than average. The Dow Jones Sustainability Group Index (DJSGI) was developed jointly by the Zurich rating institute SAM and Dow Jones. It contains the top 10 percent of the companies in each sector, rated in terms of sustainable development. Only 229 of the approximately 3000 names noted in the Dow Jones Global Index were selected for the DJSGI. However, Henkel is not one of the DJSGI's 18 "Leading Sustainability Companies."

Member of
Dow Jones SustainabilityGroup Index
1999

Third study by the Hamburg Environmental Institute, 1999: Henkel's ratings in the 10 environmental categories



Score achieved
(as % of the maximum points available)

1999 1996

1 Environmental policy
2 Worldwide standards
3 SHE management
4 Sustainability of products
5 Optimization of processes
6 Information policy
7 Waste and used products
8 Accident prevention
9 Contaminated sites
10 External ecological activities

Not least due to the Group-wide introduction of its SHE Management System, which started in 1997, Henkel has achieved clear improvements in all areas of safety, health and environmental protection during the last 3 years.

Protecting nature

Henkel wants to help protect natural habitats and the diversity of species. Since 1997, an eco sponsorship budget has been available to support ecological projects by conservationists, schools, and nonprofit associations. A recent example from Germany is the start-up financing for a sustainability project in the Bergisches Land region to the east of Düsseldorf.

Farmers, butchers and a fruit juice producer are working together to sell products produced by agricultural methods in line with nature conservation. The project is coordinated by the Biologische Station Oberberg (Oberberg Biology Station), which also provides marketing support.

Binding principles: Business ethics

In its relationships with shareholders, employees, customers, suppliers, competitors, neighbors, politicians, officials and the community, the Henkel Group is judged by how it acts. Henkel's reputation is a crucial factor for the continuity and long-term profitability of the Company.

In 1999, an international work group composed of Henkel personnel managers distilled the Company's corporate culture into 10 rules of conduct, which make up the Code of Conduct of the Henkel Group. This serves as an important guideline for decision-makers throughout the Henkel Group and excludes conflicts of interest.

The Code of Conduct requires employees to conduct themselves in accordance with the highest standards of honesty and integrity during their daily work. Two of the ten binding rules of conduct are formulated as follows:

Respect individual diversity

Mutual respect is basic to our culture. We treat each other in our work environment accordingly, i.e., respectfully and free from abusive behavior and harassment. Any type of harassment, regardless of intent, direct or indirect, physical or verbal, is prohibited. Any such conduct by managers, employees, customers or suppliers of Henkel will not be tolerated.

Be fair in competition

Henkel companies support market economy. Within the framework of applicable competition laws, we seek to compete fairly. We do not prevent others from competing freely with each other and we do not make false or misleading comparisons with competitors.

Occupational accidents

Occupational accidents are all accidents that involve Henkel employees on Henkel premises and result in at least one day of absence from work by these employees. Events outside of Henkel premises, such as traffic accidents on public roads, are not included.

The accident figures are shown for the Henkel Group as a whole and for the individual regions. In view of the large number of employees in Europe, the figures for this region have been broken down still further and are shown for Germany, the European Union excluding Germany, and Eastern Europe. The data have been statistically verified.

Occupational accidents in the Henkel Group

Number of occupational accidents with at least one day of absence per 1,000 employees (excluding off-site accidents)

1998 1999

Coverage: 64% of all employees

A centralized system which conforms to the criteria of the European Chemical Industry Council (CEFIC) is being set up to document occupational accidents in the Henkel Group. In 1999, it covered 64 percent of the total workforce of the Henkel Group (1998: 60 percent). Coverage differs from region to region. Chinese joint ventures, for example, are not yet included.

In addition, the Cognis Group has created a worldwide accident database, into which all sites must enter precisely defined information within 24 hours after an accident. The data are analyzed and serve as a basis for improvements. The other business sectors are now following this example.

Henkel Group	1998	1999
Fatal occupational accidents		
Coverage: All production sites	**1**	**0**
Serious occupational accidents		
Accidents causing the injured person to be absent from work for more than 50 days		
Number of sites covered	**88**	**107**
Number of serious occupational accidents	**58**	**40**
Of these:		
a) Accidents during typical production activities (e.g., injuries incurred while operating a machine, scalds)	**27**	**13**
b) Accidents while walking or moving around (stumble, twisted ankle, etc.)	**31**	**27**

Distribution incidents in the Henkel Group

In 1999, there were no serious distribution incidents resulting in serious personal injury or lasting environmental damage due to the accidental release of Henkel products.

Distribution incidents involving contractors

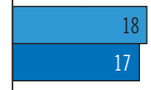
The vehicle of a carrier, with a load that included a raw material destined for Henkel Mexicana, crashed at an intersection on the freeway between Mexico City and Celaya on December 20, 1999. The consignment intended for Henkel consisted of two containers, each containing 375 kg formic acid. One of the containers was damaged in the accident and started

Occupational accidents by region

Number of occupational accidents with at least one day of absence per 1,000 employees (excluding off-site accidents)

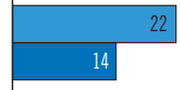
1998 1999

Germany
Coverage: 100% of all employees



European Union
(excl. Germany) + Norway, Switzerland
Coverage: 61% of all employees

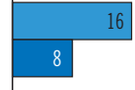
Eastern Europe
Coverage: 66% of all employees



Africa/Middle East
Coverage: 21% of all employees

Asia/Pacific
Coverage: 12% of all employees

North America
Coverage: 95% of all employees



Latin America
Coverage: 64% of all employees

to leak. As a precautionary measure, the authorities evacuated about 2,500 people from the vicinity for several hours.

A team of specialists from Henkel Mexicana assisted the emergency services in salvaging the dangerous load. As the accident was attributable to gross negligence on the part of the driver, no further orders will be placed with this carrier.

Significant operational incidents in the Henkel Group

In 1999, significant operational incidents occurred at three Henkel Group sites. Henkel categorizes an incident as "significant" if its consequences include at least one of the following:

- **fatalities or serious injuries,**
- **endangerment of the neighborhood or environment,**
- **tangible losses of more than US $100,000,**
- **a high level of public reaction.**

In the previous year, 1998, no significant operational incidents occurred. In 1999, there were two fires involving damage to property and one operational incident resulting in serious injury to an employee.

On January 29, 1999, a fire broke out in an oleochemical production plant at the Boussens site in France. Employees quickly succeeded in extinguishing it. No one was injured, and the neighborhood and environment were not endangered. The cause of the fire was a crack in a hydrogen pipeline. Although the legal regulations require an inspection to be carried out only every 3 or 10 years, the site management has the pipelines inspected by an independent technical association each year. The most recent inspection had revealed no damage. After the repair, the inspection association checked the quality of the work carried out before the plant was started up again.

On March 22, 1999, fire broke out in a hazardous materials depot in Düsseldorf-Holthausen, Germany. A plastic Big Bag with a capacity of about 1 cubic meter, containing sodium percarbonate, had self-ignited. The plant fire department soon extinguished the fire. No one was injured, and the neighborhood and environment were not endangered. An equipment manufacturing firm had returned the sodium percarbonate to Henkel in the Big Bag after an operational test. The spontaneous ignition was probably caused by impurities introduced during the test. There are currently no plans to carry out further tests of this type. However, should such external tests be carried out with sodium percarbonate in future, Henkel will examine the returned product very closely.

