

# Sunstar Group Report

January-December 2022

2023



# Management Message and Vision



## Our vision of well-being and ESG-driven management

Sunstar Group Representative  
Yoshihiro Kaneda

In 2022, while the business environment underwent rapid changes due to conflicts in various parts of the world and soaring raw material prices, there were nevertheless positive signs of economic and social activities moving toward normalization after the COVID-19 pandemic. Additionally, it was a year in which there was renewed recognition that the rapid increase in CO2 emissions, due to the development of the global economy, is causing global warming and environmental destruction, as well as affecting people's health.

Sunstar has set a long-term vision for the year 2032, the centennial of its founding. We will support general health through oral health, create businesses offering support for healthy and comfortable living and mobility spaces, and conduct sound management practices respecting the environment and society. Through these efforts, we aim to become a company with a high social value. In the process, we must remember that people's healthy and comfortable lives are integral to the health of the planet.

Sunstar is strong in developing businesses such as in oral care, health foods, cosmetics, indoor air quality improvement, adhesives, sealants, and metal parts on a global scale. We also have colleagues around the world with diverse cultures and values who are working together toward the same goal. At an online event in 2022 to commemorate the 90th anniversary of Sunstar's founding, employees from around the world shared their aspirations toward the company's centennial anniversary. From their messages, I strongly felt that if Sunstar employees around the world unite their efforts, we can contribute to the sustainability of human society and the planet by creating a healthy and enriched society for people and reducing environmental impact.

Going toward the centennial of Sunstar, we will pursue "well-being & ESG (Environmental, Social, and Governance) driven management"—that is, the creation of new businesses and sound business operations that contribute to the well-being of people and the planet — by listening to the voices of Sunstar's stakeholders and leveraging the power of our employees.

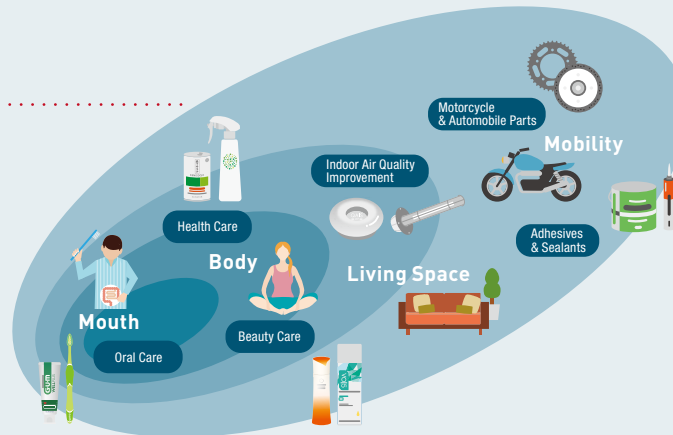
# Sunstar's ESG-driven management contributes to the well-being of people around the world as well as the planet

## Sunstar's well-being and ESG-driven management



## Making mouths, bodies, air environments, and living and mobility spaces healthier and more comfortable

The Sunstar Group aims at contributing to the well-being of people around the world by developing businesses that make mouths, bodies, air environments, and living and mobility spaces healthier and more comfortable. It does so through its products and services in oral care, beauty care, health foods, household products, indoor air quality improvement, adhesives and sealants and metal parts, and by integrating these different properties. We also strive to reduce the environmental impact of our products, packaging, and business operations.



## Sunstar Group Topics 2022

### Donation of oral care products to support the health of people around the world

More than 80,000 products, including toothbrushes, toothpaste, and dental rinses, were donated through the Polish Red Cross Society in Warsaw as emergency humanitarian aid to those who are in Ukraine and who have evacuated to its neighboring countries. We also conducted activities to raise awareness of the importance of oral care in maintaining general health during times of emergency. In addition, in support of Lebanon, where a major explosion occurred in the port of Beirut in 2020, we delivered more than 120,000 toothbrushes to local elementary schools, kindergartens, pediatric cancer facilities, medical universities, and medical institutions to provide guidance on oral hygiene.



### Product donations to acknowledge medical professionals for their efforts in the COVID-19 pandemic

Our Shanghai office in China donated approximately 9,000 bottles of GUM mouthwash to more than 10 medical institutions. In Japan, we donated 65,000 bottles of V05 Hairspray to medical institutions, which reduces hair touching and keeps hands clean due to its high hair-holding power. Through these donations, we expressed our gratitude to those working in the medical field.



## Future Creation 1

### Make the habit of good oral care for healthy living; Global collaboration begins to create new services using IT

In order for people around the world to enjoy healthy and joyful lives, they must develop healthy lifestyle habits. Sunstar has been making various efforts to make this possible. Since last year, members with their respective strengths described below have come together to engage in global discussions and collaboration to drive the creation of healthy oral habits through the use of new technologies.



#### Leveraging Playbrush's app development capabilities

Playbrush is a venture company from UCL, University of London, which joined the Sunstar Group in 2021. The company has sold more than 300,000 IoT smart toothbrushes worldwide, which are linked to smartphone apps to encourage proper tooth brushing habits through gamification techniques. In Germany, Austria, and the UK, the company is providing a subscription service that delivers replacement brushes regularly.



#### Applying oral care product development capabilities

Sunstar offers a variety of oral care products tailored to customer needs, including the IoT smart toothbrush "Gum Play" in Japan. Although we have now discontinued the product, we are exploring new approaches to tooth brushing habits through collaboration with Playbrush.



#### Utilization of AI and image recognition technology

Utilizing a database of oral images analyzed by dental experts and AI technology, we have commercialized a web service in Japan that recommends toothbrushes and interdental cleaning tools based on mouth photos and answers to simple questions. Also, based on research on facial expressions and appearance, we have developed a facial impression analysis application using AI technology. The service is offered at facial treatment salons to guide customers to the impression they want to achieve based on the analysis results of their facial photos.



#### Leveraging dental treatment and dental health education expertise

The dentists and dental hygienists who belong to the Sunstar Foundation provide dental treatment, dental checkups, and dental health education for companies and schools. Among these services, the foundation offers the "Mouth Care 30 Days Trial," a program encouraging the building of a healthy oral care routine, and online dental health guidance.



## Future Creation 2

### Contributing to the decarbonization of the automotive industry; Supporting weight reduction, electrification, and comfort improvement with adhesive technology

The automotive industry is accelerating decarbonization and electrification to achieve the world's goal of carbon neutrality (virtually zero CO<sub>2</sub> emissions) by 2050 to reduce global warming. In response, Sunstar aims to contribute to the evolution of automobiles at the shift towards electrification in the industry and the reduction of CO<sub>2</sub> emissions by providing new adhesives products that decrease the weight of car bodies while maintaining their rigidity and quietness.



\* for illustrative purposes

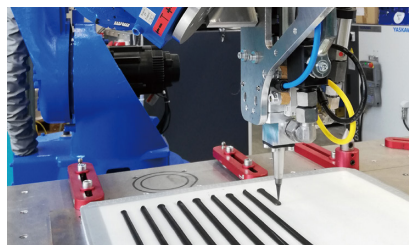
#### Structural adhesives that contribute to vehicle weight reduction and improved ride comfort

We provide automakers with automotive adhesives that support the weld bonding method, a method that combines spot welding and adhesion to enhance vehicle body rigidity and weight reduction. Among them, a "damping adhesive" jointly developed with Mazda reduces vehicle body vibration noise and contributes to improved vehicle ride comfort and quietness.



#### Coating material for battery cases with low environmental impact production

Various new adhesives are increasingly adopted in line with the electrification of automobiles, such as FIPG (Foamed-In-Place Gasket) for waterproofing of rechargeable battery cases of electric vehicles, urethane adhesives, and noise-insulating sheets for tires. Sunstar's FIPGs also ensures low environmental impact as they can be applied at low temperatures and in short time without wasting raw materials in the manufacturing process.



#### Adhesives for in-vehicle cameras for automated driving and in-vehicle displays

Adoption of shock absorption, waterproofing, and heat dissipation materials for in-vehicle cameras used in automated driving and adhesives for larger- and narrower-framed in-vehicle displays is expanding.



\* for illustrative purposes

#### Accelerating efforts to reduce CO<sub>2</sub> emissions in the adhesive manufacturing process

To reduce CO<sub>2</sub> emissions in the production of adhesives to be supplied to automobile manufacturers, we are developing processes that use less energy to coat and cure them, adopting renewable electricity for power procurement at our plants, and installing solar power panels.

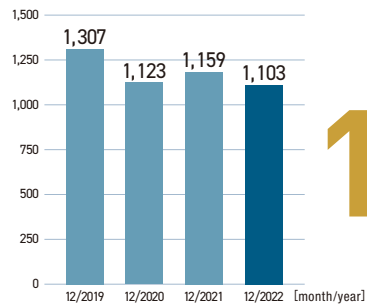


# Group Business Performance 2022

The net sales of the Sunstar Group in 2022 amounted to 1,103 million Swiss Francs (CHF), down 5% compared to the previous year, strongly influenced by both macro-economic factors and the Japanese Yen hitting its lowest level vs CHF. Sales in local currency increased in the Americas and Europe from the previous year, decreased in Asia, and remained stable in Japan, resulting in an overall group organic sales

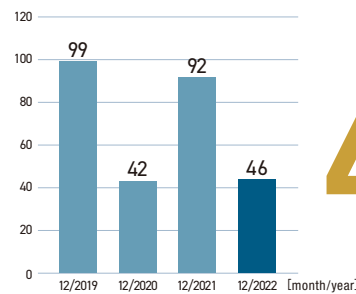
increase of 1.4% over the previous year. Operating income decreased 50% to CHF 46 million compared to previous year, mainly due to the impact of higher raw material and freight costs. The financial information in this report complies with International Financial Reporting Standards (IFRS).

## Net Sales



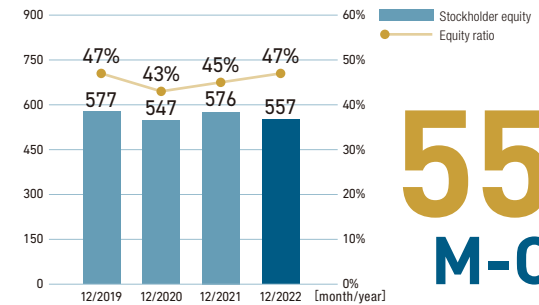
**1,103**  
M-CHF

## Operating Income



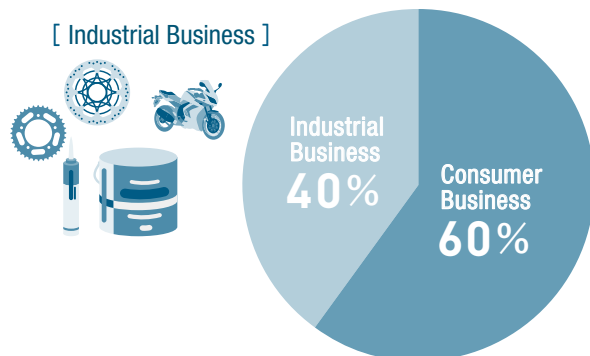
**46**  
M-CHF

## Stockholder Equity & Ratio



**557**  
M-CHF

## Sales by Business Sector



**2:3**

[ Consumer Business ]



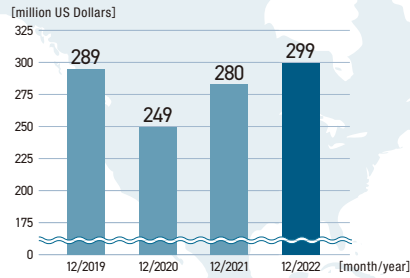
The sales ratio of industrial and consumer businesses in all businesses changed from 1:2 in the previous year to 2:3 this year, due to growing sales of automotive adhesives and metal parts in the industrial business and declining sales in China and Japan in the consumer business, along with the impact of currency exchange rates.

\*Consumer Business: Oral care goods, cosmetic, health foods, etc.

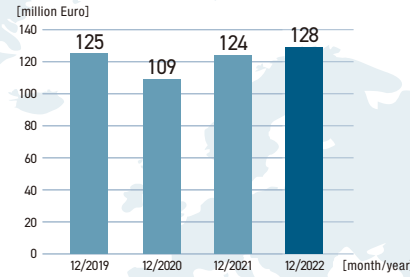
\*Industrial Business: Metal parts for motorcycles, automobiles, and adhesives/sealants for automobiles, buildings, electronic parts, etc.

Net Sales by Region

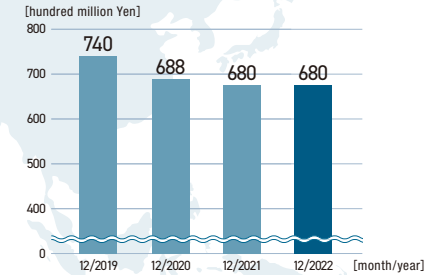
Americas **26%**



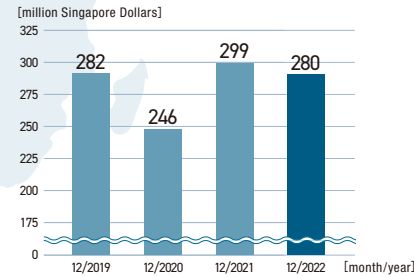
Europe **12%**



Japan **45%**



Asia **17%**



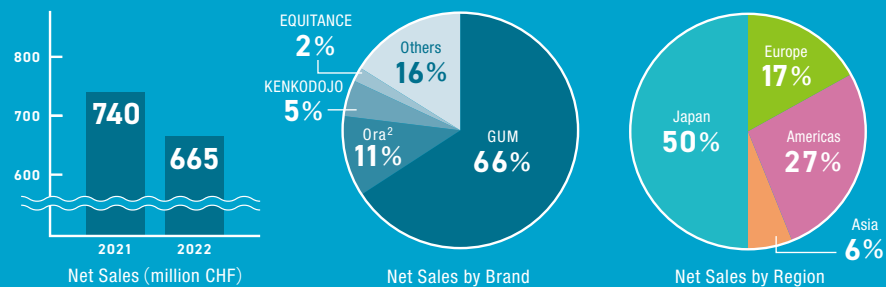
Based in **22** countries worldwide

# Consumer Business

Oral Care

Beauty Care

Health Care



## Consumer Business overview in FY2022

In FY2022, although sales decreased in Japan and Asia due to factors such as stagnant sales in China arising from continued COVID-19 lockdowns, sales were strong in Europe and the Americas. On the other hand, profits decreased significantly due to the global increase in costs of raw materials, logistics, and electricity.

By region, in Europe, sales growth was driven by Sweden, Poland, and the Netherlands. In the Americas, Mexico, Argentina, and other Latin American countries performed well. In both regions, interdental cleaners contributed to revenue. In Japan, the GUM Plus series with significantly improved sterilizing properties was newly launched in autumn, achieving a successful start with the good reception of its toothpaste and dental rinse by retailers and consumers.

## Future prospects

In the era of 100-year life, the Consumer Business aims to help extend healthy life expectancy so that customers can always lead healthy and enriching lives. To do so, we provide products and services that contribute toward promoting overall health, starting with oral health, as well as the creation of healthy and comfortable living environments for both minds and bodies.

In recent years, the importance of good oral health in overall health promotion is rising due to the impacts of infectious diseases, repeated natural disasters, and an aging society. Together with raising awareness about the importance of oral care with the cooperation of dental professionals and local communities widely, we also accelerate the development of products that provide effective oral care in line with the oral issues and age groups of customers. To do so, we strengthen the creation of new added value, including leveraging oral bacteria research results and the application of artificial intelligence and information technology. In addition to oral care, we also work on addressing customers' health issues in the areas of health foods, skin care, hair care, and daily commodities. Furthermore, we will also actively work on environmental load reduction, such as reducing and recycling petroleum-derived plastics which are often used in consumer products, such as toothbrushes, interdental brushes, and mouthwash bottles, as well as packaging, developing products that are beneficial to health as well as the environment, and reducing the environmental impact of our business locations.

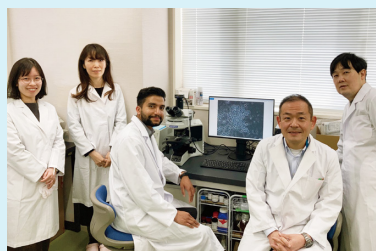


## Consumer Business highlights : Launching the GUM PLUS series

## Oral Care

Discovered the "mastermind" bacteria of periodontal disease through joint research with SUNY  
 Uniquely developed formulation technology that effectively kills "mastermind" bacteria

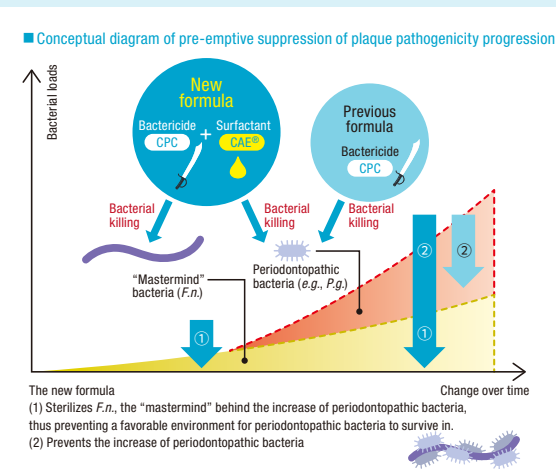
Since 1979, Sunstar has sent researchers to the State University of New York at Buffalo (SUNY), the world's leading institution in periodontal disease research. Based on research findings at SUNY, Sunstar identified cetylpyridinium chloride (CPC) as being effective in sterilizing periodontopathic bacteria, and in 1989, Sunstar became the first in the industry to launch the GUM brand line of periodontal disease prevention products with CPC as the core ingredient. Since then, we have continued to evolve our products based on the latest periodontal medicine and have grown the GUM brand.



Researchers in charge of the project

In recent joint research with SUNY, we used the next-generation sequencing technology which is capable of comprehensively analyzing the genetic sequences of over 700 types of bacteria in the mouth. We analyzed the relationship between the types of bacteria in the saliva of 611 Sunstar employees and the level of severity of periodontal disease. In this study, we found that as the periodontal disease worsens, along with an increase in highly pathogenic periodontopathic bacteria, there is an increase in another type of bacteria called *Fusobacterium nucleatum* (*F.n.*).

Bacterial research has confirmed that when the mouth is poorly cleaned, *F.n.* will grow initially, acting as the "mastermind" in making the oral environment be more favorable and conducive to the growth of highly pathogenic periodontopathic bacteria. We then began to develop a formula that could effectively sterilize *F.n.*. Through a new technology that enhances the formulation of the surfactant CAE®, we discovered that the bactericide CPC has a high effect not only on periodontopathic bacteria, but also on *F.n.*.



Launch of "GUM PLUS" in Japan,  
 which evolved from research findings



GUM PLUS was developed based on the latest research results in periodontics. In addition to sterilizing periodontopathic bacteria, it also sterilizes *F.n.*, the "mastermind" that aids the growth of periodontopathic bacteria. This gives GUM PLUS the ability to pre-emptively address the factors that cause periodontopathic bacteria to increase. Research on oral bacteria is still ongoing. Meanwhile, future research progress and global expansion are expected.



GUM PLUS received a special award in the New Product Collection 2022 General Public Voting Category at the Japan Drugstore Show, Asia's largest drugstore exhibition which was held in August 2022. It was also featured in a 2023 hit prediction article last year in a prominent trend magazine and received high praise through customer reviews on online platform. Since its launch in September 2022, the product has maintained strong sales.

# Oral Care



Toothpaste / Mouthwash / Toothbrushes / Between teeth cleaning / Dental treatment products

## New sonic vibration toothbrush, which is gentle on teeth and gums and highly effective in removing dental plaque, performed well in Europe

The GUM SONIC SENSITIVE Battery Toothbrush, a new battery-powered sonic toothbrush featuring lightweight and compact size, was launched in Europe. Highly efficacious in plaque removal, yet very gentle, it delivers a soft brushing experience to people with hypersensitivity and fragile gums. Digital marketing campaigns in European countries were successful, and the product delivered strong sales.



## Sales and market share in Argentina increased notably due to promotion of interdental cleaners and orthodontic products

In Argentina, interdental cleaners and orthodontic oral care product lines performed well, gaining 19% of the overall market and 32% of the pharmacy market share. Product and brand awareness increased through communication efforts tailored to the specific needs of each community, such as pregnant women, marathon runners, diabetics, and dental schools.



## New floss offering improved plaque removal with two twisted strings and a refreshing flavor gained popularity in Europe

GUM TWISTED FLOSS has been introduced in Europe, boosting plaque removal function by 30% due to increased surface made of two twisted strings. It easily glides between teeth and has a pleasant and refreshing mint-green tea flavor. Increasing awareness online of the benefits of adding interdental cleaning to the oral care ritual contributed to the positive sales trend in European countries.



## Raising oral health awareness at various in-person events Significant growth in both sales and profits in Mexico

In Mexico, the GUM brand and products were promoted through multiple promotional and product placement activities such as wrapping buses for F1 car race venues, digital boards at soccer fields, gourmet food events, retail store events, and the "Ladybug" marathon, a new GUM character for children. Expanded touchpoints with customers led to sales and profit growth.



# Beauty Care



Skin care cosmetics / Hair care products / Oral beauty care products

## Popular Chinese actress and singer Song Qian is featured in Ora<sup>2</sup> ads to enhance brand value

Ora<sup>2</sup> advertisement features popular Chinese actress and singer, Song Qian, as a symbol of a cool and successful woman. The brand promoted this new ad using SNS and videos to enhance the value of oral beauty products.



## Medicated hair-growth agent "EQUITANCE FUWARI YELL" goes on sale

A medicated hair-growth agent that integrates the results of Sunstar's long-standing hair and hair-growth research. It is a new hair-growth treatment after taking a bath that leads to voluminous hair. It aims to promote positive aging, making going out and dressing up more enjoyable. Many customers gave us high marks saying, "My hair became more voluminous," or "It is comfortable and fun to care for."



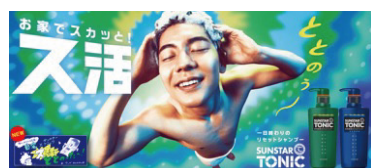
## Ora<sup>2</sup> stylish portable toothbrush and toothpaste sets sell well

Ora<sup>2</sup> me Portable, a toothbrush and toothpaste set, was launched in Japan and Taiwan in response to an increase in social outings. Sales were strong due to the slim, portable, and non-see-through design that allows users to carry the set without worrying about it being seen.



## Hot topic of the season! The refreshing solution proposed by SUNSTAR TONIC Shampoo

Sunstar Tonic Shampoo is popular for its cooling sensation. Users identified with "Soo Action," a method of use that refreshes the scalp and mind, and the product experience cartoon by a popular sauna cartoonist, and the product rode the wave of the sauna boom, with hot bath facilities starting to use the product.



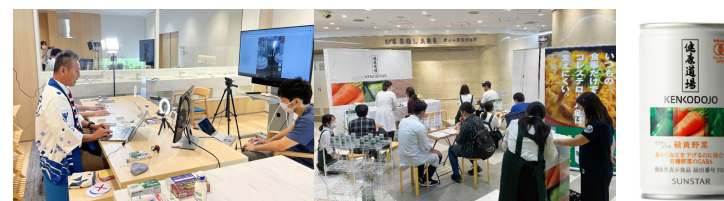
# Health Care



Health foods / Household goods

## KENKODOJO promoted fan acquisition by expanding opportunities for dialogue with customers

The KENKODOJO brand of health foods has been sold mainly through direct sales, but now sales at stores have doubled as a result of strengthening pop-up store sales at department stores and commercial facilities. A YouTube channel has been set up to provide health information and launched live commerce conducted by our employees. KENKODOJO's fan base has grown significantly by providing nutritional counseling from nutritionists and starting conversations that convey the mission of both the company and the brand.



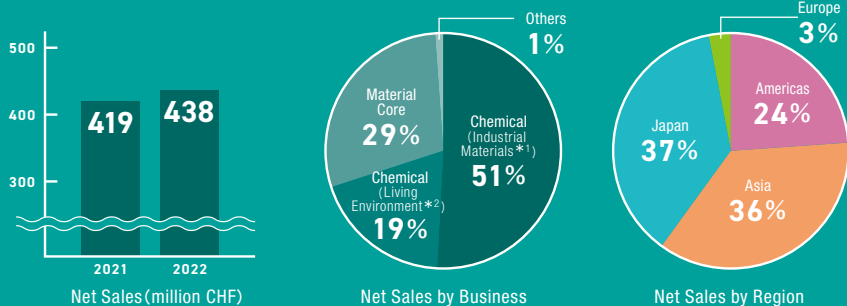
## Shine Detergent Keira for kitchen and bathroom expanded sales

Keira is a detergent designed to clean water-related stains to a shine. A video that shows before-and-after examples was shared on Instagram, placed on SNS sites as an ad, and delivered via TikTok. An influencer blogger who is a big fan of Keira shared a video showing her using Keira at home on SNS. The video gained over 2 million views, and online sales grew by 200% year-on-year.



# Industrial Business

Chemical  
Material Core  
E-Science



\*1 Adhesives for automobiles and electronics  
\*2 Sealants for construction

## Industrial Business overview in FY2022

The business environment in FY2022 was highly demanding for many reasons. There have been major supply chain issues due to global semiconductor shortages, the impact of the situation in Ukraine, and our customers — automobile and motorcycle manufacturers — continued to reduce production. However, we succeeded in achieving higher sales than the previous year through measures such as securing new customers and revising prices. On the other hand, operating income decreased despite efforts to reduce cost of sales, which were affected by soaring prices of raw materials such as chemicals and steel products.

In automobile adhesives, sales were strong in areas such as the various adhesives used in glass and car body manufacturing processes by automotive manufacturers in Japan, China, and North America, as well as FIPGs (Formed-In-Place Gaskets) for electric vehicle battery covers and door covers. In adhesives for electronics, there were solid sales of adhesives for large in-vehicle displays. The construction sealant and adhesive business saw steady sales in sealants for high-rise buildings in Japan and large buildings in China. The metal parts business grew sales due to increased orders for parts used by motorcycle manufacturers in Japan, Europe, the U.S., and China, motorcycle aftermarket products, and automobile parts in Thailand. In the new business sector, new products for pet owners were launched as a new target market for photocatalytic deodorization and sterilization systems, helping to increase sales even though the launch had been delayed due to the shortage of semiconductors.

## Future prospects

As the technical solutions group that supports the creation of healthy and comfortable living spaces for people across the world, the Industrial Business is leveraging our strengths in adhesive and metal processing technologies to strengthen the competitiveness of our existing businesses, expand sales areas, and develop businesses in related fields, while striving to create new living environment businesses such as the indoor air quality improvement business. In adhesives for automobiles and electronics, we expect strong demand for new adhesives arising from weight reduction, conversion to electric vehicles, and electrification in line with carbon neutrality in the automotive industry. We will also use our locations in Germany to expand business for automobile manufacturers in Europe. As for construction sealants and adhesives, we will expand our lineup of products such as interior adhesives, enhance one-component products which have high work efficiency, expand business in China, develop the market in Asia, and make containers environmentally friendly. In the metal parts business, we aim to grow business by increasing orders for brake discs used in large motorcycles, luxury bicycles, electric motorcycles, and small electric vehicles in China and India as well as metal parts for automobiles and ships. In the indoor air quality improvement business, we will enhance our product lineup for pet owners and undertake global expansion to expand the business.

# Industrial Business highlights : Sterilization and deodorization system

## E-Science

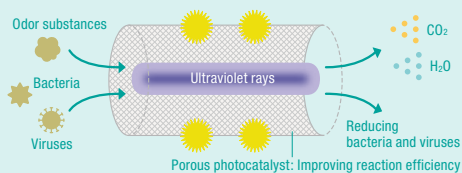
### Cultivating new businesses that provide healthy and comfortable air environments

#### Supporting healthy and comfortable living through air environments

Sunstar is developing businesses for health and comfort from oral health to the body, the air environment, and living and mobility spaces. Among these businesses, the sterilization and deodorization business supports healthy and comfortable living through improved air environments.



#### Adopting effortless sterilization and deodorization technology by photocatalyst



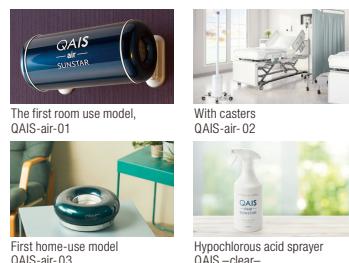
Conventional air purifiers either collect odor substances, bacteria, and viruses in the device or release a disinfecting and deodorizing agent into the air. In contrast, Sunstar's sterilization and deodorization system uses an ultraviolet light source and photocatalyst to remove odor substances and suppress bacteria and viruses, which are then returned to the air. The system does not require filter replacement or chemical refilling, making it easy to maintain its performance over a long period with little maintenance.

#### Expansion of business-use products



Initially, the product was deployed in schools, offices, hotels, hospitals, and nursing care facilities as a device to be integrated into air conditioning ducts in the ceiling and as a commercial deodorizer to be placed in garbage dumpsters. It was also integrated into the air conditioning systems of JR West's limited-express trains as a device for maintaining safe and secure air.

#### QAIS brand products rollout

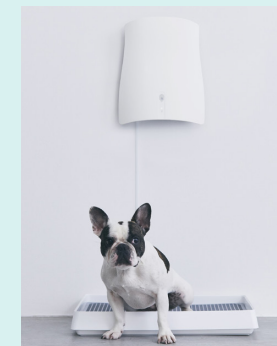


QAIS-air-01/02, in-room models with improved deodorizing performance, quietness, and stylish design made a breakthrough with their value appeal, which no other company can match, in creating "air that makes your body happy." We expanded our business by launching QAIS-air-03, a home-use model with a high level of interior design, and a deodorizing and sterilizing spray.

### Following the positive feedback on our home-use models, a new pet friendly model has been developed

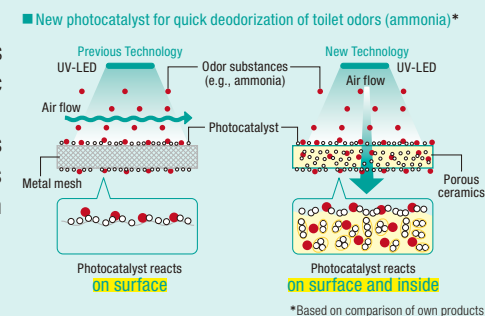
#### Released a new product targeting the pet market

The home-use model QAIS-air-03 was well-received for its premium design and high pet odor-elimination. Aiming to attract more customers in the pet market, we have developed a new model. In September 2022, we launched the new QAIS-air-04A1J, a wall-mounted model that can quickly remove pet toilet odors (ammonia odor rising upward). It is full of pet-oriented features that enhance safety and quietness. Although the launch was delayed due to a shortage of semiconductors, product reviews on internet sales sites continue to show high praise from pet owners, and there are high hopes for future sales.



#### Photocatalytic device performance dramatically improved

Sunstar's sterilization and deodorization systems have been using photocatalytic devices with fine mesh-like holes to boost the catalytic reaction efficiency. In the new model, photocatalysts are loaded on porous ceramics to improve reaction efficiency, which enables rapid deodorization and prevents odors from spreading throughout the room.



#### Toward global expansion of indoor air quality business

While advancing our business in Japan, we have been developing models for the global market and preparing to increase production. In 2023, we will launch our products in North America and China, and we will steadily expand our business globally.



# Chemical



Adhesives / Sealants for automobiles, electronic parts, and construction

## The adoption of our automotive adhesives is expanding worldwide

Adoption of windshield adhesives expanded in China and Asia, and adoption of various adhesives for car body bonding expanded in Japan, the U.S., and China.



## Increase in new orders for body paint and noise-insulating materials for automobiles

In the automotive adhesive business, we have received orders for car body materials and paints in the Americas, and for coated foamed noise-insulation materials in Japan.



## Increase in orders for adhesives for electric vehicles

Sales of FIPG (Foamed-In-Place Gaskets) and urethane adhesives for electric vehicle battery cover applications by automakers in Europe, Japan, and China expanded.



## Automotive adhesives for large-size displays sell well

Sales of adhesives for large-size and narrow-frame automotive displays are expanding in Japan. We plan to expand our business to Europe and Asia as well. Preparations for mass production are underway for new orders for heat-dissipating agents for in-vehicle cameras since demand is growing for automatic driving.



\* for illustrative purposes

## Chemical

### Highly durable and weatherproof sealant fully adopted for Japan's tallest skyscraper

Penguin Seal SA7500, a Silyl terminated Acrylate two-component sealant that can contribute to extending the maintenance cycle of buildings, has been fully adopted for the Toranomon Azabudai Project, the tallest skyscraper in Japan, which is currently under construction.



### Obtained large projects with construction sealant in China A new fire-retardant-type product was also introduced

Penguin Seal SR2518, a one-component silicone sealant, was adopted for large projects such as high-rise buildings and landmarks. In 2022, we expanded our product lineup by adding a new flame-retardant-type sealant, Penguin Seal SR2519.



## Material Core

Metal parts for motorcycles and automobiles



### Increase in the use of aluminum hub floating brake discs by Chinese motorcycle manufacturers

High-grade aluminum hub floating brake discs have been adopted for large motorcycles for the Chinese market, and mass production has begun at our Indonesian plant. Business in China has further expanded.



### Further expansion of metal parts for automobiles

In 2022, drive transmission parts made with fine blanking presses in Thailand showed solid growth. Business for automobiles continued to expand with mass production orders, and new orders were also received for 2023.



# Sustainability

The Sunstar Group aims to become an indispensable company for society in line with its long-term vision for 2032, the 100th anniversary of its founding. To realize this vision, we are creating new businesses that "contribute to the well-being of people and the planet" and implementing ESG-driven management with consideration for the environment and society.



In 2022, we celebrated the 90th anniversary at each Sunstar Group company around the world. Tapestries with a mosaic artwork of all Group employees' faces visualizing One Team and commemorative badges were distributed to all Group companies. Colleagues around the world were connected online to celebrate the 90th anniversary together, share their voices and exchange their ambitions for the 100th anniversary.

## Sunstar Group Long-Term Vision 2032

### Ideal Image in 2032

Sunstar is a company that contributes to enhancing healthy life expectancy and quality of life (QOL), starting from good oral health to preventive medicine and holistic wellness. It is important for us to be recognized as the most trustworthy company in the world, providing total support for people to live a healthy and comfortable life in all living environments including mobility and buildings.



We will contribute to solving social issues through our business aimed at achieving our ideal image in 2032. At the same time, we will prioritize responses to areas demanded by society - **Environment**, **Human Resources**, **Management Platform**, and **partnerships** with stakeholders. We will create new values that contribute to the well-being of the people and the planet through partnerships with stakeholders.



SUSTAINABLE DEVELOPMENT GOALS						Sunstar's SDGs Key Goals	
1 POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	3 GOOD HEALTH AND WELL-BEING	We will provide products and services that will help people live healthier lives, from the promotion of oral and overall health to improving the living environments of people all around the world.
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	11 SUSTAINABLE CITIES AND COMMUNITIES	We will work to make living environments more secure and comfortable, with regards to mobility and buildings.
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS		12 RESPONSIBLE CONSUMPTION AND PRODUCTION	We will work to prevent, reduce, and reuse waste products through the entire life cycle of our products—from procurement to manufacturing, logistics, sales, and even after consumer use.

Sunstar's sustainability web page  
<https://www.sunstar.com/sustainability/>



## Environment

### Group companies implemented initiatives to achieve mid-term environmental targets and environmental activities necessary for our community

#### Mid-term environmental targets

As part of its environmental initiatives, Sunstar has established Group-wide global environmental targets to be achieved by 2030.

(1) Plant-based/recycled plastics used in containers and packaging: 50%



(2) Recyclable or reusable material used in post-consumer containers and packaging: 100%



(3) FSC®-certified or other certified paper used in containers and packaging: 100%



(4) RSPO-certified or other certified palm oil used in products: 100%



(5) Renewable electricity used in own plants and offices: 100%



(6) Reduction of water consumption per production in own plants: 20% reduction per kg compared to FY2020



(7) Reduction of total CO<sub>2</sub> emissions from own plants (Scope 1 + 2): 85% reduction compared to FY2020



#### Efforts to meet targets

##### ● Reduction of the environmental impact of products, packaging and in-store sales promotion tools

We have proceeded to reduce the amount of plastic in our products and packaging by replacing it with plant-derived and recycled materials. We are also actively driving the replacement of plastic with renewable materials such as wood and paper for fixtures and sales promotion tools used in storefronts in Europe, the U.S., and Japan.



##### ● Collection and recycling test program for used plastic

In the Netherlands, we collaborated with TerraCycle on a two-year test program ending in March 2023 to collect and recycle used interdental cleaners. In Japan, we participated in a test program to collect and recycle refill packs for daily use products in collaboration with Kobe City and other companies in the industry. We will continue to work on designing products and packaging materials with reduced environmental loads and creating a system for resource recycling.



##### ● Biodiversity conservation and forest protection initiatives

To protect biodiversity and the natural environment, we have begun supporting forest protection and tree planting in the U.S. and Germany. In Germany, we have started activities to enrich local greenery and ecosystems by keeping honeybees on the factory premises. Employees actively participate in volunteering activities to exterminate invasive alien plants in Switzerland and cleanup activities in the neighborhoods of business sites in various countries. We are also promoting the use of RSPO-certified palm oil as a raw material and FSC®-certified paper for packaging.

\* Roundtable on Sustainable Palm Oil (RSPO): Sunstar's RSPO membership progress <https://rspo.org/members/12085>  
 \* Forest Stewardship Council® (FSC®): An independent, non-profit organization that promotes the responsible management of forests globally



##### ● Reduction of CO<sub>2</sub> emissions at our sites

We are reducing CO<sub>2</sub> emissions by switching to renewable electricity for power used at our plants and offices. We maintain a high ratio of renewable electricity at our Swiss headquarters, our toothbrush and interdental brush factory in Germany, and our factories and offices in Japan. Solar panels have been installed at some of our plants in Germany and Japan, and new solar panels are being installed at our metal parts plant in Singapore and our adhesives plant in Germany. In addition, we have begun operating electric vehicle charging stations for employees in Germany.



## Human Resources

We are developing people and an organizational structure that respect diversity of individual values and continue to grow in response to the changing times

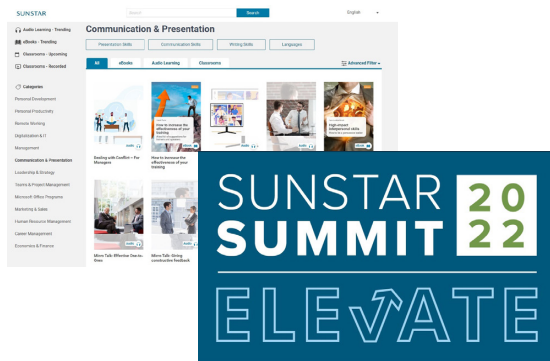
### To enhance individual and organizational well-being

From 2021 to 2022, we conducted management risk mitigation workshops by the management teams of the four regions — Japan, the Americas, Europe, and Asia — and an employee engagement survey in Japan. Based on the findings, we have defined initiatives to enhance employee job satisfaction, creating encouraging work environments, and other organization development initiatives that we are advancing across the organization.



### Striving to become an autonomous and highly competitive group of professionals

E-learning platforms and educational programs to support employee-driven career development were implemented in Europe, the U.S. and Japan. In addition, we proactively support human resource exchange through joint educational initiatives on topics such as digital transformation and key market trends as well as global trainee programs.



### For the promotion of teamwork management that fuses diverse individuals

Several programs were developed to promote collaboration, diversity, and inclusion. In Europe, the Sunstar Connect Program was held to deepen a common understanding of our corporate culture and fostering communication beyond the boundaries of functions, departments, and countries. On the occasion of the company's 90th anniversary, we organized a global online event. Video messages by employees with diverse backgrounds and values from all over the globe reinforced the sense of belonging and cohesion across Sunstar Group.



### Initiatives enhancing employee well-being and performance

As a company undertaking business related to health, we maintain programs supporting the physical and mental well-being of our employees. For example, we create opportunities for sporting events and exercise at all our business locations around the world. In Japan, we introduced the "Sunstar Gymnastics" that focuses on strengthening leg and back muscles. We were also certified as an Excellent Health and Productivity Management Organization in Japan.



## Partnership

### We continue to globally communicate the importance of oral health in maintaining general health

Periodontal disease is one of the main factors in tooth loss. It also affects the progression of systemic diseases, such as diabetes. Oral frailty, a decline in the ability of the mouth to chew and swallow that hastens the aging process, is also gaining attention.

Sunstar continues to raise awareness about the importance of oral health maintenance for general health worldwide. In 2022, we held oral and overall health awareness seminars such as for distributors and dentists in China, and for the general population and members of the construction industry in Japan.



The Sunstar Foundation, working to promote dental and oral health in anticipation of benefits for overall health, annually awards research grants to young Japanese researchers conducting cutting-edge research into the relationship between periodontal and systemic diseases. The grants are used to fund studies at institutions such as the Joslin Diabetes Center affiliated with Harvard Medical School, with two researchers sent there in 2022.

Sunstar also presents the World Perio Research Awards and the Perio Link Award every three years, recognizing advanced research into the relationship between periodontal and systemic diseases. A presentation ceremony was held during the 2022 European Federation of Periodontology conference.



## Sunstar's History and Future



Sunstar engages in businesses that lead to the promotion of systemic health and the development of comfortable living spaces in keeping with the company motto, "Always strive to help people everywhere achieve better health and enhance their quality of life."

Since 1979, we have been sending researchers to the State University of New York, an institution renowned for its periodontal disease research. As part of their activities with the University's pioneering research, Sunstar's scientists were quick to pick up on the relationship between periodontal and systemic diseases. Sunstar has been supporting research in this field by hosting international symposia on the subject in locations across the globe, gathering medical and dental professionals together. Since the first symposium in 1986, we have built up the GUM brand business while leading the way in raising awareness about oral and systemic health. This is especially important today, with interest in oral health growing in recent years with the aging of populations around the world and the COVID-19 pandemic.

Also growing in significance are automobile adhesives and drivetrain metal parts, which support electric vehicle weight reductions in response to environmental concerns, as well as industrial sealants for enhancing building durability. Sunstar tackles the challenges of these social and environmental issues head on, aiming to improve people's well-being as well as that of the planet.



Sunstar was founded in 1932 and originated in the business of bicycle parts and rubber glue for flat tire repair. Utilizing the manufacturing facilities of metal tube containers for rubber glue, the company commercialized toothpaste and expanded as "Consumer Business". The bicycle parts and rubber glue business was shifted and expanded to metal parts for motorcycles and adhesives and sealants for automobiles, construction, and electronics as "Industrial Business".

