# Financial Results Presentation for the 2nd Quarter of FY 2022

## October 27, 2021



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# I. Financial Results for the 2nd Quarter of FY 2022

### I – 1. Overview

1

Year-on-year net sales increased by 7.9%, while profits increased by 52.9%. In addition, when compared with periods before the novel coronavirus disease (COVID-19) pandemic, net sales recorded the second-highest number following that at the corresponding period of the year before last, and in terms of profits, profit attributable to owners of parent was at a high level as profit hit a record high.

In the Chemicals industry, all sub-segments (Inorganic Chemicals, Organic Chemicals, and Fine Chemicals) observed higher sales than the previous year, with the year-on-year net sales up by 14.8% and segment profits up by 69.6%.

3

2

In the Housing Materials business, the impact of COVID-19 continues to be felt, with year-on-year sales down by 5.9% and segment profits down by 20.9%.



### I – 2. Consolidated Financial Results

#### ■ Highlights of Financial Results for the Q2 of FY 2022

(Millions of yen)

	Consolidated Cumulative Q2				Increace	
	FY2	021	FY2022		of Amount	Changes
	Amount	Percentage	Amount	Percentage		
Net Sales	23,408	100.0%	25,266	100.0%	1,858	7.9%
Operating Income	2,609	11.1%	3,795	15.0%	1,186	45.5%
Ordinary Income	2,822	12.1%	4,116	16.3%	1,294	45.9%
Net Income Attributable to Owners of the Parent	1,924	8.2%	2,943	11.6%	1,019	52.9%
Exchange Rate (USD)	107		110			
Exchange Rate (EUR)	120		131			

- Net sales in the Housing Materials business were sluggish due to the continuing impact of COVID-19. However, the Chemicals business observed a recovery trend and posted a significant year-on-year increase. Overall, sales increased by 7.9%, second only to the record high set in 2019.
- In terms of profits, the year-on-year operating income increased due to increased sales volume and higher unit prices in the Chemicals business.

For the second quarter, the profit earned has been the highest ever recorded.

• The yen depreciated against both, the U.S. dollar and the euro. As a result, foreign exchange impacted sales positively, resulting in an earning of 261 million yen over the previous year.



#### I – 3. Sales and Profit by Business segments(consolidated)

(Millions of yen)

		Consolidate Cumulative Q2				
Net Sales		FY2021	Percentage	FY2022	Percentage	Changes
	Inorganic Chemicals	4,669	19.9%	5,877	23.3%	25.9%
Chemicals	Organic Chemicals	5,744	24.5%	5,991	23.7%	4.3%
Operations	Fine Chemicals	3,882	16.6%	4,538	18.0%	16.9%
	Subtotal	14,297	61.1%	16,407	65.0%	14.8%
Housing	Interior, Exterior Finishes and Paving Materials	710	3.0%	672	2.7%	▲ 5.3%
Materials	Exterior Products	8,001	34.2%	7,527	29.8%	▲ 5.9%
Operations	Subtotal	8,711	37.2%	8,199	32.5%	▲ 5.9%
Other		399	1.7%	660	2.5%	64.9%
Total		23,408	100.0%	25,266	100.0%	7.9%

	Consolidate Cumulative Q2				
Segment Profit	FY2021	percentage	FY2022	percentage	Changes
Total of Chemicals Operations	2,131	81.7%	3,614	95.2%	69.6%
Total of Housing Materials Operations	1,337	51.2%	1,058	27.9%	▲20.9%
Other	▲ 859	▲32.9%	▲ 877	▲23.1%	2.0%
Total	2,609	100.0%	3,795	100.0%	45.5%



#### I – 4. Overview of Sales by Segment (Chemical Products)



①Sales of insoluble sulfur, a material for radial tires, have largely surpassed those of the previous fiscal year, which was affected by the spread of COVID-19, backed by a rapid recovery in demand for automobiles and tires since the second half of the previous fiscal year. Sales of carbon disulfide for rayon and cellophane, and sodium sulfate for bath agents and detergents increased year on year due to a rebound from the COVID-19 pandemic.

- ②Regarding chlorinated isocyanuric acid for disinfectants, sales of agents for swimming pools recovered in domestic market, thanks to the partial resumption of swimming lessons at schools. Sales of agents for plumbing systems (sanitary devices) remained strong with increased demand for sterilization and cleaning as a result of rising awareness of hygiene at homes. Sales remained strong in the U.S. market, backed by the growing home swimming pool market due to a recovery in economic conditions and stay-at-home demand.
- ③Regarding Glicoat-SMD, a heat-resistant soluble OSP (Organic Solderability Preservative) for printed wiring boards, sales remained solid, against a backdrop of the growth of electronics markets worldwide. Sales of advanced& specialty chemicals such as epoxy resin curing agent (imidazoles) and resin modifier (glycoluril derivatives) increased year on year, backed by a recovery in demand for use in electronic components and automobiles.



#### I – 5. Overview of Sales by Segment

#### (Housing Material Products)



Although the number of new housing starts showed signs of a slight recovery, sales of interior, exterior finishes and paving materials and exterior products remained sluggish, as governments and private companies deferred or had a wait-and-see attitude for their projects or capital investment, against a backdrop of weak domestic demand and uncertainty about the future under the state of emergency declaration. Profitability also declined due to soaring prices of raw materials including aluminum ingots.



#### I – 6. Analysis of Increase/Decrease in Chemical Segment Profit





#### I – 7. Analysis of Increase/Decrease in Housing Material Segment Profit



#### I – 8. Consolidated Balance Sheets

(Millions of yen)

	2021/3	2021/9	Increase of amount	
Current assets	65,024	61,981	▲ 3,043	Cash and deposits (▲1,230) 、 Notes and accounts receivable – trade (▲1,254)
Non-current assets	42,319	43,816	1,497	Machinery, equipment and vehicles, net (+987)
Total assets	107,344	105,798	▲ 1,546	
Current liabilities	15,702	14,721	<b>▲</b> 981	
non-current liabilities	15,075	13,524	▲ 1,551	Retirement benefit liability ( $\blacktriangle$ 1,559)
Total liabilities	30,778	28,246	▲ 2,532	
Total net assets	76,566	77,551	985	Retained earnings (+990)
Total liabilities and net assets	107,344	105,798	▲ 1,546	
Capital-to-asset ratio	70.5%	72.5%	2.0%	
ROE	7.9%	7.7%	▲0.2%	



#### I – 9. Consolidated Statements of Cash Flows

(Millions of yen)

	2020/9	2021/9
Net cash provided by (used in) operating activities	3,093	2,275
Net cash provided by (used in) investing activities	(1,043)	(626)
Net cash provided by (used in) financing activities	(2,289)	(1,928)
Net increase (decrease) in cash and cash equivalents	(279)	(230)
Cash and cash equivalents at end of period	32,327	36,977
Flee cash flow = CF from operating activities - CF from investing activities	2,050	1,649

#### ♦ Cash flows provided by operating activities totaled ¥2,275 million.

Major sources of revenue : Profit before income taxes of ¥4,135 million, decrease in trade receivables of ¥1,632 million Major expenditure factors : Contribution to employees' retirement benefits trust of ¥1,500 million, income taxes paid of ¥1,415 million

#### ♦ Cash flows used in investing activities totaled ¥626 million.

Major sources of revenue : Proceeds from redemption of securities of ¥2,000 million Major expenditure factors : Purchase of property, plant and equipment of ¥1,681 million

#### ♦ Cash flows used in financing activities totaled ¥1,928 million.

Major sources of revenue : Proceeds from long-term borrowings of ¥100 million

Major expenditure factors : Purchase of treasury shares of ¥1,290 million



# II. Forecast of Financial Results for FY 2022

#### II – 1. The Full-Year Financial Results Forecast (Consolidated)



Exchange rate assumed: 105 yen/US dollar, 128 yen/Euro

Note: Revisions to the consolidated earnings forecasts most recently announced: No

#### II – 2. Capital investment, Depreciation, R&D Expense(Consolidated)



	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022 Forecast	(Millions of yen)
Capital Investment	3,815	1,628	2,073	1,961	4,106	6,058	
Depreciation	1,645	2,318	2,281	2,189	1,835	2,121	
R&D Expenses	1,235	1,310	1,295	1,338	1,207	1,412	



# **III.** Long-Term Vision Challenge 1000 **"STAGE 1" Progress Status**

#### III - 1. Outline of Challenge 1000 (1)



Develop up a long-term vision, address future themes, and aim to achieve results



### III - 2. Outline of Challenge 1000 (2)



#### III – 3. Financial goals



😝 SHIKOKU 📗

STAGE 1 STAGE 2 STAGE 3 19

#### III – 4. Progress Summary (FY2021-FY2022 Q2)

Financial Targets	<ul> <li>Recovery despite the impact of COVID-19</li> <li>FY2021 is expected to be at par with FY2019 as a result of the recovery phase from COVID-19.</li> <li>Although the progress of sales is currently lagging, operating profit and operating profit margin are expected to match the plan.</li> </ul>
Investment Business	<ul> <li>Investment in production facilities was executed as planned</li> <li>Production facility (TAP-4) for the Fine Chemicals business was completed and became operational.</li> <li>The production facilities for chlorinated isocyanuric acid in the Organic Chemicals business is under construction as planned.</li> <li>Fine Chemicals business will be able to strengthen its production of materials for cutting-edge photoresists, while the Organic Chemicals business will be able to increase the flexibility of its production brands.</li> </ul>
Yonpou- yoshi (Contributions to Stakeholders)	<ul> <li>Conduct contribution activities for each stakeholder</li> <li>Customers: Provide products in accordance with SHIKOKU QUALITY*</li> <li>Employees: Create an environment that fosters a culture of challenge</li> <li>Shareholders: Implement share buyback and plan to list on the prime market.</li> <li>Society: Use 1% of ordinary income for social contribution; sponsorship of regional events (75th Kagawa-Marugame International Half Marathon, etc.)</li> </ul>

SHIKOKU QUALITY: The SHIKOKU QUALITY is ensured in all the products, services, and values delivered to customers. The Group aims to build its brand by focusing not only on product quality, but also on services.



#### III – 5. Progress on Business Reform Policy

#### Next FY2023 is the final year of "STAGE 1".

We will achieve our goals and aim for further growth in "STAGE 2".

Business Name	Торіс	STAGE 1 Target
Inorganic Chemicals	<ul> <li>Continue efforts to improve the quality of insoluble sulfur</li> <li>Consider commercialization of products developed from sulfur</li> </ul>	Consolidated sales of 14 billion yen (Results in 2021/3: 10.4 billion yen)
Organic Chemicals	<ul> <li>Enhance production facilities (bulk products, ODM products, etc.)</li> <li>Strengthen sanitary products business</li> </ul>	Consolidated net sales: 10 billion yen (2021/3 results: 10.7 billion yen)
Fine Chemicals	<ul> <li>Functional materials: Strengthen response to demand for semiconductor process materials. Develop new applications for resin modifiers (low dielectric, CFRP)</li> <li>Glicoat-SMD: Aim to sell new OSPs that are halogen-free and have long-term storage stability</li> <li>GliAS: Start handling Glicoat-SMD automatic analyzer. Aim to propose total solutions</li> <li>GliCAP: Approval of activities and achievements</li> </ul>	Consolidated sales of 8 billion yen (2021/3 results: 8.7 billion yen)
Housing Materials	<ul> <li>Strengthen sales activities by leveraging high- value products</li> <li>Create an environment that can improve production efficiency through digitization, systemization, and automation</li> </ul>	Consolidated net sales: 25 billion yen (2021/3 results: 18.7 billion yen)



#### **III** – 6. Progress on Companywide Reform Policy

We are working to build a foundation that can accommodate diverse work styles, fostering a sense of selfimprovement, and creating a framework for change, and we are generally making progress as planned.

Item	Торіс
Creation of values	<ul> <li>Enhance brand value (Formulation of SHIKOKU QUALITY)</li> <li>Strengthen environmental initiatives (Create CSR report)</li> <li>Implement measures to create new businesses (Implement internal recruitment)</li> </ul>
Creation of reserve energy	<ul> <li>Promotion of telework and other initiatives to improve work efficiency</li> <li>Promote telework, which allows employees to work efficiently regardless of their physical location</li> </ul>
Creating of operational bases	<ul> <li>Consolidation of sales bases</li> </ul>
Creation of organization	<ul> <li>Start discussion to determine the organizational structure to be pursued</li> <li>Transition to a holding company structure (see page 27 for details)</li> </ul>
Creation of company climate	<ul> <li>Dissemination of long-term vision and exchange activities to eliminate barriers between divisions</li> <li>Hold workshops, roundtable discussions, and other events</li> </ul>
Creation of human resources	<ul> <li>Create an environment in which employees can actively tackle challenges (Review the evaluation system, including the introduction of challenge goals with a point system)</li> </ul>



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## **Ⅲ** – 7. Pillar for Strategy (Companywide Reform Policy)

### **Semiconductor Process Materials**

#### **♦** Fine Chemicals starting the operation of multipurpose plant

The demand for semiconductors has been increasing because of IoT and autonomous cars.

Needs for high-quality, high-function materials are growing among manufacturers who manufacture and develop semiconductor process materials.

A plant (TAP-4) with high quality equipment, such as low metal control for cutting-edge semiconductor process materials became operational in July 2021 The company will promote the commercialization of extreme ultraviolet (EUV) photoresist materials, etc., which will support the deepening of next-generation semiconductors.

## **Chlorinated Isocyanurates**

#### Construction of a new plant for Chlorinated Isocyanurates at Kitajima Office, Tokushima Plant (NEO2022)

Globally, the impact of transboundary movements of aquatic organisms in ballast water in concurrence with the traffic of ships on the ecosystems has turned serious. There are also many areas where it is difficult to secure clean water, and solution of the social issues such as improvement in the water sanitation environment is urgently demanded. It was decided to build a new plant to respond to the increasing demands for Chlorinated Isocyanurates for purposes such as improving water environment. Its construction began in September 2020 with approximately 5 billion yen in investment, and it is scheduled to be completed in April 2022.





TAP-4 (Tokushima Plant)





### III - 8. Pillar for Strategy (Achievement of SDGs)

#### Creation and publication of SDGs Handbook on the website



In the SDGs Handbook, we have introduced goals related to each of our businesses and the social issues that we are contributing towards.



### **Ⅲ**-9. Pillar for Strategy (Achievement of SDGs)

## Chemical operations



- Organic Chemicals contributes to the supply of safe water to people and conservation of marine environment.
- => Providing a good hygienic environment for people around the world through the disinfection, cleaning, and bleaching technologies.

## Housing Materials operations





- Contributing to planning cities and communities where people can live securely and safely.
- => Decorative and Home Exterior Products provides the lineup of high-strength products and ensures high safety.
- => Interior Materials uses human- and environmentallyfriendly raw materials and provides space where people lead a healthy life. 25



#### III – 1 0. Shareholders Return–Transitions in Dividend Payouts–





## IV. New Organizational Structure

#### **IV**-1. Transition to a Holding Company Structure-1

The company will begin to prepare for the transition to a holding company structure in January 2023.

### **Objectives**

- Enhancement of the business operation structure Speed up decision-making by boldly transferring authority to each operating company
- (2) Governance structure and redefinition of the head office's role Specialize the holding company in group management functions Spinning off head office indirect divisions to eliminate duplication and optimize operations
- (3) Strengthening the development of management talents From the perspective of strengthening sustainable management capabilities, promote the development of future management human resources through autonomous management of the operating companies

Strengthen the group structure and speed up decision-making in order to respond to changes in the business environment and challenges.



#### $I\!V$ – 2. Transition to a Holding Company Structure- 2

## [Image of Group management structure after the transition]





#### ♦ Schedule

	2022			2023
	Jan	Apr.	June	Jan. 1
Schedule for Transitioning to Holding Company Structure	Establish a preparation company for transfer to holding company	Approval of the absorption-type company split agreement by the Board of Directors	Special resolution at the shareholders' meeting	Succession of rights and obligations to the new company Commencement of the holding company structure

The Group will be reborn as a company having a new management structure, and will strive to achieve the long-term vision, "Challenge 1000" to ensure its leap toward a 100-year company in the next 25 years.



# Thank you for listening.

V. References

### V – 1. Corporate Profile

(As of September 30, 2021)

- Company name
- Code number
- Stock exchange listing
- Incorporated
- Head office
- President and C.E.O.
- Capital
- Number of employees
- Net sales

- SHIKOKU CHEMICALS CORPORATION
- 4099 Industry : Chemicals
- Tokyo
  - October 10, 1947
  - Marugame, Kagawa Prefecture
- Naoto Tanaka
  - 6,867 million yen
  - 1,218 (Consolidated)
  - 49,590 million yen (Consolidated)



### V – 2. Business Structure

Two main business pillars, which are chemical products and housing materials.



### V-3. History

Oct 1947	Established in Marugame, Kagawa Prefecture with a capital of 2 million yen as a producer of carbon disulfide (=> inorganic chemical products)
Oct 1957	No. 1 Tokushima Plant (now Tokushima Plant's Yoshinari location) was constructed and began operations in the production of sodium sulfate (=> inorganic chemical products)
May 1961	CMC production began at No. 1 Tokushima Plant. We applied CMC to wall material later
Jun 1962	No. 2 Tokushima Plant (now Tokushima Plant's Kitajima location) was constructed
Oct 1962	The Company's shares were listed on the Second Section of the Tokyo Stock Exchange
May 1964	Japan's first operations to produce chlorinated isocyanurates (=> organic chemical products) were launched at No. 2 Tokushima Plant
Dec 1969	The Company began production of OSP (Organic Solderability Preservative) (which was later called Glicoat-SMD (=> Fine Chemicals) for PWBs (Printed Wired Board) and other electronic components
Sep 1970	The Company began production in the field of housing materials, launching production of interior finishes (JULUX) at No. 2 Tokushima Plant
Jun 1972	The Company began production and sales of accordion gates (=> Exterior Products)
Mar 1975	The Company moves its share listings from the Second to First Sections of the Tokyo Stock Exchange and Osaka Securities Exchange
Jul 1975	Tadotsu Plant was constructed in Tadotsu, Kagawa Prefecture
Nov 1975	Full-scale production of imidazole (=> Fine Chemicals) began at No. 2 Tokushima Plant (test production began in 1968)
Jun 1981	The Company opened a representative office in Los Angeles (which later became an overseas subsidiary as SIC in 1985)
Jul 1984	Production of insoluble sulfurs (=> Inorganic Chemicals) began at Marugame Plant
Sep 1992	The Research Center (now R&D Center) was constructed in Utazu, Kagawa Prefecture
Oct 1995	Ranzan Plant was constructed in Ranzan, Saitama Prefecture
Jul 2006	Shikoku (Shanghai) Co., Ltd. was established in Shanghai
2008	The Company began sales of a roughening agent for PWBs (=> Fine Chemicals), and constructed a new plant for Glicoat- SMD at Marugame Plant
Aug 2013	Tokushima Advanced Chemicals Plant-3 (TAP-3) facility was constructed at Tokushima Plant
Sep 2014	Converted Nippon Ryutan Kogyo Co., Ltd., the only carbon disulfide production company in Japan, into a consolidated subsidiary
Apr 2015	Offices were established in Taiwan and Singapore
Oct 2016	Physical Testing Laboratory was constructed at R&D Center
Mar 2017	Insoluble sulfur production facilities were enhanced
Apr 2017	Converted Nippon Koki Co., Ltd. into a subsidiary
Jul 2021	Tokushima Advanced Chemicals Plant-4 (TAP-4) facility was constructed at Tokushima Plant



#### V – 4 . History and Sales Trends





# **Chemicals Operations**

## **Chemicals Operations**

# **1**Inorganic Chemicals

#### **V** – 5 . Inorganic Chemicals





#### V – 6 . Insoluble Sulfur-Product Introduction-

- Application: Vulcanizing agent for rubber
- Main customers: Domestic and overseas tire manufacturers
- The raw material rubber is hard, and it acquires the characteristic to extend and contract by adding sulfur and heating (vulcanizing).
- When normal sulfur is used in the production process of radial tires, sulfur blooming (deposition) occurs on the surface of rubber and cause poor adhesion of rubber. Since insoluble sulfur is dispersed in the material rubber, it can be used to suppress blooming.
- For production of insoluble sulfur, polished handling technique for the company foundation product "carbon disulfide" is required.
- □ High quality is demanded in insoluble sulfur by tire manufacturers.
- In March 2017, production facility expansion was completed, and our production capacity was increased to 1.3 times.



Manufacturing processes for insoluble sulfur (schematic diagram)



## **Chemical Operations**

# **2**Organic Chemicals

#### **V** – 7 . Organic Chemicals



#### V – 8. Chlorinated Isocyanurates-Product Introduction-

- Applications: Sanitizing agent for swimming pools and septic tanks, chlorine-based sanitizing agent for spas and home baths
- □ Main customers: Swimming pool operators, schools, general consumers (U.S.)
- Main component: Chlorinated Isocyanurates
- Compared to other disinfectant agents for swimming pools, "NEO-CHLOR" is characterized by longer duration in outdoor pools and little quality deterioration even after a long period of storage, as it undergoes little degradation caused by ultraviolet rays.
- □ It delivers strengths in "NAPIX," an automatic chlorine feeder for swimming pools and business baths.
- Utilizing the strong oxidation, bleaching, and cleaning power of chlorine, we are developing various fields of application such as industrial and home sanitary field, ballast water (seawater used as weight on the bottom of the ship) treatment, drinking water application, and sanitation management applications in various facilities.



#### NEO-CHLOR product group





Chlorinated Isocyanurates

#### Image of ballast water sanitization

## **Chemical Operations**

## **③Fine Chemicals**

#### V - 9. Fine Chemicals





#### [Major products]

- Glicoat-SMD... Water-soluble rust preventive agent for printed wiring boards (OSP)
- Advanced & Specialty Chemicals...

Imidazoles (curing agent of epoxy resin) Resin modifier, raw material for drug

- Raw material for heat-resistant wire varnish
- Solder resist



#### V – 1 0. OSP: Organic Solderability Preservative-Product Introduction-

- Application: Water-soluble rust preventive agent for printed wiring boards OSP: Organic Solderability Preservative]
- Main customers: Printed wiring board manufacturers all over the world
- By forming an organic coating on the copper circuit of the printed wiring board to prevent oxidation of the exposed copper circuit, it ensures good soldering performance in the implementation process, and contributes to reliable electronic component manufacture.
- The main component of OSP is imidazole, which has a property to selectively undergo chemical reaction with copper. Our strength is that we are also an imidazole manufacturer and can synthesize the main ingredient to suit the required properties of OSP.
- While rust preventive agents for printed circuit boards include metal plating in addition to OSP, the percentage of OSP is still increasing.
- Glicoat-SMD has acquired a lot of material designations from major electrical manufacturers, and has become an industry standard.

By increasing the environmental performance ahead of other companies, we are increasing the adoption results for automotive electrical components and semiconductor package boards.

 Printed wiring boards going through Glicoat-SMD treatment tank





### V – 1 1. Advanced & Specialty Chemicals-Imidazoles

- □ Application: Curing agent and curing accelerator for epoxy resin<sup>\*</sup>, raw material for drugs
- Main customers: Resin material manufacturers and drug manufacturers
- Imidazole is used in a wide range of applications, including curing agent for epoxy resin and urethane resin, raw material of drugs and agricultural chemicals, and raw material of various industrial chemicals such as rust preventive agents.
- The majority of our company sales come from application as an epoxy resin curing agent.
   Epoxy resin which used imidazole as a component has optimal properties for electrical and electronic component applications.
- We have a lineup of various imidazoles to support the diverse curing speeds and properties demanded by the users.
- In the fields where competitive products (non-imidazole products) were strong, there is a movement for customers to newly adopt imidazole to improve the product performance.
- \*Epoxy resin: A collective term for resin-like compounds with epoxy groups that readily react at the ends of a molecule, and thermosetting synthetic resins that are formed by polymerizing the compounds with curing agents. Used in printed circuit boards, paints, etc. in addition to adhesives.



### V – 1 2. Advanced & Specialty Chemicals-Imidazoles



### V – 1 3. Focused Products (Printed Wiring Boards Agents)

#### **GliCAP**<sup>®</sup>

- Adhesion improving agent between copper circuit and resin on printed wiring boards.
- Conventionally, unevenness was formed on surface by roughening (etching) the copper so that the adhesion to resin was improved by "mechanical bonding" (anchor effect).
- As the performance of semiconductors is improved, it is becoming more difficult to roughen the copper on package boards implementing high performance semiconductors, with the copper circuit width decreasing to ultrafine level.
- Copper circuits with smooth surface are required for high-frequency server boards for which further acceleration is being demanded to achieve practical application of the 5th generation mobile communication system (5G), since transmission loss is caused by the unevenness of the copper surface in the high-frequency range.
- GliCAP® has both properties to "strongly bind to resin" and "strongly bind to copper," and can improve the adhesion "chemically" without roughening the copper surface.
- We are including applications other than those in printed circuit boards for GliCAP<sup>®</sup> in the future.



### V – 1 4. Focused Products (Advanced & Specialty Chemicals)

- Advanced materials
- Advanced materials at our company refer to the products (compounds) that can improve various functions by blending them as materials for electronic parts such as semiconductors that are used in electronic devices, etc.
- Demands for improvement in the properties of resin materials to be used (heat resistance, electrical properties, etc.) are increasing as electronic devices evolve, and there are increasing opportunities to consider the functional materials of our company.
- The range of examination for the functional materials of our company is quite wide, and examinations are being made even with carbon fiber reinforced plastics (CFRPs) that are used as structural materials for automobiles and aircrafts with a purpose to improve heat resistance and strength.
- Using the organic synthesis technology cultivated with imidazole and isocyanuric acid, our company is committed to research and development of new functional material products.
- Construction of a plant equipped for high quality such as low metal control has been decided in order to produce state-of-the-art semiconductor process materials.

Its construction began in February 2020, and is scheduled to be completed in July 2021.





### V – 1 5. Focused Products (Advanced & Specialty Chemicals)

#### A new isocyanuric acid derivatives

- We developed this material by utilizing isocyanuric acid synthesis technology we have accumulated.
- It has excellent heat resistance, light resistance, and transparency, and is used as a modifier for sealing agent, etc.
- New adhesion improver
  - A resin modifier that improves adhesion to inorganic materials such as metals through addition to the resin. Since it delivers adhesion equivalent to the conventional modifiers while having no sulfur content, it can improve the metal corrosivity, which was a problem with the conventional product.
  - We are developing its application in a wide range of resin materials including epoxy system commonly used in electronic parts, acrylic system, urethane system and polyimide system.
- Benzoxazine
  - A resin with excellent heat resistance, flame resistance and electrical properties.
  - Examination is being made as a semiconductors sealing agent and carbon fiber reinforced plastics (CFRPs).

Benzoxazine





### V – 16. Focused Products (Advanced & Specialty Chemicals)

#### Glycoluril derivatives

- A multi-functional resin modifier with transparency and high heat resistance.
- It has 4 functional groups and is expected to form hardened materials with a high crosslinking density.



- Products having a thiol groups (-SH) as a functional group will rapidly cure with epoxy resin at a low temperature. Compared to the conventional modifiers, cured resin has excellent heat resistance, moisture resistance, acid resistance, alkali resistance, and hardness, and it can significantly improve the resistance to heat and moisture, which had been a problem.
- It has been adopted in the field of electronic materials that continue to advance in performance and miniaturization.



# Housing Materials Operations

## **Housing Materials Operations**

# **4 Interior, Exterior Finishes**

## and

# **Paving Materials**

#### V – 17. Interior, Exterior Finishes and Paving Materials





### V – 18. Interior, Exterior Finishes and Paving Materials

- Interior materials
  - The business started with "JULUX," the first industrial product for plastered wall material in Japan, which was developed for in-house chemical glue CMC application.
  - It is difficult to handle Juraku wall, traditional Japanese wall, but with our wall materials, uniform quality can be maintained only by mixing a specified amount of water. Our plastered wall material is freshly drawing attention because of its property of high adsorption of chemicals that cause sick building syndrome such as formaldehyde as well as odor.
  - We are deploying the products characterized by high designability to our target market of commercial and public space design and custom-designed houses. Colors and expressions are brought to a space by three-dimensional and various patterns that can be only achieved with thick coating.









#### V – 19. Interior, Exterior Finishes and Paving Materials

- Exterior and paving materials
  - We also expand our business to "exterior" to cover the outside of buildings and exterior parts, and "paving" to cover the surfaces of roads and approaches.
  - Our exterior materials come in wide variations including colors and can create subtle expressions as they are finished manually to the texture of the surface. As paving materials, we offer materials such as natural stone, natural sand, and rubber chips.
  - For exterior materials and paving materials, we create synergistic effects by making use of our sales channels for exterior products.



#### Paving materials





## **Housing Materials operations**

## **5 Exterior Products**

#### V-20. Exterior Products





#### **V**-21. Home Exterior Products

- In 1971, when the motorization was rapidly progressing, we devised an "accordion gate," which can be easily opened and closed with an expansion mechanism, and which can respond to the residential situation with limited space in Japan, and it became the standard for gates in front of the car shed.
- Since then, we have continued to add to the product lineup for general gates, car sheds (car ports), fences, deck materials, terraces, etc.
- We also devote our efforts in design, in addition to our focus on functions, and won the first "G mark" (current Good Design Award) in the exterior industry in 1984.
- 'Fun roof,' our terrace roof with a sample design which harmonizes to the house using flat, wood-like ceiling materials received the 2019 Good Design Award.





Accordion gate





#### V – 2 2. Decorative Exterior Products



Bicycle parking space



High strength car stops



Garbage accumulation storage



### V – 2 3. Efforts in Housing Materials Business

- We are adding to the lineup of high-strength exterior products that are resistant to wind and snow and promoting sales expansion, based on the fact that large-scale disasters such as typhoons have been recently happening one after another over the country.
- We deploy the strength standards and quality cultivated in the decorative area to all products and are developing products with high quality and strength.
- As parts of the lineup of high-strength products, we have commercialized fences for detached houses, and independent terraces in addition to the large fences, archways, Large fences, and car ports.



## **Long-Term Vision**

### V – 24. Business Reform Policy

#### Chemicals Continue to develop and advance for the sake of the world **Operations Desired State** Strategic Scenario Make use of materials Accumulate sulfur handling and synthesis Inorganic which are difficult to handle in a recyclingreaction evaluation technologies oriented manner and contribute to Create new value starting from making use of technological innovation and environmental sulfur and expand the business domain preservation around the world Anticipate customer needs based on social Organic Deliver cleanliness to issues such as the water environment and people across the globe by protecting the sanitation and make optimal proposals environment and ensuring sanitation concerning sterilization and cleaning with our unique technologies and services Set unique themes by anticipating needs and Contribute to technological advancement establish technologies in cooperation with prosperous customers. by providing highly functional products Develop highly functional products based on based on unique technologies Fine accumulated unique technologies Set themes with an eye on market trends and develop Create global standards with our new products drawing on our strengths technologies Strive to propose comprehensive solutions from the point of view of customers

Housing Materials Operations

Design a new lifestyle in the future and contribute to the community development around the world for everyone's happiness

#### **Desired** state

Housing Materials Design a new lifestyle in the future and contribute to the community development around the world for everyone's happiness

#### Process to provide value

Attract and acquire human resources and engineers in Japan and overseas, with original products placing focus on the design and functionality

Promote alliance and extend operations globally with our unique product categories



### V – 26. Companywide Reform Policy

Set six companywide reform policies toward realization of the desired state in 2030 and push forward with them mobilizing group-wide efforts

	Desired state in 2030	Toward "one- step-ahead, proposal" company with Dokusouryoku (creativity) Solve social issues with creative ideas, leading the progress of the world				
С		1 Creation of values	2 Creation of reserve energy	<b>3</b> Creation of operational bases		
	Company- wide	<ul> <li>Increase brand value and take on challenges for new business</li> <li>Improvement of SHIKOKU QUALITY</li> <li>Establishment of a framework that makes it easier for everyone to propose and take on challenges for new businesses and ideas for such businesses</li> </ul>	<ul> <li>Improve efficiency to secure resources for reforms</li> <li>Elimination of inefficiencies and simplification and standardization of operations</li> <li>Efficiency improvement by making use of technology such as IT</li> <li>Optimal allocation of personnel and work style reforms</li> <li>Gain a foothold in and accelerate gives and accele</li></ul>	Gain a foothold into the world and accelerate global business expansion• Formulation of companywide operational base strategy• Optimization of domestic production, development and sales operational bases• Optimization of overseas production, development and sales operational bases		
	reform	4 Creation of organizations	5 Creation of company climate	6 Creation of human resources		
	policy	<ul> <li>Establish a group governance structure to realize the vision</li> <li>Building of an optimal group governance structure</li> <li>Establishment of a group governance structure in keeping with the business expansion overseas</li> </ul>	<ul> <li>Foster company climate which embraces diversity and encourages challenges</li> <li>Spread of "proposal-based styles" among employees</li> <li>Fostering of company climate to develop "proposal-based styles"</li> <li>Establishment of a working environment which accommodates diverse work styles</li> </ul>	<ul> <li>Build a framework to encourage individuals to take on challenges and evaluate individuals fairly</li> <li>Establishment of a framework for recruitment which attracts desired human resources</li> <li>Creation of opportunities for growth where each individual is respected</li> <li>Revision to and strengthening of management of the evaluation system</li> </ul>		



#### V – 27. Yonpou Yoshi – Contributions to Stakeholders –

#### Customers

#### "One-step-ahead" values

We will provide new values with our unique, state-ofthe-art products and services.

### Employees

**Challenges and growth** 

We will support a fulfilling life with a sense of real growth through various ways of working and through taking on challenges.



Shikoku Chemicals Group

#### **Shareholders**

## Shareholders return policy

We will aim to achieve a total return ratio of 50% on a consolidated basis.

#### Community

#### A better tomorrow

We will contribute to the resolution of social issues and to realize a prosperous living environment.





[Note regarding this document]

Forward-looking statements or projections mentioned in this document, including earnings are based on currently available information and actual results may differ from the projection due to various factors.

Further, the purpose of this material is to provide information to the investors, and not to serve as a recommendation to buy or to sell. Please note that Shikoku Chemical Corporation will not be responsible for the consequences of investments etc.