On June 14, 1999, a steam boiler ruptured at the site in Brooklyn, New York, USA, strewing debris over an area extending beyond the site perimeter. The assistant plant manager sustained steam burns and was unable to return to work until the fall of 1999. The cause of the accident was identified as an improperly welded patch plate. This dated back to repair work performed by a specialist company before Henkel acquired the site in 1996. The boiler was inspected and approved for continued safe operation by an independent expert in 1997. The faulty weld was not detected. The defective boiler was scheduled to be scrapped shortly afterwards. A new boiler is now in operation.

Complaints from neighbors

	1998	1999
Complaints attributable to Henkel		
Number of sites covered	**88**	**107**
Number of sites that received complaints	**23**	**22**
Number of sites that received more than 5 complaints	**4**	**4**
Number of complaints		
Total	**91**	**88**
Of these, due to odor	**57**	**52**
noise	**18**	**29**
dust	**16**	**7**
Improvement measures initiated	**63**	**76**
Cause already eliminated	**27**	**34**

31 production sites certified to international standards

Facility audits by independent auditors are an important instrument for ensuring compliance with SHE requirements, for verifying the functionality of the Henkel SHE Management System at the sites, and thus for reducing risks. SHE audits by independent Henkel experts are examples of such inspections. In addition, Henkel Group companies have their environmental management systems certified to international standards by accredited external verifiers. This incurs higher costs.

If certificates yield market benefits, the Henkel Group companies take advantage of this opportunity. Some Henkel business sectors have adopted Group-wide certification as an objective (see pages 22 and 23).

Certified production sites

		ISO 14001	EMAS
Belgium	Henkel Belgium, Herent	●	
	Henkel-Ecolab, Tessenderlo	●	
Brazil	Cognis Brasil, Jacarei	●	
	Henkel Loctite Adesivos, Jacarei	●	
	Henkel Surface Technologies Brasil, Diadema	●	
Denmark	Henkel-Ecolab, Valby	●	
Germany	Grünau Illertissen, Illertissen	●	●
	Henkel Bautechnik, Unna	●	●
	Henkel, Düsseldorf *		●
	Henkel Fragrance Center, Krefeld	●	●
	Henkel Genthin, Genthin	●	
	Henkel Oberflächentechnik, Herborn-Schönbach	●	●
	Henkel Oberflächentechnik, Magdeburg	●	●
	Henkel Teroson, Heidelberg	●	●
	Kepec Chemische Fabrik, Siegburg		●
	Lang Apparatebau GmbH, Siegsdorf	●	
	Neynaber Chemie, Loxstedt	●	●
	Thompson-Siegel, Düsseldorf-Flingern	●	
Great Britain	Henkel Limited, Winsford	●	
Hungary	Henkel Magyarország, Vác	●	
India	Henkel Spic India, Karaikal	●	
Ireland	Cognis Ireland, Cork	●	
	Loctite Ireland, Ballyfermot	●	
	Loctite Ireland, Tallaght	●	
Italy	Henkel S.p.A. Divisione Surface Technologies, Caleppio di Settala	●	
Netherlands	Henkel-Ecolab, Nieuwegein	●	
Poland	Henkel Polska, Racibórz	●	
Puerto Rico	Loctite Puerto Rico, Sabana Grande	●	
Sweden	Henkel Surface Technologies Nordic, Mölndal	●	●
Spain	Henkel Ibérica (Pulcra), Barcelona, Zona Franca	●	●
	Henkel Ibérica (Pulcra), Barcelona, Zona Terrassa	●	

*) The largest production facility of Cognis Deutschland GmbH occupies part of the site.

Europe

Austria
- Vienna*

Belgium
- Herent*
- Tessenderlo

Denmark
- Valby

Finland
- Helsinki
- Riihimäki*
- Vantaa*

France
- Boussens*
- Châlons-en-Champagne*
- Cosne-sur-Loire*
- Lièpvre*
- Louviers*
- Meaux*
- Nemours*
- Ponthierry*
- Reims*

Germany
- Bopfingen
- Düsseldorf-Flingern*
- Düsseldorf-Holthausen*
- Genthin*
- Hanover*
- Heidelberg*
- Heidenau
- Herborn-Schönbach*
- Illertissen*
- Krefeld
- Lohne
- Loxstedt*
- Magdeburg*
- Neesen
- Sankt Augustin
- Siegburg*
- Siegsdorf
- Unna
- Viersen-Dülken
- Wassertrüdingen*

Great Britain
- Belvedere*
- Winsford*

Greece
- Atalanti

Hungary
- Körösladány*
- Szolnok
- Vác*

Ireland
- Ballyfermot*
- Bray
- Cork*
- Tallaght*

Italy
- Caleppio di Settala*
- Campo di Bisenzio
- Casarile
- Ferentino*
- Fino Mornasco*
- Lomazzo*
- Parma
- Rozzano
- Zingonia/Bergamo*

Netherlands
- Nieuwegein*
- Ravenstein*

Poland
- Racibórz*
- Staporków*
- Wrząca

Portugal
- Alverca*

Russia
- Engels*
- Tosno*

Slovenia
- Maribor*

Spain
- Barcelona/Zona Franca*
- Barcelona/Zona Terrassa
- La Coruña*
- Malgrat*
- Montornés*
- Sant Adrián*
- Santa Perpétua*
- Seville/Alcalá de Guadaira*

Sweden
- Mölndal*
- Gothenburg

Switzerland
- Erlinsbach

Turkey
- Cayirova*
- Izmir*

* One of the 107 sites contributing to the Group data

■ Certified to ISO 14001 and/or EMAS

■ SHE audit carried out

■ Objectives published

Overview of the SHE situation at major production sites of the Henkel Group

Egypt
- Port Said* ■

Israel
- Haifa* ■■

Kenya
- Nairobi*

Lebanon
- Beirut ■

Morocco
- Casablanca*

South Africa
- Alberton-Alrode* ■■
- Cape Town ■

Tunisia
- Tunis*

Australia

- Melbourne/ Broadmeadows*
- Melbourne/Kilsyth*

China

- Guangzhou*
- Guilin*
- Shanghai/Jinshan*
- Shanghai/Nan Hui*
- Shanghai/Tao Pu*
- Shantou*
- Siping*
- Tianjin*
- Xuzhou*

India

- Karaikal*
- Gurgaon

Indonesia

- Jakarta*

Japan

- Tokyo/Kitatone*
- Yashiro

Malaysia

- Sungai Buloh*
- Telok Panglima Garang*

New Zealand

- Auckland/Avondale

Philippines

- Manila

Taiwan

- Taipei/Chung Li

Thailand

- Bangkok*

* One of the 107 sites contributing to the Group data

Certified to ISO 14001

SHE audit carried out

Objectives published

Argentina
- Avellaneda*

Brazil
- Jacarei*
- São Paulo/Diadema*
- São Paulo/Itapevi*

Canada
- Brampton, Ontario*
- Rexdale, Ontario*
- Toronto, Ontario*

Chile
- Santiago*

Jamaica
- Kingston*

Mexico
- Ecátepec de Morelos*

Puerto Rico
- Sabana Grande*

Venezuela
- Caracas/Guacara

USA
- Atlanta, Georgia*
- Aurora, Illinois*
- Avon, Ohio
- Brooklyn, New York
- Calhoun, Georgia*
- Charlotte, North Carolina*
- Cincinnati, Ohio*
- Denver, Colorado*
- Des Plaines, Illinois*
- Elgin North, Illinois
- Elgin South, Illinois
- Fremont, California*
- Hayward, California
- Hoboken, New Jersey*
- Jackson, Tennessee*
- Kankakee, Illinois*
- Lewisville, Texas
- Livonia, Michigan*
- Lock Haven, Pennsylvania*
- Mauldin, South Carolina*
- Oak Creek, Wisconsin*
- Solon, Ohio
- St. Louis, Missouri*
- Tucker, Georgia
- Warren, Michigan*
- Warrenswille Heights, Ohio*
- Wayne, New Jersey*

Environmental data and objectives

The improvement of safety, health and environmental protection in a company should be a systematic process, one which is transparent to and assessable by both internal and external observers. Setting objectives, communicating interim results, and checking that the objectives are achieved all contribute to this. The Henkel Group publishes SHE data and objectives and reports on progress and results.

