

# Surveillance Evaluation Report

*Roundtable on Sustainable Biomaterials*

*Global - Advanced Products*

*Advanced Biochemical (Thailand) Co., Ltd.*

## **SCS Certificate Code: SCS-RSB/PC-0018**

2/1 Map Ta Phut Industrial Estate, I-3 Road, Tambol Map Ta Phut, Amphur Muang Rayong, Rayong,  
21150, Thailand  
Pan-usa Kongmutwattana  
[www.vinythai.co.th](http://www.vinythai.co.th)

CERTIFIED	EXPIRATION
September 28, 2017	September 27, 2022

DATE(S) OF AUDIT
8 October - 24 December, 2021
DATE OF LAST UPDATE
29 April 2022

*SCS Contact:*

**Matthew Rudolf** | Managing Director, International Operations  
+1.919.533.4886 (direct) [mrudolf@scsglobalservices.com](mailto:mrudolf@scsglobalservices.com)

**SCS**global  
SERVICES  
*Setting the standard for sustainability™*

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA  
+1.510.452.8000 main | +1.510.452.8001 fax  
[www.SCSglobalServices.com](http://www.SCSglobalServices.com)

## FOREWORD

SCS Global Services (SCS) is a certification body accredited by the Roundtable on Sustainable Biomaterials (RSB) to conduct evaluations of biofuel operators (CB Registration No. 592). Under the RSB/SCS certification system, participating operators meeting international standards of biofuel production can be certified as “sustainable,” thereby permitting the Operator’s use of the RSB endorsement and logo in the marketplace subject to regular RSB/SCS oversight.

SCS deploys interdisciplinary teams of natural resource specialists and other experts all over the world to conduct evaluations of biofuel operations. SCS evaluation teams collect and analyze written materials, conduct interviews with Participating Operator’s staff and key stakeholders, and complete field and office audits of the operation(s) identified in the certification scope. Upon completion of the fact-finding phase of all evaluations, SCS teams determine compliance to the RSB Principles and Criteria.

Please Note: An RSB certificate itself does not constitute evidence that a particular product supplied by the certificate holder is certified to RSB standards. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required RSB claim is clearly stated on-product. For more information about the RSB, visit their website at [www.rsb.org](http://www.rsb.org).

### Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Roundtable on Sustainable Biomaterials. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs, and policies applied to the Participating Operator, and the results of the evaluation. Section A will be posted on the RSB Participating Operators Database (<http://rsb.org/certification/participating-operators/>). Section B contains more detailed results and information for use by the Participating Operator.

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## SECTION A – PUBLIC SUMMARY

### 1.0 GENERAL INFORMATION

#### 1.1 Operator Information

##### 1.1.1 Name and Contact Information

Organization name	Advanced Biochemical (Thailand) Co., Ltd.		
Operator Number	1413		
Contact person	Ms Pan-usa Kongmutwattana		
Address	2/1 Map Ta Phut Industrial Estate, I-3 Road, Tambol Map Ta Phut, Amphur Muang Rayong, Rayong, 21150, Thailand	Telephone	+66(2) 030-6833
		Fax	
		e-mail	panusa.kong@agc.com
		Website	www.vinythai.co.th

##### 1.1.2 Additional Parties Involved

Organization name	Advanced Biochemical (Thailand) Co., Ltd Business Office (Marketing and Sales)		
Contact person	Ms Pan-usa Kongmutwattana		
Address	No. 944 Mitrtown Office Tower, 14 <sup>th</sup> Floor, Rama 4 Road, Wangmai Sub-District, Pathumwan District, Bangkok, Thailand 10330	Telephone	+66(2) 030-6833
		Fax	
		e-mail	panusa.kong@agc.com
		Website	www.vinythai.co.th
Nature of Involvement:			
Marketing and Sales Office			

#### 1.2 Scope of Certificate

Please select one:	<input type="checkbox"/> <b>RSB EU RED</b>	<input type="checkbox"/> <b>RSB Global</b>
Please select boxes that apply:	<input type="checkbox"/> Pre-assessment	<input type="checkbox"/> 1st Annual Surveillance
	<input type="checkbox"/> Initial Assessment	<input type="checkbox"/> 2nd Annual Surveillance
	<input type="checkbox"/> Re-certification	<input type="checkbox"/> 3rd Annual Surveillance
	<input type="checkbox"/> Follow-Up to NCs	<input checked="" type="checkbox"/> 4th Annual Surveillance
Scope as it appears on certificate:	Manufacture of Bio-based Epichlorohydrin (ECH) from Vegetable Oil derived Glycerol	

The scope assessment agrees with the scope under which the operator applied	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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### 1.2.1 Determination of Extent of Audit

Total number of subsidiaries, branch offices, affiliated entities, external third parties contracted or otherwise engaged, operational structures, sites, facilities, processing and production units, and supply chain structures	1 Marketing office 1 Storage facility 1 Point of origin 1 Industrial Operator
Participating Operator Risk Class	Low
Disputes or prior Non-compliances	2 Major NCs, closed

### 1.2.2 Standards Used

#### Applicable RSB-Accredited Standards

Standard Name and Version
<ul style="list-style-type: none"> <li>• RSB Principles &amp; Criteria (RSB-STD-01-001 V3.0);</li> <li>• RSB Procedure for Traceability (Chain of Custody) (RSB-PRO-20-001 V3.2);</li> <li>• RSB Standard for Participating Operators (RSB-PRO-30-001 V3.3);</li> <li>• RSB Procedure on Communication and Claims (RSB-PRO-50-001 V3.5);</li> <li>• RSB Procedure for Risk Management (RSB-PRO-60-001 V3.3);</li> <li>• RSB Standard for Advanced Fuels (RSB-STD-02-010 V2.3);</li> <li>• RSB Standard for Advanced Products (RSB-STD-01-001 V2.0);</li> <li>• RSB GHG Calculation Methodology (RSB-STD-01-003-01 V2.3)</li> </ul>

All standards employed are available on the websites of the Roundtable on Sustainable Biomaterials (<https://rsb.org/the-rsb-standard/working-with-the-rsb-standard/>). Standards are also available, upon request, from SCS Global Services.

### 1.3 Sites in Scope

#### 1.3.1 Industrial Operator/ Mechanical Processor

Name of Facility	Advanced Biochemical (Thailand) Company Ltd.
Type	<input type="checkbox"/> Agriculture Milling and/or Fermentation <input type="checkbox"/> Vegetable oil Extraction <input type="checkbox"/> Biofuel Production and/or Distribution <input checked="" type="checkbox"/> Other, please explain here: Bio-based epichlorohydrin from vegetable oil glycerine
Location/City	Rayong, Thailand
Geographic location ( <i>Latitude &amp; Longitude</i> )	12.03476, 101.149794

Start date of operations (initial start date)	14 January 2012
Number of processing steps	1
Description of the product or the product component that the certification covers, including, if applicable, the specification of the mass of the certified component related to the total product.	Epichlorohydrin (ECH) is an intermediate chemical used mainly in the production of epoxy resins and other chemical products. Refined glycerin reacts with hydrogen chloride to form dichloropropanol. Dichloropropanol and sodium hydroxide are processed to make Epichlorohydrin.
<b>Annual throughput of previous 12 months – See confidential annex</b>	

**1.3.2 Traders or Warehouses (commercially sensitive - see confidential annex for details)**

**1.3.3 Points of Origin – specific entities are confidential, please see annex for details**

Number of Points of Origin in Scope	1
Number of Points of Origin providing more than ten metric tons per months	1
Number of Points of Origin Assessed on a Sample Basis during This Audit	1
List of Points of Origin Assessed on a Sample Basis during This Audit	1