Environmental data

SHE performance indicators are an important management instrument, with which opportunities of making improvements in environmental protection and safety can be identified, ongoing measures can be controlled, and progress towards the attainment of objectives can be monitored. Performance indicators are also a suitable aid for communicating the status and progress of environmental protection and safety in the Company to the public.

Henkel has taken both of these aspects into account in defining the operational indicators published in the Environmental Data section (see pages 17 to 21). They include the core data set developed specially by the European Chemical Industry Council (CEFIC).

Emissions of phosphorus and nitrogen compounds into wastewater at Henkel Group sites are quantitatively negligible. For this reason, they are not recorded as a Group indicator. Henkel is currently setting up data collection systems for the transport safety indicators that CEFIC plans to publish as of 2001.

The Henkel Group is expanding. This is reflected in the increase in the number of production sites contributing to the environmental data (from 31 in 1995 to 107 in 1999). As the rate of expansion is not uniform, there are sudden jumps in the environmental indicators. The higher parameters in 1997 were mainly attributable to the inclusion of data from three newly acquired companies (Loctite, Schwarzkopf, Novamax) and several Chinese sites.

In the Environmental Data section, each category of absolute emission and consumption values is accompanied by a graph showing the relative development of the associated parameter and the production volume. This is intended to simplify assessment of the absolute figures.

Objectives of the business sectors

The objectives of the individual business sectors are shown on pages 22 and 23, to the extent permitted by competitive considerations.

Site objectives

The decrease in emissions and the reduced consumption of resources in the Henkel Group represent the sum of the efforts and performances of the individual sites. Ambitious site objectives play a key role in achieving these improvements. The fact that some of these objectives are not achieved demonstrates how ambitious they are.

The longer list of site objectives in comparison to previous years (see pages 24 to 27) is another sign of the growth in SHE awareness in the Henkel Group companies.

Environmental data from 38 countries

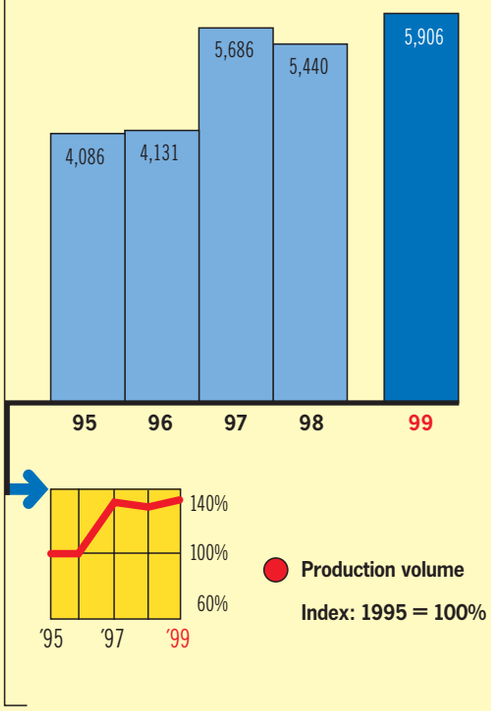
Argentina	**Hungary**	**Poland**
Australia	**India**	**Portugal**
Austria	**Indonesia**	**Puerto Rico**
Belgium	**Ireland**	**Russia**
Brazil	**Israel**	**Slovenia**
Canada	**Italy**	**South Africa**
Chile	**Jamaica**	**Spain**
China	**Japan**	**Sweden**
Egypt	**Kenya**	**Thailand**
Finland	**Malaysia**	**Tunisia**
France	**Mexico**	**Turkey**
Germany	**Morocco**	**USA**
Great Britain	**Netherlands**	

The SHE performance indicators are determined at 107 Henkel Group production sites in 38 countries and are aggregated to obtain the Group data. The 107 sites have been selected on the basis of their production volumes, the quantities and types of emissions, and the resources consumed. The selected sites account for 87 percent of the production of the entire Henkel Group.

Environmental data

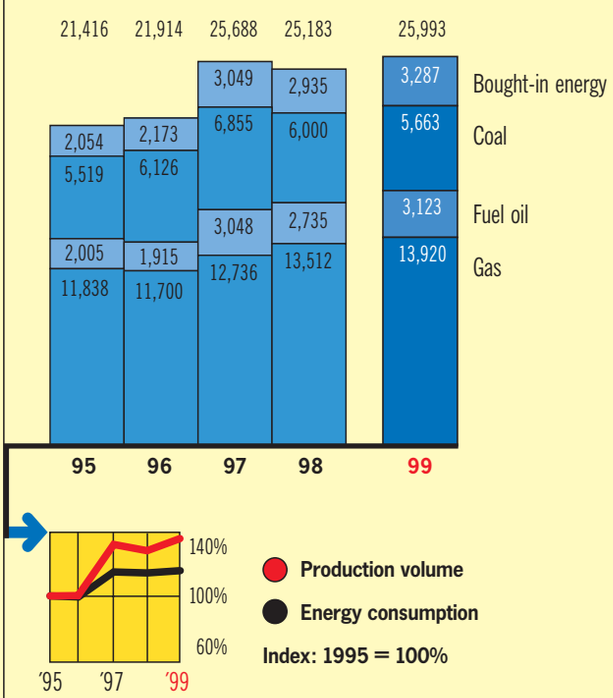
Production volumes

in thousand metric tons



Energy consumption

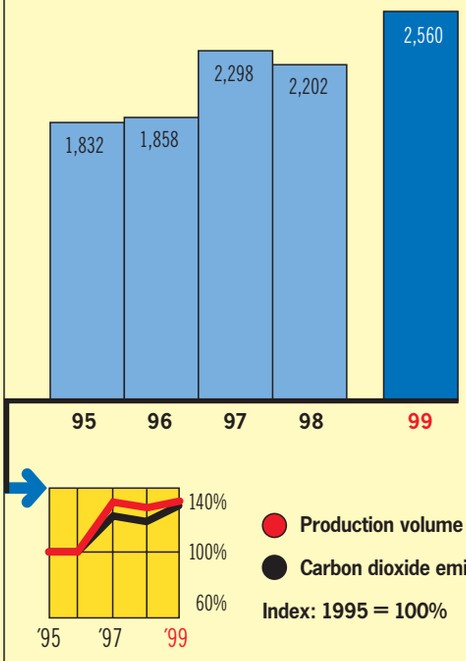
in terajoules

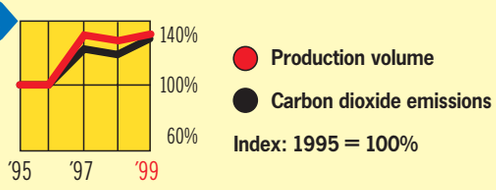


Bought-in energy is electricity, steam and district heating that is generated outside the sites.