**1.4 GHG Intensity – confidential information, please see annex for details**

**1.5 Advanced Product Information**

*(Can be moved to appendix if certain information is confidential)*

If the feedstock for a batch of RSB certified Advanced Product is not wholly but only partly RSB-certified: state the amount of certified feedstock in relation to the total mass of the feedstock for the appropriate category:	Feedstock for claimed material is 100% RSB eligible
<b>For Category I products:</b>	
State the bio-based carbon or bio-based mass content that can be ensured at any time of the production process	100% bio-based
State the standard used for measuring or calculating the biobased carbon or bio-based mass content	ASTM D6866-20 Method B (AMS)

**2.0 EVALUATION PLANNING & PROCESS**

**2.1 Audit Team**

<b>Auditor Name:</b>	Robert Earley	<b>Auditor role:</b>	Lead Auditor
<b>Qualifications:</b> Robert Earley is an auditor of RSB and ISCC certifications, and has been trained in ISO 9001:2015 auditing, and is currently the technical manager of the RSB certification program at SCS			

Global Services. Prior to joining SCS Global Services, Robert was the Transport Program Manager of Manila-based Clean Air Asia, promoting clean and efficient freight and logistics across Asia, and before that was the Director of the Clean Transportation Program at the Innovation Center for Energy and Transportation (iCET), which developed standards for lifecycle GHG emissions assessment for biofuels in China, and which became the first member of the RSB in China. Mr. Earley, who has lived in China since 2005 and is fluent in Mandarin Chinese, studied environmental science at the University of Calgary and Urban and Regional Planning at the University of Waterloo in Canada. His coursework at the University of Calgary included impacts of agriculture and conservation in agricultural areas in southern Alberta.

<b>Auditor Name:</b>	Otavio Cavalett	<b>Auditor role:</b>	GHG Verifier
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**Qualifications:** Otavio Cavalett is a Researcher in the Industrial Ecology Programme (IndEcol), Department of Energy and Process Engineering, NTNU (Norway) and an Auditor in SCS Global Services (USA). Prior to this, he was Leader of the Sustainability Analysis Team at the Brazilian National Biorenovables Laboratory (LNBR/CNPEM) in Brazil. He has more than 15 years of experience with Life Cycle Assessment of biofuel and biorefinery systems, with emphasis on climate metrics and other environmental areas of interest in relation to the United Nations Sustainable Development Goals. He has contributed to recent IPCC reports and published more than 60 scientific papers.

## 2.2 Evaluation Methods and Schedule

### 2.2.1 Methodology and Strategies Employed

SCS deploys interdisciplinary teams with expertise in agriculture, ecology, forestry, social sciences, natural resource economics, and other relevant fields to assess an Operator’s compliance to RSB standards and policies. Evaluation methods include document and record review, implementing sampling strategies to visit a broad number of site and facility types, observation of implementation of management plans and policies, and stakeholder analysis. When there is more than one team member, team members may review parts of the standards based on their background and expertise. On the final day of an evaluation, team members convene to deliberate the findings of the assessment jointly. This involves an analysis of all relevant site observations, stakeholder comments, and reviewed documents and records. Where consensus between team members cannot be achieved due to lack of evidence, conflicting evidence or differences of interpretation of the standards, the team is instructed to report these in the certification decision section.

### 2.2.2 Evaluation Itinerary and Activities

Time	Element/Activity	Personnel
<i>Day 1</i> 8 October 2021	<b>Microsoft Teams (held remotely)</b>	
9:00 a.m.	<b>Opening Meeting and General Requirements</b> – Introduction to certification program and assessment process to on-site staff	Management



<p>(All times in Bangkok time zone)</p>	<ul style="list-style-type: none"> <li>- Review of scheduled activities</li> <li>- Review of RSB Procedures; confirm roles, responsibilities and processes</li> <li>- Confirmation of scope of products to be certified</li> <li>- Clarification of all suppliers; i.e. glycerine, transportation, storage</li> <li>- Client to outline production process and overall process flow</li> <li>- Review site map(s)</li> <li>- Update from client and any social or environmental changes to the operation</li> <li>- Follow up on implementation of any corrective action plans from desk audit or previous initial field audit</li> </ul>	
<p>10:00</p>	<p><b>Document Review: Participating Operator/ Standards Checklist</b></p> <ul style="list-style-type: none"> <li>- Review of training procedures and records</li> <li>- Review of Grievance Mechanism</li> <li>- Review of traceability method and implementation (including acquiring, handling, and forwarding sustainable material)</li> <li>- Analysis of material balances and records</li> <li>- Review of records</li> </ul>	
<p>12:30</p>	<p><b>Lunch Break</b></p> <ul style="list-style-type: none"> <li>- Brief lunch break</li> </ul>	
<p>1:15 p.m.</p>	<p><b>Document Review: Participating Operator/ Standards Checklist (con't)</b></p> <ul style="list-style-type: none"> <li>- Review of GHG inputs</li> <li>- Communications and Claims</li> <li>- Requirement for Advanced Fuels/ Advanced Products</li> </ul> <p><b>Document Review: Compliance with Principles and Criteria</b></p> <p>Principle 1:</p> <ul style="list-style-type: none"> <li>- Review of all relevant business licenses</li> <li>- Review of land and water use permits</li> </ul> <p>Principle 2:</p> <ul style="list-style-type: none"> <li>- Review screening tool</li> <li>- Review environmental and social management plan (ESMP)</li> <li>- Review impact assessments, if applicable</li> <li>- Review budget and resources available for RSB implementation</li> </ul> <p>Principle 4:</p> <ul style="list-style-type: none"> <li>- Review of contracts, contracts with third-party contracted workers, policies and training records grievances</li> <li>- Training and occupational health and safety record</li> </ul> <p>Principle 7:</p> <ul style="list-style-type: none"> <li>- Conservation values, ecosystems, buffers, water rights</li> </ul> <p>Principle 9:</p> <ul style="list-style-type: none"> <li>- Water permits, water management and water monitoring in ESMP</li> </ul> <p>Principle 10:</p> <ul style="list-style-type: none"> <li>- Air permits, air management in ESMP</li> </ul> <p>Principle 11:</p> <ul style="list-style-type: none"> <li>- Integrated waste management</li> <li>- Resource and energy usage, and efficiency</li> </ul>	<p>Management</p>

4:00	<p><b>Review of Thai Tank Terminal Records (Audited by Asep Rusdiana)</b></p> <p>Current glycerine tank levels, Current ECH tank levels, training records of staff that handle goods. Data was provided by ABT directly.</p> <p><b>Confirmation of Renova San Lorenzo Point of Origin documents (Audited by Robert Earley) from August 31 point of origin audit against ABT data.</b></p>	
5:30	<b>Closing meeting</b>	
	<b>End of Audit</b>	

### 2.3 Evaluation of Management System

#### 2.3.1 Evaluation of RSB compliance claims and use of RSB trademarks

Are all claims used in line with scope and allowed claims per RSB-PRO-50-001 or Advanced Product Standard, as applicable?	No on-product claims made in previous year
Does Operator use RSB trademarks on off-product or on-product claims?	None

### 3.0 RISK ASSESSMENT RESULTS

Highest Risk Class will Apply for the Participating Operator

Site	Based on the most recent self-risk assessment the PO's risk assessment results are (The number):	Corresponding risk class (low, medium, high):	Date of risk assessment (must be no older than 3 months from the audit date)	Auditor's assessment of Operator's risk
Advanced Biochemical (Thailand) Co. Ltd	0	Low	31 August, 2021	Agrees with PO's assessment based on an analysis of the Risk Assessment Tool responses
Overall Risk				Low

#### 3.1.1 RSB Audit types Matrix

	Low risk class	Medium risk class	High risk class
Certificate validity	5 years	3 years	2 years

Main audit	Every 5 years	Every 3 years	Every 2 years
Surveillance audit	Annual	Annual	Annual