Carbon dioxide emissions

in thousand metric tons

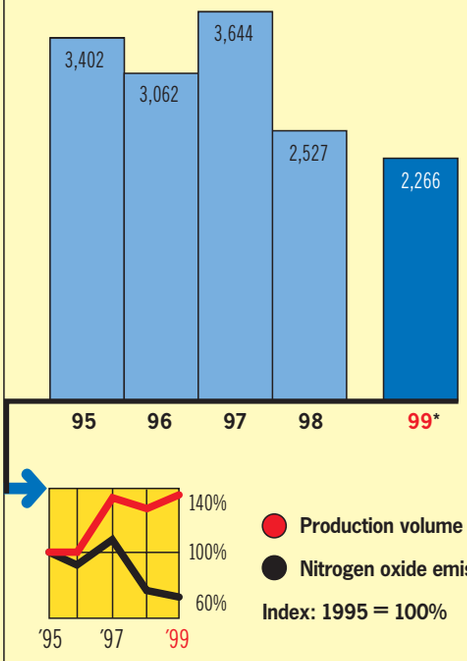


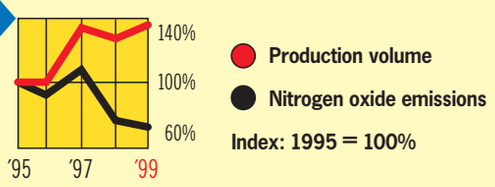


The carbon dioxide released by the activities of the Henkel Group is almost all created by the generation of energy. The given values include carbon dioxide formed during the generation of bought-in, i.e., externally generated, energy. Since this carbon dioxide was not emitted at the Henkel sites, the amount was estimated with the help of recognized factors.

Nitrogen oxide emissions

in metric tons (calculated as nitrogen dioxide)



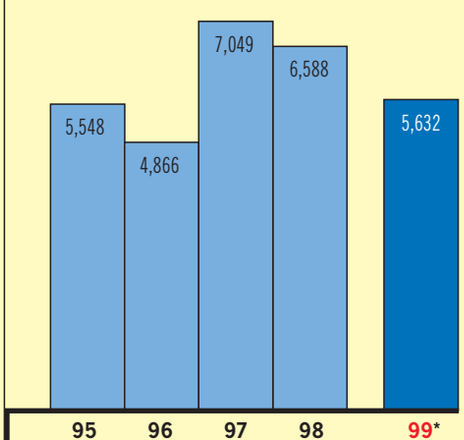


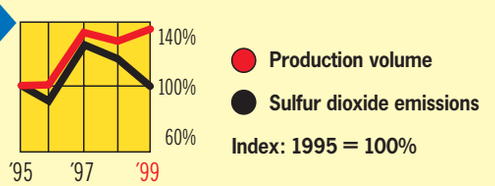
The reduction in nitrogen oxide emissions in 1998 is largely attributable to the switch to different sources of energy at eastern European and Chinese sites.

* Provisional value. At the time of going to press, not all data had been finally evaluated.

Sulfur dioxide emissions

in metric tons

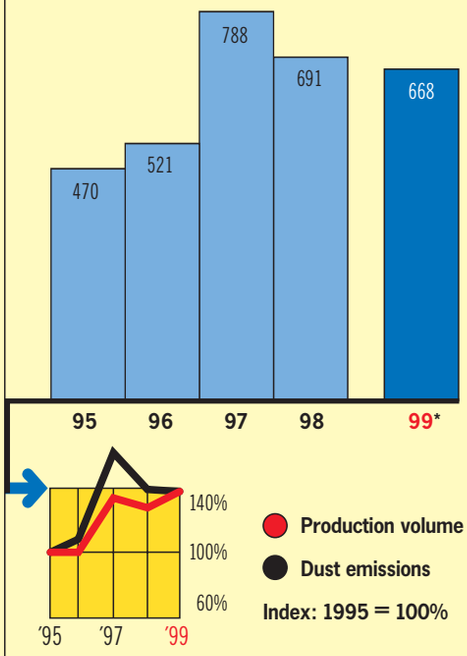




* Provisional value. At the time of going to press, not all data had been finally evaluated.

Dust emissions

in metric tons

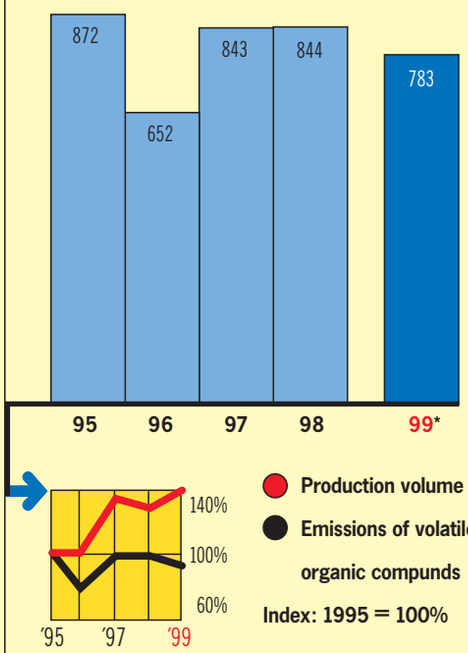


The values include aerosols, as they are difficult to distinguish from dust with the available measuring technology.

* Provisional value. At the time of going to press, not all data had been finally evaluated.

Emissions of volatile organic compounds

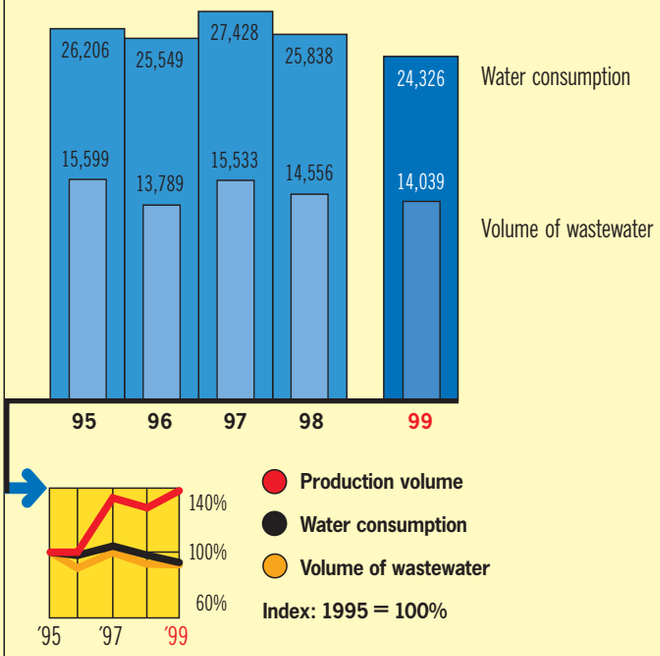
in metric tons



* Provisional value. At the time of going to press, not all data had been finally evaluated.

Water consumption and volume of wastewater

in thousand cubic meters



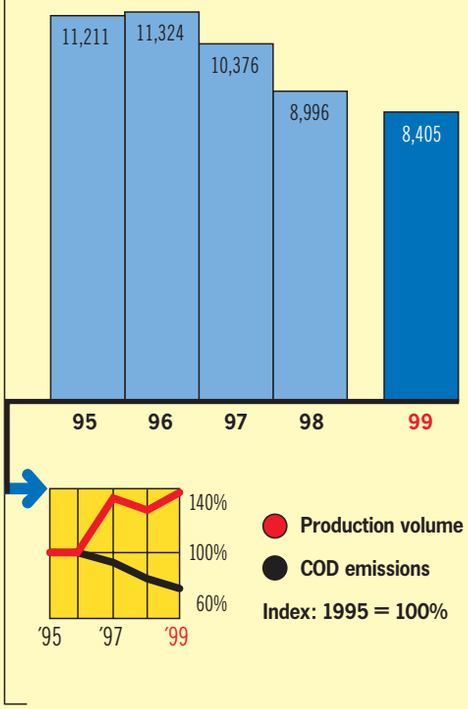
The water consumption includes all water, whether bought-in or extracted from Henkel's own sources. Most of this water is process water. Only a small proportion of drinking water is used.
Because water is lost by evaporation from cooling towers and water is contained in products, the volume of wastewater is smaller than the volume of water consumed.

The significant aspect of wastewater emissions is the magnitude of the loads actually discharged into surface waters. About a quarter of the sites are direct dischargers. In other words, the site wastewater is treated in-house and is then discharged into surface waters (for example, a river or the sea). The wastewater loads of these sites can be added directly to the amount for the Henkel Group as a whole.

The other sites are indirect dischargers, and only a proportion of their wastewater loads therefore enters the environment. In order to reflect the actual burden on the environment in the total amount for the Henkel Group, it was assumed that, on average, 70 percent of the wastewater load from these indirect dischargers is degraded or eliminated in municipal or jointly operated sewage treatment plants. This is a very conservative estimate. Efficiently operated sewage treatment plants generally attain degradation and elimination rates well in excess of 90 percent.

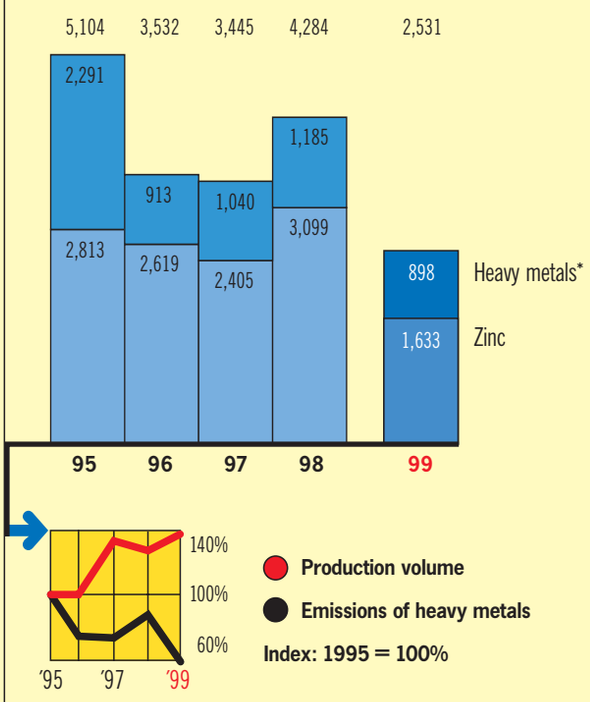
COD emissions into surface waters

in metric tons



Emissions of heavy metals into surface waters

in kilograms



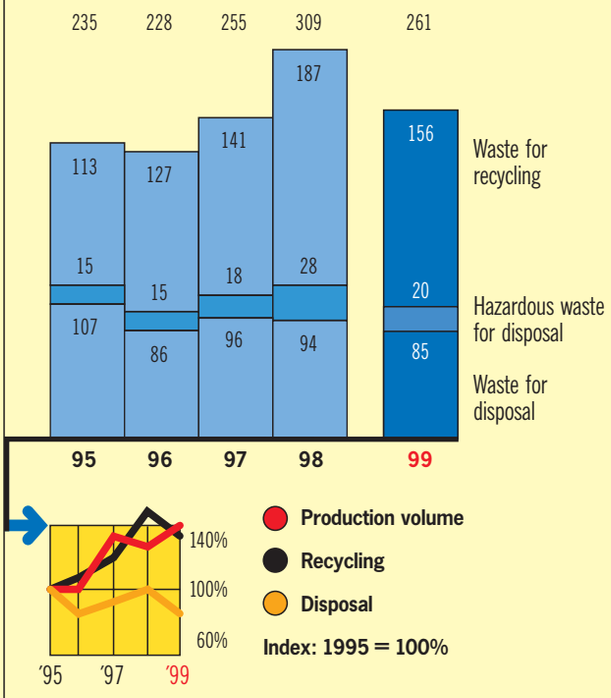
Zinc is traditionally counted as a heavy metal. As zinc is usually less harmful than other heavy metals in terms of its effects on the environment, the zinc load is shown separately.

The increase in zinc emissions in 1998 was caused by a change in production methods at one site. The measures then taken to reduce the zinc load started to produce results in late 1998, and the effects were visible in 1999.

* Lead, chromium, copper, nickel; particularly hazardous heavy metals, such as mercury and cadmium, are not processed.

Waste for recycling and disposal

in thousand metric tons



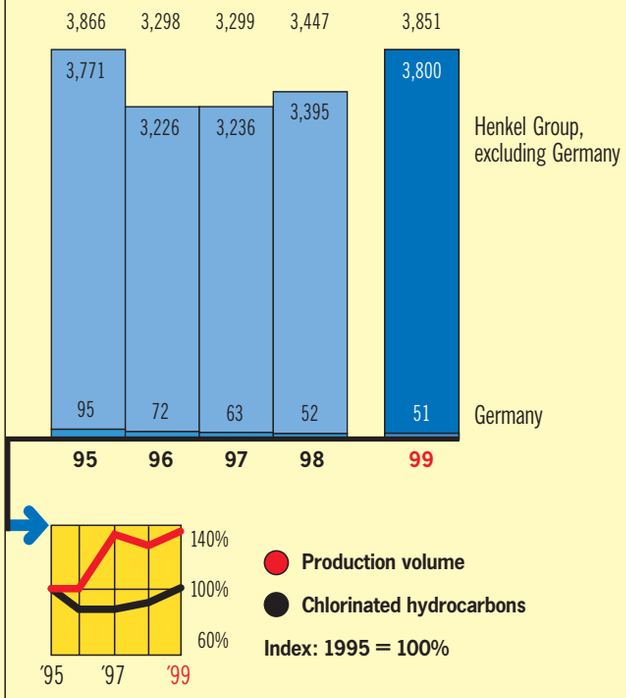
"Hazardous waste for disposal" includes not only those kinds of waste that are classified as hazardous under the laws of the respective countries, but also all hazardous wastes listed in the Basel Convention of 1989.

Because individual countries continue to extend their list of hazardous wastes, it is possible for the volume of hazardous waste to increase without any change having occurred in the waste situation in the Henkel Group.

The increase in the volume of waste for recycling in 1998 was attributable to just one site. A new official requirement stipulated that waste recycled inside the site had to be included in the 1998 figures. This requirement was rescinded in 1999. The 1998 data are thus not fully comparable with those of the other years.

Consumption of chlorinated hydrocarbons

in metric tons



Methylene chloride, which is used in Great Britain in paint strippers, accounts for most of Henkel's consumption of chlorinated hydrocarbons.

Objectives of the Business Sectors

Objectives	Status
Adhesives	
● Group-wide certification of the environmental management systems on the basis of the European Union's Eco-Management and Audit Scheme and/or the international ISO 14001 standard	➜ 4 sites in Europe are certified (see page 11); other sites are preparing for certification.
● Permanent revision and consistent optimization of the entire range of products in line with SHE considerations	➜ As the global market leader, Henkel's strategy is not restricted to simply complying with legal requirements, but is targeted at playing a leading role in the environmental compatibility of products and the associated competitive advantages.
● Development of additional extremely-low-emission flooring installation products (primers, leveling compounds, adhesives) to avoid indoor air pollution	➜ For all types of floor coverings, installation products have been developed that conform to the requirements of the EMICODE EC1 quality mark (see page 4); they already make up 60 percent of Henkel's range in Germany and will now be marketed consistently in other European countries.
● Preferential use of renewable raw materials	➜ The OLEOLINK project, which is being financed with public funds, is aimed at promoting the use of renewable oleochemical raw materials in adhesives. The formulation of the Pritt stick adhesive was changed and is now based almost exclusively on renewable raw materials.
● Expansion of the market for solvent-free adhesive systems in the shoe manufacturing sector	➜ Market launch in products of leading U.S. manufacturers of sports footwear (produced in Asia)
● Expansion of the market for solvent-free laminating and coating adhesives in cooperation with customers	➜ Marketed volume increased by 20 percent in 1999; additional projects started with major customers.
Cosmetics/Toiletries	
● Use of renewable raw materials, preferably vegetable-based	➜ Permanent objective in the development of new formulations; 1999: Market launch of an antiperspirant stick – 45 percent of its ingredients are based on renewable raw materials; in this respect, the stick leads in its product category.
Detergents/Household Cleaners	
● Use of eco-performance indicators for complete evaluation of the environmental impacts of detergents throughout their life cycle – definition of the indicators	➜ The indicators were bindingly defined in late 1999. They are the basis for coordinating priority objectives in 2000.
● Reduction of 5 percent in energy consumption per wash cycle (relative to the 1996 level) by the end of 2001	➜ Development work within the planned time schedule
● Reduction of 10 percent in the amount of detergent per wash cycle (relative to the 1996 level) by the end of 2001	➜ Development work within the planned time schedule
● Reduction of 10 percent in the amount of packaging per wash cycle (relative to the 1996 level) by the end of 2001	➜ Development work within the planned time schedule

Objectives	Status
Industrial and Institutional Hygiene/Surface Technologies	
Industrial and Institutional Hygiene (Henkel-Ecolab)	
● Long-term, Group-wide certification of the environmental management systems to the international ISO 14001 standard	➜ Certification of Henkel-Ecolab GmbH & Co. OHG and Henkel-Ecolab Deutschland GmbH, including business processes and the service processes at customer sites; in addition, 4 production sites have been certified (see page 11); certification of other sites in France, Ireland and Italy is planned for the year 2000.
● Reduction of wastewater pollution in customer plants in the food sector (breweries, dairies)	➜ Successful market launch of enzyme-based cleaning system for dairies (see SHE Report 1998, p. 37); these innovative products have already given Henkel-Ecolab competitive advantages.
Surface Technologies	
● Group-wide certification of the environmental management systems to the international ISO 14001 standard	➜ Certification of Henkel Oberflächentechnik GmbH (development, production and marketing); 6 sites in Europe and Latin America are certified (see page 11).
● Development and marketing of chrome-free conversion processes	➜ Continuous roll-out in the automotive industry and the coated aluminum manufacturing sector; further technological development
	➜ Consolidation in the Italian market; launch in Spain, the USA, and other countries
● Development and marketing of environmentally more compatible pickling processes for stainless steel	

Chemical Products (Cognis)	
● Group-wide certification of the environmental management systems to the international ISO 14001 standard	➜ 6 sites in Europe and Latin America are certified. Another 4 sites are expected to be certified by the end of 2000.
● Development of new raw materials on a purely vegetable basis	➜ Permanent objective
● Development and active marketing of APEO-free emulsifiers for polymerization	➜ Products successfully marketed. Close cooperation with leading American and European producers of emulsion paints and dispersion adhesives to facilitate worldwide switch of production to APEO-free emulsifiers.
● Biodegradable distillates and cleansing oils for the printing ink industry	➜ First product successfully marketed
● Development of matrix resins based on renewable raw materials for workpieces made from natural-fiber-reinforced plastic	➜ Development work is in progress; first prototype has been produced.
● Checking of all textile auxiliaries that, under the voluntary assessment program of the German trade association TEGEWA, belong to the highest wastewater-relevance category (WRC 3); replacement of the substances responsible for this classification with substances belonging to WRC 1 or 2	➜ Some ingredients have already been replaced; substitution of the most important substances will be completed in 2000.
● Development of new types of products for the agriculture and forestry sector and landscape management, so that the amounts of fertilizers and pesticides currently used can be reduced	➜ First sales; intensive further development; marketing in key regions

Site objectives

European region

			Result 1999	Target year
Austria	Vienna	Certification to ISO 14001 (initially planned:		
		EU Eco-Management and Audit Scheme)	Extended to 2000	1999
Belgium	Herent	Reduction of 9 percent in wastewater from production (relative to 1999)		2000
Finland	Riihimäki	Certification to ISO 14001		2002
	Vantaa	Certification to ISO 14001		2002
France	Boussens	Certification to ISO 14001		2000
	Châlons-en-Champagne	Certification to ISO 14001 for Henkel-Ecolab and Henkel France		2000
	Cosne-sur-Loire	Certification to ISO 14001		2000
	Louviers	Creation of a wastewater register	Achieved	1999
		Certification to ISO 14001		2000
	Meaux	Reduction of suspended solids in wastewater to less than		
		15 milligrams per liter by improved final sedimentation		2000
		Reduction of 10 percent in wastewater load by		
		recovering recyclable materials (surfactants)		2000
		Certification to ISO 14001		2001
	Nemours	Certification to ISO 14001		2000
	Reims	Reduction of 20 percent in water consumption (relative to 1998)	–1 percent[1)]	1999
		Certification to ISO 14001	Extended to 2000	1999
Germany	Düsseldorf-Flingern	20 percent less product residues from cleaning processes		
		in wastewater	Extended to 2002[2)]	1999
		Reduction of accidents with at least one day of absence to		
		less than 15 per 1,000 employees		2000
	Düsseldorf-Holthausen*	Increase of 5 percent in recirculated steam condensate		2001
		Reduction of more than 50 kilograms per year in nickel load in wastewater		2001
		Reduction of accidents with at least four days of absence to		
		5 per 1,000 employees	4.9	1999
		Reduction of accidents with at least four days of absence to		
		4 per 1,000 employees		2000
	Hanover	Reduction of 55 percent in water consumption	–80 percent[3)]	1999
		Reduction of 5 percent in hazardous waste (relative to 1997)	–10 percent[3)]	1999
	Heidelberg*	Reduction of specific energy consumption from		
		320 to 290 kilowatt hours per metric ton of product	288	1999
		Reduction of 5 percent of waste per metric ton of product		2000
		Reduction of accidents with at least one day of absence to		
		less than 29 per 1,000 employees		2000
	Herborn-Schönbach*	Reduction in water consumption and volume of wastewater by reducing the number		
		of cleaning operations (installation of pipes that can be cleaned with pig systems)		2000
	Illertissen*	Reduction of COD load in wastewater (relative to 1998)	–14 percent	1999
		Improved organization of site emergency services		2000

* Additional objectives are declared in the site's environmental statement (can be requested free of charge).

1) Technical improvements could not be realized on schedule. 2) Due to major changes in product range. 3) Partly due to changes in product range.

			Result 1999	Target year
Germany	**Lohne**	Certification to ISO 14001		**2000**
	Loxstedt*	Reduction of 10 percent in hazardous waste (relative to 1998)	**–97 percent**[4)]	**1999**
	Magdeburg*	Sealing of catch pots in the depot for water-polluting substances	**Achieved**	**1999**
		Reduction of 5 percent in water consumption (relative to 1999)		**2000**
		Reduction of 80 percent in hazardous waste (relative to 1999)		**2000**
	Siegburg*	Reduction of 5 percent in water consumption		**2000**
		Implementation of an occupational safety program (DuPont concept)		**2000**
	Wassertrüdingen	Creation of a wastewater stream register		**2000**
		Implementation of a disaster control drill		**2000**
Great Britain	**Belvedere**	Certification to ISO 14001		**2001**
Hungary	**Körösladány**	Certification to ISO 14001	**Extended to 2000**	**1999**
	Vác	Certification to ISO 14001	**Achieved**	**1999**
Ireland	**Ballyfermot**	Certification to ISO 14001	**Achieved**	**1999**
		Limitation of all noise sources to a maximum of 85 decibels (A)		**2000**
	Bray	Certification to ISO 14001		**2000**
	Cork	Reductions: 40 percent in sulfur dioxide emissions		**2000**
		25 percent in nitrogen oxide emissions		**2000**
		25 percent in carbon dioxide emissions		**2000**
	Tallaght	Certification to ISO 14001	**Achieved**	**1999**
		Creation of a waste register for hazardous waste		**2000**
Italy	**Caleppio di Settala**	Reduction of 30 percent in water consumption (relative to 1998)		**2001**
	Ferentino	Reduction of 10 percent in volume of waste per metric ton of product		**2001**
	Fino Mornasco	Reduction of 50 percent in reportable accidents		**2001**
	Lomazzo	Reduction of 10 percent in volume of waste per metric ton of product		**2001**
	Rozzano	Certification to ISO 14001		**2000**
Netherlands	**Ravenstein**	Certification to ISO 14001		**2000**
Poland	**Racibórz**	Reductions: 96 percent in sulfur dioxide emissions	**–96 percent**	**1999**
		97 percent in dust emissions	**–95 percent**	**1999**
		99 percent in soot emissions	**–96 percent**	**1999**
		20 percent in carbon dioxide emissions	**–50 percent**	**1999**
		Certification to ISO 14001	**Achieved**	**1999**
		Certification of occupational safety management to Polish standard		**2001**
Portugal	**Alverca**	Reduction of 3 percent in solid waste (relative to 1999)		**2000**
		Certification to ISO 14001		**2000**
Russia	**Tosno**	Certification to ISO 14001		**2002**
Slovenia	**Maribor**	Construction of a wastewater retention basin	**Deferred**	**1999**
		Installation of catch pots in raw materials depot	**Achieved**	**1999**
		Certification to ISO 14001		**2001**
Spain	**Barcelona/Zona Franca***	Reduction of 10 percent in water consumption per metric ton of product	**–20 percent**	**1999**
	La Coruña	Certification to ISO 14001		**2000**
	Malgrat	Certification to ISO 14001		**2000**

[4)] Partly due to change of classification.

Site objectives

European region

			Result 1999	Target year
Spain	Montornés	Certification to ISO 14001		2000
	San Adrián	Certification to ISO 14001		2000
	Santa Perpétua	Certification to ISO 14001		2000
	Seville/Alcalá de Guadaira	Certification to ISO 14001		2000
Sweden	Mölndal*	Reduction of 50 percent in organic load in wastewater (relative to 1998)		2000
Turkey	Cayirova	Certification to ISO 14001	**Extended to 2001**	1999
	Izmir	Reduction of 30 percent in the sulfate load of wastewater (relative to 1999)		2000

Africa/Middle East region

			Result 1999	Target year
Israel	Haifa	Reduction of 75 percent in wastewater from production (relative to 1999)		2000
South Africa	Alberton-Alrode	Certification to ISO 14001		2001
	Chloorkop	Certification to ISO 14001	**Objective was not pursued**[5)]	1999

Asia/Pacific region

			Result 1999	Target year
Australia	Melbourne/Kilsyth	Certification to ISO 14001		2001
China	Guangzhou	Certification to ISO 14001		2000
	Guilin	Creation of a wastewater register	**Achieved**	1999
		Reduction of 50 percent in water consumption (relative to 1998)		2000
		Wastewater-free detergent production		2001
	Shanghai/Tao Pu	Certification to ISO 14001		2001
	Siping	Reduction of 8 percent in the total volume of wastewater (relative to 1998)	**–20 percent**	1999
	Tianjin	Reduction of 90 percent in the sulfur dioxide emissions of the boiler house		2000
		Reduction of 90 percent in the dust emissions of the boiler house		2000
	Xuzhou	Reduction of 80 percent in wastewater from production (relative to 1999)		2000
India	Karaikal	Reduction of 5 percent in gas consumption (relative to 1999)		2000
		Reduction in occupational accidents to a maximum of 14 per 1000 employees		2000
Indonesia	Jakarta	Certification to ISO 14001		2001
		Reduction of 10 percent in volume of wastewater (relative to 1999)		2001
Malaysia	Sungai Buloh	Certification to ISO 14001		2002
	Telok Panglima Garang	Reduction of 70 percent in the sulfur dioxide emissions of		
		the boiler house	**–70 percent**	1999
		Certification to ISO 14001		2001
		Reduction of 50 percent in reportable accidents		2000
Thailand	Bangkok	Certification to ISO 14001		2001

* Additional objectives are declared in the site's environmental statement (can be requested free of charge).

5) Production relocated to Alberton-Alrode.

American region

			Result 1999	Target year
Argentina	**Avellaneda**	Certification to ISO 14001	**Extended to 2000**	**1999**
		Reduction of 50 percent in reportable accidents		**2000**
Brazil	**Jacarei**	Reduction of 5 percent in laboratory waste (relative to 1998)	**–70 Prozent**	**1999**
		Reduction of 10 percent in organic load in wastewater (relative to 1999)		**2000**
	São Paulo/Diadema,	Reduction of 5 percent in water consumption (relative to 1999)		**2000**
	São Paulo/Itapevi	Certification to ISO 14001		**2000**
Canada	**Brampton, Ontario**	Certification to ISO 14001		**2001**
	Rexdale, Ontario	Certification to ISO 14001		**2001**
		Recycling of 10 percent more wastewater from cleaning processes		**2000**
	Toronto, Ontario	Installation and starting up of an odor control system	**Achieved**	**1999**
		Continuation of odor control measures		**2000**
Chile	**Santiago**	Reduction in volume of wastewater (relative to 1998)	**+21 percent**[6]	**1999**
Mexico	**Ecátepec de Morelos**	Certification to ISO 14001	**Extended to 2000**	**1999**
		Reduction of more than 80 percent in the organic load of wastewater (relative to 1998)		**2000**
USA	**Aurora, Illinois**	Certification to ISO 14001		**2001**
	Calhoun, Georgia	Certification to ISO 14001		**2001**
	Charlotte, North Carolina	Reduction of 45 percent in toluene emissions		**2000**
	Cincinnati, Ohio	Reduction of 50 percent in emissions of volatile organic substances		**2000**
		Reduction of 9 percent in the organic load of wastewater (measured as biological oxygen demand) (relative to 1998)		**2000**
	Denver, Colorado	Certification to ISO 14001		**2001**
	Fremont, California	Certification to ISO 14001		**2001**
	Gulph Mills, Pennsylvania	Certification of responsible care management by the U.S. Chemical Manufacturers Association	**Achieved**	**1999**
	Jackson, Tennessee	Certification to ISO 14001		**2001**
	Livonia, Michigan	Certification to ISO 14001		**2001**
	Lock Haven, Pennsylvania	Reduction of 25 percent in emissions of volatile organic substances	**–42 percent**	**1999**
	Oak Creek, Wisconsin	Certification to ISO 14001		**2001**
	St. Louis, Missouri	Certification to ISO 14001		**2001**
	Wayne, New Jersey	Certification to ISO 14001		**2001**
	Warren, Michigan	Certification to ISO 14001		**2001**
	Warrensville Heights, Ohio	Certification to ISO 14001		**2001**

Group objectives

	SHE audits at 136 sites by the end of 1999	**144**	**1999**
	SHE audits at 41 further sites by the end of 2000		**2000**

[6] Due to changes in the product range and increased production.

SHE communication: more intensive, more varied, more up-to-date

Key target groups for the SHE Report

- Trade, industrial clients
- Financial circles
- Politicians, government authorities
- Press, media
- Ecological institutions, environmental associations
- Employees
- Consumers

Henkel has successfully produced and marketed brand-name and technical consumer products for 123 years. It is therefore fully aware that success depends on providing products that are exactly tailored to clients' wishes. This basic principle, which the Company applies to its products and systems, is also applicable to communication with different target groups, especially regarding safety, health and the environment. For this reason, Henkel decided to investigate, with the help of external experts, reactions to its SHE Report among key target groups. The result was a balanced mixture of praise and criticism. Requests were also made for information that Henkel had not covered until then.

How readers assessed the 1998 Henkel SHE Report

(most frequent responses)

What pleased you most about the Henkel SHE Report?

- Henkel environmental objectives
- Henkel environmental data

What pleased you least?

- Too little attention is paid to controversial topics currently in the public eye (for example, genetic engineering)
- Too positively slanted

Henkel responded by rethinking and reshaping the overall communications concept of the SHE Report. A start was made with "Environment, Safety, Health - Facts and Figures for 1998." The revision process was continued in 1999. The main changes are as follows:

New in 2000: Concise SHE Report

In alternate years, the Henkel Group will publish a comprehensive SHE Report and a concise report. This is the first such concise report. Both versions will be published in German and English. The concise report will consist mainly of the SHE objectives and data, which readers rate as especially important.

New in 2000: More information on the Internet

SHE information is presented in a clear and attractive format and regularly updated on the Internet (already at www.henkel.de, soon at www.henkel.com).

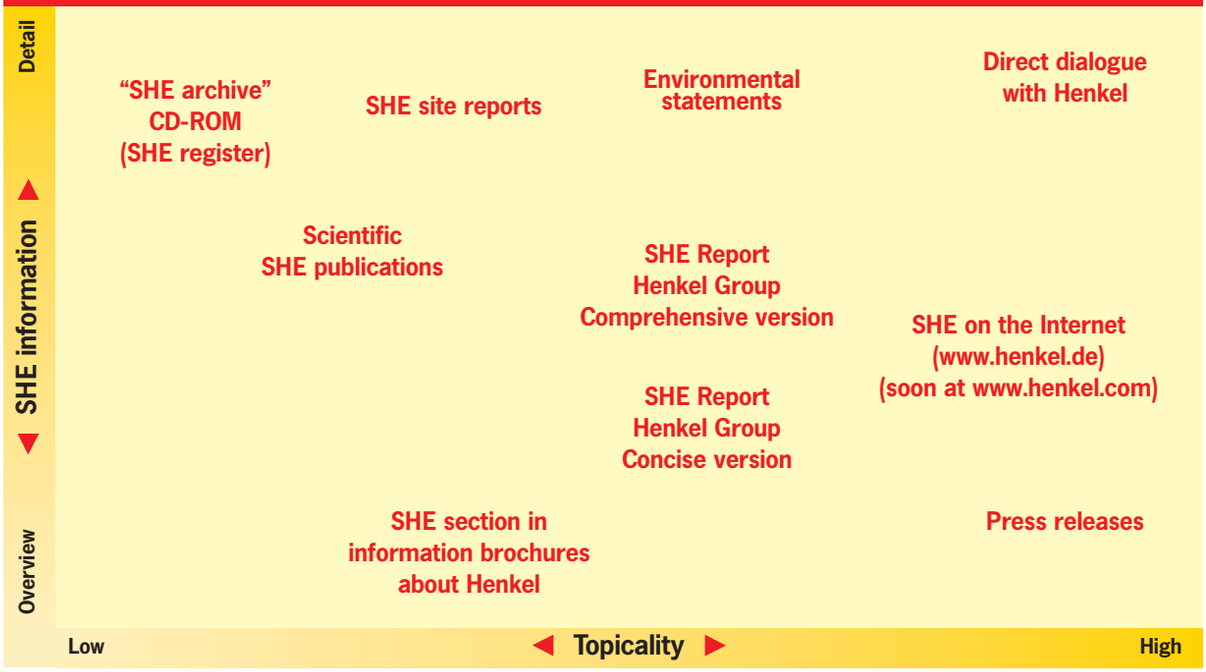
New in 2000: Site reports

15 Henkel production sites throughout the world are currently participating in a pilot project by preparing SHE site reports in their own language.

Henkel actively promotes dialogue

No matter how many new brochures and publications appear, they will never replace the spoken word. Henkel actively seeks to engage in a dialogue with the local community, schoolchildren, teachers, college students and professors, as well as with journalists, politicians and representatives of government authorities and environmental associations. Outstanding SHE results are announced in press releases. The various ways of contacting us are shown on the page to the right.

Henkel's SHE communication instruments



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○ Mission, Principles, Strategy
○ Principles and Objectives of Environmental Protection and Safety
○ Corporate SHE standards
○ Henkel Group's Code of Conduct
○ Environmental Statement of Henkel KGaA, Düsseldorf-Holthausen (in German)
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