## 4.0 RESULTS OF THE EVALUATION

### 4.1 Process of Determining Compliance

#### 4.1.1 Structure of Standard and Degrees of Non-Compliance

RSB-accredited biofuel standards consist of a three-level hierarchy: the principle, the criteria that correspond to that principle, and then the performance indicators that elaborate upon each criterion. Consistent with SCS Sustainable Biofuels Program evaluation protocols, the team collectively determines whether or not the subject operation is in compliance with every applicable indicator of the relevant sustainable biofuel standard. Each non-compliance must be evaluated to determine whether it constitutes a major or minor non-compliance at the level of the associated criterion or sub-criterion. Not all indicators are equally important, and there is no simple numerical formula to determine whether an operation is in non-compliance. The team therefore must use their collective judgment to assess each criterion and determine if the Operator is in compliance. If the Operator is determined to be in non-compliance at the criterion level, then at least one of the applicable indicators must be in major non-compliance.

#### 4.1.2 Interpretations of Findings

*Major Non-compliances*, either alone or in combination with non-compliances of other applicable indicators, result (or are likely to result) in a fundamental failure to achieve the objectives of the relevant RSB Criterion. These non-compliances must be resolved or closed out before a certificate can be awarded. If Major NCs arise after an operation is certified, the timeframe for correcting these non-compliances is typically no more than three months. Certification is contingent on the operator’s response to the NCs within the stipulated time frame.

*Minor Non-compliances* are typically limited in scale or can be characterized as an unusual lapse in the system. Most minor NCs are the result of a non-conformance at the indicator-level. Non-compliances must be closed out within a specified time period of award of the certificate.

*Opportunity for Improvement* is an observation made which does not fully impact compliance but could potentially affect the PO’s ability to comply with RSB requirements in the future.

### 4.1.3 Major Non-compliances

<input checked="" type="checkbox"/>	No major NCs were issued to the Operator during the evaluation. Any minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
<input type="checkbox"/>	Major NCs were issued to the Operator during the evaluation, which have all been closed to the satisfaction of the audit team and meet the requirements of the standards. Any minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
<input type="checkbox"/>	Major NCs were issued to the Operator during the evaluation and the Operator has not yet satisfactorily closed all major NCs.

### 4.1.4 Non-compliances and Current Status

Summary of Non-compliances and Current Status				
Non-compliance Number	Type of Non-compliance	Relevant RSB Standard & Indicator No.	Summary of Finding and Evidence Collected	Status of Non-compliance (Open/Closed)
N/A				

## 5.0 CERTIFICATION DECISION

Certification Recommendation		
<b>For Surveillance Audits: Operator is to continue as an RSB certified Participating Operator subject to the minor non-compliances stated in Section 4.2.5.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
The SCS evaluation team makes the above recommendation for certification based on the full and proper execution of the SCS Responsible Biofuels Program evaluation protocols. If certification is recommended, the Operator has satisfactorily demonstrated the following without exception:		
Operator has addressed any Major NC(s) assigned during the evaluation.	Yes <input type="checkbox"/> No <input type="checkbox"/> <b>No Major NCs issued</b> <input checked="" type="checkbox"/>	
Operator has demonstrated that their system of management is capable of ensuring that all of the requirements of the applicable standards are met over the sites and facilities covered by the scope of the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Operator has demonstrated that the described system of management is being implemented consistently over the sites and facilities covered by the scope of the certificate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Comments and/or details of any issue which was difficult and/or impossible to evaluate:		
<b>To be completed by Certification Decision-Making Entity</b>	<b>Technical Review by:</b> If different to decision-maker	Inna Kitaychik
	<b>Certification decision:</b>	Continued certification to the standards listed in section 1.2.2
	<b>Certification decision by:</b>	Inna Kitaychik
	<b>Date of decision:</b> For initial or continued certification (scope expansion decisions list separately)	29 April 2022
	<b>Surveillance schedule:</b>	Recertification must occur before 27 September, 2022 to avoid certification gap. Audit date around 27 June, 2022 is recommended.  Notes: