

---

---

ภาคผนวก

---

---

---

ภาคผนวก ก

หนังสือรับรองผลการตรวจวิเคราะห์

---

คุณภาพอากาศจากปล่องระบาย

**Report No. : 2024-500003145 / 001-1 (Page 1 of 3)**

**Issued date :** January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
**Fax:** 038-910-777 **E-mail:** [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality

**SAMPLING DATE :** December 13, 2024

**SAMPLING LOCATION :** RTO Stack

**SAMPLING TIME :** 10.35-11.23

**SAMPLING BY :** [REDACTED]

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
Fuel Type		-	Natural gas	-	-	-
Stack Diameter		cm	182	-	-	-
Stack Height		m	30.5	-	-	-
Stack Temperature		°C	131.2	-	-	-
Dry Gas Temperature		°C	34.0	-	-	-
Absolute Stack Pressure		mm.Hg	757.1	-	-	-
Air Velocity		m/s	11.78	-	-	U.S.EPA Method 2
Volumetric Flow Rate		Nm³/hr	74,741	-	-	U.S.EPA Method 2
Moisture		%	7.74	-	-	U.S.EPA Method 4
O <sub>2</sub>		%	20.69	-	-	U.S.EPA Method 3
CO <sub>2</sub>		%	0.33	-	-	U.S.EPA Method 3
TSP	at actual O <sub>2</sub>	mg/Nm³	5.48	320	200	U.S.EPA Method 5
	at 7 % O <sub>2</sub>	mg/Nm³	362.90	-	-	
	Emission Rate	g/sec	0.11383	-	5.94	-
SO <sub>2</sub>	at actual O <sub>2</sub>	mg/Nm³ (ppm)	5.45 (2.08)	157 (60)	157 (60)	U.S.EPA Method 6C
	at 7 % O <sub>2</sub>	mg/Nm³ (ppm)	358.79 (136.92)	-	-	
	Emission Rate	g/sec	0.11316	-	4.66	-

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)

<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.

TY/SA/SV/SV

SGS (THAILAND) LIMITED

This document is issued by the Company under its General Conditions of Service or stated overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009306

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

**Report No. : 2024-500003145 / 001-1 (Page 2 of 3)**

**Issued date :** January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :** [REDACTED]

**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang. Rayong 21150

Fax. 038-910-777

E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality

**SAMPLING DATE :** December 13, 2024

**SAMPLING LOCATION :** RTO Stack

**SAMPLING TIME :** 10.35-11.23

**SAMPLING BY :** [REDACTED]

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
NO <sub>x</sub> (as NO <sub>2</sub> )	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	25.48 (13.54)	376 (200)	376 (200)	U.S.EPA Method 7E
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	1,673.37 (889.24)	-	-	
	Emission Rate	g/sec	0.52899	-	11.17	
CO	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	3.91 (3.41)	790 (690)	250 (218)	U.S.EPA Method 10
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	256.87 (224.22)	-	-	
	Emission Rate	g/sec	0.08110	-	7.43	
Acrylonitrile	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	
Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	
1,3-Butadiene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	

**Remarks :**

- N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.
- N.D. = Not Detected; Detection Limit Acrylonitrile <1.75 mg/Nm<sup>3</sup>, <115.79 mg/Nm<sup>3</sup> (<0.03632 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <11.62 mg/Nm<sup>3</sup> (<0.00364 g/s), 1,3-Butadiene <1.76 mg/Nm<sup>3</sup>, <116.16 mg/Nm<sup>3</sup> (<0.03644 g/s) and Alpha Methyl Styrene <0.88 mg/Nm<sup>3</sup>, <58.27 mg/Nm<sup>3</sup> (<0.01828 g/s) at actual O<sub>2</sub> and at 7% O<sub>2</sub>, respectively.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)

<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026

TY/SA/SV/SV

SGS (THAILAND) LIMITED

This document is issued by the Company under its General Conditions of Service and the attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009307

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>-21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 001-1 (Page 3 of 3)**

**Issued date :** January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :** [REDACTED]

**ADDRESS :** 4/2, I-8 Rd., Man Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777 [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality

**SAMPLING DATE :** December 13, 2024

**SAMPLING LOCATION :** RTO Stack

**SAMPLING TIME :** 10.35-11.23

**SAMPLING BY :** [REDACTED]

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
Alpha Methyl Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	Based on NIOSH 1501
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	
Total VOCs as C <sub>3</sub> H <sub>8</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	12.84 (8.72)	-	-	Based on U.S.EPA Method 25A
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	849.51 (576.96)	-	-	
	Emission Rate	g/sec	0.26656	-	-	

**Remarks :**

- N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.
- N.D. = Not Detected; Detection Limit Acrylonitrile <1.75 mg/Nm<sup>3</sup>, <115.79 mg/Nm<sup>3</sup> (<0.03632 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <11.62 mg/Nm<sup>3</sup> (<0.00364 g/s), 1,3-Butadiene <1.76 mg/Nm<sup>3</sup>, <116.16 mg/Nm<sup>3</sup> (<0.03644 g/s) and Alpha Methyl Styrene <0.88 mg/Nm<sup>3</sup>, <58.27 mg/Nm<sup>3</sup> (<0.01828 g/s) at actual O<sub>2</sub> and at 7% O<sub>2</sub>, respectively.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)

<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026

TY/SA/SV/SV

SGS (THAILAND) LIMITED



This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009308

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-500003145 / 001-2 (Page 1 of 3)** Issued date : January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality  
**SAMPLING LOCATION :** Therminol Oil Heater Unit 2/3 of SAN (DN) ABS/SAN Plant  
**SAMPLING BY :** [REDACTED]  
**SAMPLING DATE :** December 12, 2024  
**SAMPLING TIME :** 10.15-11.03

Parameter	Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
Fuel Type	-	Natural Gas	-	-	-
Stack Diameter	cm	96	-	-	-
Stack Height	m	30.5	-	-	-
Stack Temperature	°C	153.3	-	-	-
Dry Gas Temperature	°C	33.9	-	-	-
Absolute Stack Pressure	mm.Hg	756.5	-	-	-
Air Velocity	m/s	2.08	-	-	U.S.EPA Method 2
Volumetric Flow Rate	Nm <sup>3</sup> /hr	3,309	-	-	U.S.EPA Method 2
Moisture	%	12.40	-	-	U.S.EPA Method 4
O <sub>2</sub>	%	11.03	-	-	U.S.EPA Method 3
CO <sub>2</sub>	%	5.94	-	-	U.S.EPA Method 3
TSP	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	3.66	-	U.S.EPA Method 5
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	5.16	320	
	Emission Rate	g/sec	0.00337	0.039	-
SO <sub>2</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	49.32 (18.82)	-	U.S.EPA Method 6C
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	68.84 (26.27)	157 (60)	
	Emission Rate	g/sec	0.04533	0.102	-

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.  
**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)  
<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.

SGS (THAILAND) LIMITED

This document is issued by the Company under its General Conditions of Service, attached overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 010315

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 001-2 (Page 2 of 3)** **Issued date : January 08, 2025**

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang. Rayong 21150  
 Fax: 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality **SAMPLING DATE :** December 12, 2024  
**SAMPLING LOCATION :** Therminol Oil Heater Unit 2/3 of SAN (DN) **SAMPLING TIME :** 10.15-11.03  
 ABS/SAN Plant  
**SAMPLING BY :** [REDACTED]

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
NO <sub>x</sub> (as NO <sub>2</sub> )	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	24.82 (13.19)	-	-	U.S.EPA Method 7E
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	34.96 (18.58)	376 (200)	139 (74)	
	Emission Rate	g/sec	0.02281	-	0.170	
CO	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	92.89 (81.08)	-	-	U.S.EPA Method 10
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	130.85 (114.22)	790 (690)	-	
	Emission Rate	g/sec	0.08538	-	-	-
Acrylonitrile	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	15.0	
	Emission Rate	g/sec	N.D.	-	0.018	-
Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	1.155	
	Emission Rate	g/sec	N.D.	-	0.001	-
Alpha Methyl Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	Based on NIOSH 1501
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	32.0	
	Emission Rate	g/sec	N.D.	-	0.039	-

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.  
 - N.D. = Not Detected; Detection Limit Acrylonitrile <1.76 mg/Nm<sup>3</sup>, <2.48 mg/Nm<sup>3</sup> (<0.00162 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <0.25 mg/Nm<sup>3</sup>, (<0.00016 g/s), Alpha Methyl Styrene <0.88 mg/Nm<sup>3</sup>, <1.25 mg/Nm<sup>3</sup> (<0.00081 g/s) and Ethylbenzene <0.18 mg/Nm<sup>3</sup>, <0.25 mg/Nm<sup>3</sup> (<0.00016 g/s) at actual O<sub>2</sub> and at 7% O<sub>2</sub>, respectively.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)  
<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.



Technical Manager

TY/SA/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 010316

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th



**Report No. : 2024-500003145 / 001-2 (Page 3 of 3)** Issued date : January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality  
**SAMPLING LOCATION :** Therminol Oil Heater Unit 2/3 of SAN (DN) ABS/SAN Plant  
**SAMPLING BY :** [REDACTED]  
**SAMPLING DATE :** December 12, 2024  
**SAMPLING TIME :** 10.15-11.03

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
Ethylbenzene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	N.D.	-	5.0	
	Emission Rate	g/sec	N.D.	-	0.006	-
Total VOCs as C <sub>3</sub> H <sub>8</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	32.88 (22.33)	-	-	Based on U.S.EPA Method 25A
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	46.29 (31.44)	-	-	
	Emission Rate	g/sec	0.03022	-	-	-

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.  
 - N.D. = Not Detected; Detection Limit Acrylonitrile <1.76 mg/Nm<sup>3</sup>, <2.48 mg/Nm<sup>3</sup> (<0.00162 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <0.25 mg/Nm<sup>3</sup>, (<0.00016 g/s), Alpha Methyl Styrene <0.88 mg/Nm<sup>3</sup>, <1.25 mg/Nm<sup>3</sup> (<0.00081 g/s) and Ethylbenzene <0.18 mg/Nm<sup>3</sup>, <0.25 mg/Nm<sup>3</sup> (<0.00016 g/s) at actual O<sub>2</sub> and at 7% O<sub>2</sub>, respectively.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)  
<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.

[REDACTED]  
 Technical Manager

TY/SA/SV/SV

SGS (THAILAND) LIMITED



This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 010317

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-5000003145 / 004-3 (Page 1 of 2)** Issued date : January 08, 2025

**CLIENT :** INFOS STYRO LUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2 I-8 Rd. Map Ta Phut Industrial Estate, T. Map Ta Phut. A. Muang. Rayong 21150  
 Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality  
**SAMPLING LOCATION :** Pyrolysis Oven, ABS/SAN Plant  
**SAMPLING BY :** [REDACTED]  
**SAMPLING DATE :** December 11, 2024  
**SAMPLING TIME :** 11.25-12.13

Parameter	Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
Fuel Type	-	Natural Gas	-	-	-
Stack Diameter	cm	60	-	-	-
Stack Height	m	30.5	-	-	-
Stack Temperature	°C	302.7	-	-	-
Dry Gas Temperature	°C	35.3	-	-	-
Absolute Stack Pressure	mm.Hg	758.5	-	-	-
Air Velocity	m/s	6.28	-	-	U.S.EPA Method 2
Volumetric Flow Rate	Nm <sup>3</sup> /hr	3,087	-	-	U.S.EPA Method 2
Moisture	%	6.46	-	-	U.S.EPA Method 4
O <sub>2</sub>	%	19.08	-	-	U.S.EPA Method 3
CO <sub>2</sub>	%	1.18	-	-	U.S.EPA Method 3
TSP	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	1.85	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	14.11	320	5.0
	Emission Rate	g/sec	0.00158	-	0.010
SO <sub>2</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	1.76 (0.67)	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	13.44 (5.13)	157 (60)	83.4 (32)
	Emission Rate	g/sec	0.00151	-	0.168
NO <sub>x</sub> (as NO <sub>2</sub> )	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	15.73 (8.36)	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	120.19 (63.87)	376 (200)	180.8 (96)
	Emission Rate	g/sec	0.01349	-	0.364

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)

<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.

SGS (THAILAND) LIMITED

TY/SA/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009312

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-5000003145 / 004-3 (Page 2 of 2)** Issued date : January 08, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality  
**SAMPLING LOCATION :** Pvrolysis Oven. ABS/SAN Plant  
**SAMPLING BY :** [REDACTED]  
**SAMPLING DATE :** December 11, 2024  
**SAMPLING TIME :** 11.25-12.13

Parameter		Unit	Value	Standard <sup>1/</sup>	Standard <sup>2/</sup>	Analytical Method
CO	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	71.14 (62.10)	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	543.46 (474.39)	790 (690)	-	U.S.EPA Method 10
	Emission Rate	g/sec	0.06100	-	-	-
Acrylonitrile	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	5.0	U.S.EPA Method 18
	Emission Rate	g/sec	N.D.	-	0.010	-
Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	20.0	U.S.EPA Method 18
	Emission Rate	g/sec	N.D.	-	0.040	-
1,3-Butadiene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	Emission Rate	g/sec	N.D.	-	-	-
Ethylbenzene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	0.59	U.S.EPA Method 18
	Emission Rate	g/sec	N.D.	-	0.001	-
Total VOCs as C <sub>3</sub> H <sub>8</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	7.26 (4.93)	-	-	-
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	55.41 (37.63)	-	-	Based on U.S.EPA Method 25A
	Emission Rate	g/sec	0.00622	-	-	-

**Remarks :** - N = Normal condition means reference condition at temperature of 25 °C, pressure of 1 atm or 760 mm.Hg, and dry basis.  
 - N.D. = Not Detected; Detection Limit Acrylonitrile <1.76 mg/Nm<sup>3</sup>, <13.42 mg/Nm<sup>3</sup> (<0.00151 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <1.34 mg/Nm<sup>3</sup> (<0.00015 g/s), 1,3-Butadiene <1.76 mg/Nm<sup>3</sup>, <13.47 mg/Nm<sup>3</sup> (<0.00151 g/s) and Ethylbenzene <0.18 mg/Nm<sup>3</sup>, <1.35 mg/Nm<sup>3</sup> (<0.00015 g/s) at actual O<sub>2</sub> and at 7% O<sub>2</sub>, respectively

**Sources :** <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006)  
<sup>2/</sup> Emission Air Standard according to EIA study of ABS/SAN Plant, Approval Letter No. Tor Sor 1010.8/8026.

Technical Manager

SGS (THAILAND) LIMITED

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009313



คุณภาพอากาศในบรรยากาศ

**Report No. : 2024-500003145 / 003-1 (Page 1 of 2)**

**Issued date : January 6, 2025**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**

**CONTACT :**

**ADDRESS :**

4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS : Ambient Air Quality**

**MEASUREMENT DATE : December 9-16, 2024**

**MEASUREMENT LOCATION : Ban Aow Pradoo**

**MEASURED BY :**

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
11:00-12:00	0.020	0.019	0.015	0.017	0.009	0.014	0.022
12:00-13:00	0.023	0.013	0.014	0.015	0.011	0.013	0.018
13:00-14:00	0.017	0.013	0.016	0.014	0.010	0.018	0.022
14:00-15:00	0.015	0.015	0.018	0.012	0.011	0.021	0.021
15:00-16:00	0.016	0.017	0.022	0.012	0.010	0.023	0.019
16:00-17:00	0.013	0.017	0.021	0.012	0.011	0.015	0.018
17:00-18:00	0.012	0.013	0.020	0.016	0.009	0.012	0.016
18:00-19:00	0.014	0.017	0.018	0.014	0.009	0.013	0.014
19:00-20:00	0.013	0.018	0.018	0.011	0.008	0.015	0.013
20:00-21:00	0.011	0.020	0.017	0.011	0.009	0.015	0.010
21:00-22:00	0.014	0.017	0.016	0.011	0.008	0.011	0.010
22:00-23:00	0.017	0.017	0.014	0.011	0.008	0.011	0.011
23:00-00:00	0.025	0.015	0.019	0.010	0.009	0.015	0.013
00:00-01:00	0.020	0.014	0.014	0.010	0.009	0.014	0.017
01:00-02:00	0.015	0.014	0.012	0.012	0.007	0.013	0.019
02:00-03:00	0.010	0.013	0.012	0.011	0.008	0.011	0.013
03:00-04:00	0.011	0.009	0.011	0.011	0.009	0.010	0.009
04:00-05:00	0.009	0.010	0.011	0.012	0.009	0.012	0.008
05:00-06:00	0.009	0.013	0.011	0.011	0.009	0.010	0.010
06:00-07:00	0.010	0.011	0.010	0.010	0.010	0.008	0.011
07:00-08:00	0.014	0.013	0.011	0.011	0.011	0.007	0.010
08:00-09:00	0.016	0.016	0.017	0.014	0.013	0.014	0.007
09:00-10:00	0.015	0.015	0.015	0.014	0.011	0.024	0.014
10:00-11:00	0.014	0.012	0.016	0.016	0.012	0.019	0.021
1 hr-Minimum	0.009	0.009	0.010	0.010	0.007	0.007	0.007
1 hr-Maximum	0.025	0.020	0.022	0.017	0.013	0.024	0.022
Standard* (avg. 1 hr)	0.32						

**Analytical Method : - Chemiluminescence Method**

**Source : \* Notification of the National Environment Board No.33, B.E. 2552 (2009), dated June 17, B.E. 2552 (2009)**

TY/RS/SV/SV



Technical Manager

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009286

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-500003145 / 003-1 (Page 2 of 2)**

**Issued date : January 6, 2025**

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax: 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Air Quality  
**MEASUREMENT LOCATION :** Ban Aow Pradoo

**MEASUREMENT DATE :** December 9-16, 2024  
**MEASURED BY :** [REDACTED]

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
11:00-12:00	0.003	0.010	0.006	0.004	0.008	0.004	0.006
12:00-13:00	0.004	0.004	0.002	0.005	0.007	0.004	0.006
13:00-14:00	0.003	0.004	0.002	0.006	0.006	0.005	0.006
14:00-15:00	0.003	0.005	0.002	0.004	0.007	0.007	0.004
15:00-16:00	0.004	0.005	0.005	0.005	0.009	0.008	0.006
16:00-17:00	0.003	0.004	0.002	0.007	0.011	0.010	0.006
17:00-18:00	0.005	0.008	0.009	0.005	0.009	0.008	0.008
18:00-19:00	0.004	0.016	0.007	0.004	0.008	0.013	0.006
19:00-20:00	0.005	0.002	0.001	0.003	0.006	0.006	0.012
20:00-21:00	0.004	0.005	0.006	0.004	0.003	0.006	0.008
21:00-22:00	0.004	0.009	0.006	0.004	0.005	0.008	0.012
22:00-23:00	0.003	0.011	0.003	0.004	0.003	0.006	0.009
23:00-00:00	0.004	0.013	0.002	0.005	0.006	0.004	0.005
00:00-01:00	0.007	0.004	0.006	0.005	0.006	0.005	0.007
01:00-02:00	0.005	0.003	0.008	0.008	0.006	0.007	0.002
02:00-03:00	0.005	0.005	0.002	0.006	0.006	0.005	0.003
03:00-04:00	0.004	0.005	0.001	0.004	0.007	0.006	0.007
04:00-05:00	0.005	0.007	0.001	0.005	0.007	0.007	0.007
05:00-06:00	0.004	0.008	0.006	0.005	0.005	0.005	0.008
06:00-07:00	0.004	0.006	0.001	0.008	0.006	0.006	0.002
07:00-08:00	0.004	0.006	0.004	0.008	0.006	0.007	0.005
08:00-09:00	0.004	0.007	0.003	0.006	0.007	0.006	0.006
09:00-10:00	0.006	0.007	0.004	0.007	0.008	0.007	0.005
10:00-11:00	0.006	0.008	0.004	0.006	0.006	0.007	0.003
1 hr-Minimum	0.003	0.002	0.001	0.003	0.003	0.004	0.002
1 hr-Maximum	0.007	0.016	0.009	0.008	0.011	0.013	0.012
Avg. 24 hr	0.004	0.007	0.004	0.005	0.007	0.006	0.006
Standard* (avg. 1 hr)	0.78						
Standard** (avg. 24 hr)	0.30						

**Analytical Method :** - UV Fluorescence Method

**Sources :** \* Notification of the National Environment Board No.21, B.E. 2544 (2001), dated April 9, B.E. 2544 (2001)  
 \*\* Notification of the National Environment Board No.24, B.E. 2547 (2004), dated August 9, B.E. 2547 (2004)

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed over it. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009287

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-2 (Page 1 of 2)**

**Issued date :** January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :**

**ADDRESS :**

4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Air Quality

**MEASUREMENT DATE :** December 9-16, 2024

**MEASUREMENT LOCATION :** New CO Plant of BTC

**MEASURED BY :**

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
15:00-16:00	0.013	0.020	0.036	0.013	0.021	0.025	0.015
16:00-17:00	0.018	0.021	0.030	0.010	0.024	0.028	0.016
17:00-18:00	0.021	0.032	0.033	0.012	0.027	0.031	0.020
18:00-19:00	0.022	0.022	0.017	0.013	0.028	0.022	0.022
19:00-20:00	0.024	0.024	0.015	0.011	0.023	0.025	0.023
20:00-21:00	0.022	0.022	0.013	0.016	0.016	0.013	0.020
21:00-22:00	0.025	0.017	0.019	0.010	0.009	0.020	0.017
22:00-23:00	0.029	0.014	0.018	0.012	0.008	0.015	0.019
23:00-00:00	0.015	0.012	0.014	0.013	0.028	0.021	0.013
00:00-01:00	0.015	0.009	0.010	0.011	0.030	0.013	0.023
01:00-02:00	0.014	0.017	0.011	0.010	0.017	0.013	0.011
02:00-03:00	0.014	0.011	0.013	0.011	0.018	0.017	0.014
03:00-04:00	0.011	0.013	0.017	0.009	0.015	0.022	0.020
04:00-05:00	0.017	0.018	0.030	0.024	0.020	0.017	0.032
05:00-06:00	0.028	0.021	0.033	0.021	0.023	0.021	0.035
06:00-07:00	0.035	0.026	0.031	0.025	0.021	0.026	0.025
07:00-08:00	0.035	0.023	0.029	0.029	0.014	0.020	0.019
08:00-09:00	0.021	0.022	0.022	0.027	0.014	0.019	0.029
09:00-10:00	0.025	0.017	0.019	0.023	0.015	0.024	0.024
10:00-11:00	0.017	0.030	0.019	0.021	0.014	0.018	0.020
11:00-12:00	0.018	0.014	0.022	0.025	0.016	0.020	0.013
12:00-13:00	0.019	0.011	0.025	0.017	0.019	0.017	0.014
13:00-14:00	0.027	0.013	0.013	0.014	0.019	0.013	0.015
14:00-15:00	0.022	0.022	0.017	0.019	0.022	0.011	0.016
<b>1 hr-Minimum</b>	<b>0.011</b>	<b>0.009</b>	<b>0.010</b>	<b>0.009</b>	<b>0.008</b>	<b>0.011</b>	<b>0.011</b>
<b>1 hr-Maximum</b>	<b>0.035</b>	<b>0.032</b>	<b>0.036</b>	<b>0.029</b>	<b>0.030</b>	<b>0.031</b>	<b>0.035</b>
<b>Standard* (avg. 1 hr)</b>	<b>0.32</b>						

**Analytical Method :** - Chemiluminescence Method

**Source :** \* Notification of the National Environment Board No.33, B.E. 2552 (2009), dated June 17, B.E. 2552 (2009)

Technical Manager

TY/RS/SV/SV

SGS (THAILAND) LIMITED



This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009288

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-500003145 / 003-2 (Page 2 of 2)**

**Issued date : January 6, 2025**

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Air Quality  
**MEASUREMENT LOCATION :** New CO Plant of BTC

**MEASUREMENT DATE :** December 9-16, 2024  
**MEASURED BY :** [REDACTED]

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
15:00-16:00	0.005	0.002	0.008	0.004	0.008	0.006	0.002
16:00-17:00	0.008	0.002	0.013	0.003	0.005	0.004	0.004
17:00-18:00	0.015	0.010	0.012	0.002	0.002	0.008	0.002
18:00-19:00	0.011	0.012	0.011	0.006	0.002	0.005	0.006
19:00-20:00	0.018	0.008	0.007	0.004	0.005	0.002	0.004
20:00-21:00	0.022	0.005	0.006	0.002	0.005	0.002	0.003
21:00-22:00	0.020	0.003	0.005	0.002	0.002	0.004	0.004
22:00-23:00	0.014	0.006	0.004	0.003	0.006	0.004	0.003
23:00-00:00	0.009	0.013	0.003	0.005	0.004	0.004	0.004
00:00-01:00	0.006	0.012	0.005	0.006	0.003	0.004	0.004
01:00-02:00	0.006	0.012	0.005	0.002	0.004	0.004	0.004
02:00-03:00	0.007	0.006	0.004	0.002	0.003	0.004	0.004
03:00-04:00	0.006	0.006	0.003	0.002	0.005	0.005	0.004
04:00-05:00	0.005	0.011	0.006	0.001	0.005	0.004	0.009
05:00-06:00	0.006	0.004	0.003	0.005	0.005	0.004	0.006
06:00-07:00	0.006	0.003	0.002	0.004	0.005	0.008	0.006
07:00-08:00	0.005	0.009	0.004	0.003	0.004	0.005	0.007
08:00-09:00	0.007	0.009	0.005	0.004	0.008	0.002	0.006
09:00-10:00	0.008	0.009	0.006	0.004	0.005	0.002	0.002
10:00-11:00	0.009	0.006	0.007	0.005	0.002	0.004	0.006
11:00-12:00	0.011	0.002	0.006	0.008	0.002	0.004	0.004
12:00-13:00	0.004	0.009	0.006	0.006	0.005	0.008	0.003
13:00-14:00	0.008	0.007	0.007	0.006	0.006	0.005	0.004
14:00-15:00	0.005	0.008	0.005	0.004	0.005	0.002	0.003
1 hr-Minimum	0.004	0.002	0.002	0.001	0.002	0.002	0.002
1 hr-Maximum	0.022	0.013	0.013	0.008	0.008	0.008	0.009
Avg. 24 hr	0.009	0.007	0.006	0.004	0.005	0.005	0.005
Standard* (avg. 1 hr)	0.78						
Standard** (avg. 24 hr)	0.30						

**Analytical Method :** - UV Fluorescence Method

**Sources :** \* Notification of the National Environment Board No.21, B.E. 2544 (2001), dated April 9, B.E. 2544 (2001)  
 \*\* Notification of the National Environment Board No.24, B.E. 2547 (2004), dated August 9 B.E. 2547 (2004)

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed on the back. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009289

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-3 (Page 1 of 2)** Issued date : January 6, 2025

**CLIENT :** INFOS TYRO LUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang. Rayong 21150  
 Fax: 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Air Quality **MEASUREMENT DATE :** December 9-16, 2024  
**MEASUREMENT LOCATION :** In front of Siam Yamato Steel **MEASURED BY :** [REDACTED]

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
14:00-15:00	0.017	0.021	0.026	0.026	0.021	0.017	0.020
15:00-16:00	0.015	0.023	0.021	0.026	0.022	0.028	0.017
16:00-17:00	0.040	0.037	0.035	0.018	0.022	0.031	0.025
17:00-18:00	0.020	0.021	0.027	0.021	0.026	0.031	0.026
18:00-19:00	0.017	0.043	0.017	0.029	0.033	0.039	0.033
19:00-20:00	0.035	0.068	0.016	0.037	0.035	0.048	0.026
20:00-21:00	0.044	0.058	0.029	0.032	0.037	0.045	0.032
21:00-22:00	0.050	0.078	0.035	0.040	0.039	0.044	0.035
22:00-23:00	0.038	0.094	0.026	0.043	0.048	0.040	0.025
23:00-00:00	0.039	0.069	0.026	0.036	0.050	0.040	0.028
00:00-01:00	0.046	0.072	0.037	0.042	0.036	0.030	0.028
01:00-02:00	0.069	0.076	0.035	0.033	0.034	0.022	0.028
02:00-03:00	0.080	0.069	0.052	0.018	0.038	0.031	0.038
03:00-04:00	0.061	0.061	0.041	0.017	0.035	0.030	0.042
04:00-05:00	0.057	0.064	0.035	0.033	0.037	0.030	0.041
05:00-06:00	0.082	0.080	0.037	0.022	0.038	0.025	0.040
06:00-07:00	0.073	0.075	0.039	0.012	0.038	0.023	0.043
07:00-08:00	0.047	0.073	0.033	0.026	0.036	0.031	0.046
08:00-09:00	0.042	0.044	0.026	0.028	0.031	0.028	0.036
09:00-10:00	0.034	0.029	0.032	0.029	0.032	0.029	0.031
10:00-11:00	0.027	0.027	0.029	0.023	0.025	0.027	0.029
11:00-12:00	0.020	0.025	0.024	0.021	0.020	0.026	0.034
12:00-13:00	0.014	0.016	0.023	0.017	0.014	0.024	0.021
13:00-14:00	0.016	0.017	0.029	0.019	0.017	0.026	0.026
1 hr-Minimum	0.014	0.016	0.016	0.012	0.014	0.017	0.017
1 hr-Maximum	0.082	0.094	0.052	0.043	0.050	0.048	0.046
Standard* (avg. 1 hr)	0.32						

**Analytical Method :** - Chemiluminescence Method

**Source :** \* Notification of the National Environment Board No.33, B.E. 2552 (2009), dated June 17, B.E. 2552 (2009)

TY/RS/SV/SV



Technical Manager

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009290

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-3 (Page 2 of 2)** Issued date : January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax: 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Air Quality **MEASUREMENT DATE :** December 9-16, 2024  
**MEASUREMENT LOCATION :** In front of Siam Yamato Steel **MEASURED BY :** [REDACTED]

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 09-10, 2024	December 10-11, 2024	December 11-12, 2024	December 12-13, 2024	December 13-14, 2024	December 14-15, 2024	December 15-16, 2024
14:00-15:00	0.010	0.004	0.004	0.006	0.004	0.004	0.004
15:00-16:00	0.006	0.004	0.003	0.003	0.004	0.005	0.005
16:00-17:00	0.005	0.004	0.004	0.004	0.004	0.006	0.005
17:00-18:00	0.004	0.004	0.003	0.004	0.005	0.006	0.004
18:00-19:00	0.004	0.005	0.004	0.005	0.005	0.007	0.004
19:00-20:00	0.005	0.006	0.004	0.006	0.007	0.007	0.004
20:00-21:00	0.007	0.007	0.004	0.005	0.006	0.007	0.005
21:00-22:00	0.007	0.010	0.004	0.006	0.006	0.006	0.005
22:00-23:00	0.005	0.009	0.003	0.007	0.008	0.008	0.004
23:00-00:00	0.006	0.009	0.004	0.008	0.007	0.006	0.007
00:00-01:00	0.008	0.010	0.004	0.006	0.006	0.004	0.005
01:00-02:00	0.011	0.009	0.006	0.005	0.008	0.005	0.006
02:00-03:00	0.010	0.006	0.007	0.004	0.008	0.008	0.007
03:00-04:00	0.008	0.005	0.006	0.007	0.007	0.007	0.007
04:00-05:00	0.011	0.009	0.007	0.006	0.008	0.004	0.007
05:00-06:00	0.011	0.009	0.007	0.004	0.008	0.004	0.008
06:00-07:00	0.007	0.008	0.008	0.003	0.008	0.005	0.010
07:00-08:00	0.008	0.008	0.005	0.004	0.006	0.008	0.011
08:00-09:00	0.007	0.006	0.005	0.006	0.005	0.008	0.008
09:00-10:00	0.005	0.005	0.007	0.007	0.005	0.005	0.005
10:00-11:00	0.005	0.005	0.005	0.006	0.004	0.006	0.006
11:00-12:00	0.004	0.005	0.004	0.005	0.004	0.005	0.007
12:00-13:00	0.004	0.004	0.005	0.004	0.004	0.005	0.007
13:00-14:00	0.003	0.004	0.006	0.005	0.004	0.007	0.005
1 hr-Minimum	0.003	0.004	0.003	0.003	0.004	0.004	0.004
1 hr-Maximum	0.011	0.010	0.008	0.008	0.008	0.008	0.011
Avg. 24 hr	0.007	0.006	0.005	0.005	0.006	0.006	0.006
Standard* (avg. 1 hr)	0.78						
Standard** (avg. 24 hr)	0.30						

**Analytical Method :** - UV Fluorescence Method

**Sources :** \* Notification of the National Environment Board No.21, B.E. 2544 (2001), dated April 9, B.E. 2544 (2001)  
 \*\* Notification of the National Environment Board No.24, B.E. 2547 (2004), dated August 9 B.E. 2547 (2004)

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service photo overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009291

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-500003145 / 003-5 (Page 1 of 3)**

**Issued date : January 6, 2025**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**

**CONTACT :**

**ADDRESS : 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150**

**Fax. 038-910-777**

**E-mail:**

## Analysis Report

**SAMPLE DESIGNATED AS : Wind Speed and Direction**

**MEASUREMENT LOCATION : Ban Aow Pradoo**

**MEASUREMENT DATE : December 9-16, 2024**

**MEASURED BY :**

TIME	December 09-10, 2024		December 10-11, 2024		December 11-12, 2024		December 12-13, 2024		December 13-14, 2024		December 14-15, 2024		December 15-16, 2024	
	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)
11:00-12:00	NE	2.7	NE	2.7	NE	2.7	ENE	2.7	NE	2.7	ENE	3.1	ENE	3.6
12:00-13:00	NE	2.7	NE	2.7	ENE	2.7	ENE	2.7	NE	2.2	ENE	3.6	ENE	3.1
13:00-14:00	NE	2.2	ENE	2.7	E	3.1	NE	2.2	ENE	2.2	ENE	3.1	NE	3.1
14:00-15:00	S	1.8	ENE	2.7	ENE	3.1	NE	2.7	NE	2.2	ENE	2.7	NE	3.1
15:00-16:00	SSW	1.3	SW	1.8	ENE	2.7	NE	2.2	NE	2.7	ENE	3.1	ENE	3.1
16:00-17:00	SSE	1.8	SW	1.3	ENE	2.2	ENE	2.2	ENE	2.7	NE	2.7	ENE	2.7
17:00-18:00	SSW	0.9	S	1.3	S	1.3	ENE	2.7	ENE	2.7	ENE	2.7	ENE	2.7
18:00-19:00	ESE	1.3	SE	0.9	SE	1.3	ENE	1.8	NE	2.2	NE	2.2	ENE	2.7
19:00-20:00	ESE	0.9	-	CALM	-	CALM	NE	1.8	ENE	2.7	NE	1.8	ENE	2.2
20:00-21:00	ENE	0.9	-	CALM	-	CALM	NE	1.3	NE	2.2	NE	1.3	ENE	2.2
21:00-22:00	NE	0.9	ENE	1.3	-	CALM	NE	1.8	NE	2.2	NE	1.8	ENE	2.7
22:00-23:00	NE	1.8	ENE	1.3	-	CALM	NE	0.9	NE	1.3	NE	1.8	NE	2.2
23:00-00:00	NE	1.8	ENE	1.8	-	CALM	NE	0.9	NE	1.3	NE	2.2	NE	2.7
00:00-01:00	NE	1.3	NE	1.8	-	CALM	NE	0.9	NE	1.8	NE	2.7	ENE	3.1
01:00-02:00	NE	0.9	NE	1.8	-	CALM	NE	0.9	NE	2.2	NE	2.2	NE	2.2
02:00-03:00	NE	0.9	ENE	1.3	NE	0.9	NE	1.3	NE	2.2	NE	2.7	ENE	2.7
03:00-04:00	NE	0.9	NE	1.8	NE	0.9	ENE	1.3	NE	2.2	NE	2.7	NE	2.7
04:00-05:00	NE	0.9	NE	1.3	NE	0.9	-	CALM	NE	1.8	ENE	3.1	NE	1.8
05:00-06:00	NE	0.9	ENE	1.8	NE	0.9	NE	1.8	NE	1.8	ENE	3.1	NE	1.8
06:00-07:00	NE	0.9	ENE	1.3	NE	1.3	ENE	2.7	NE	1.8	NE	2.7	NE	1.3
07:00-08:00	NE	1.3	ENE	0.9	NE	1.3	ENE	3.1	NE	1.8	ENE	3.1	NE	2.2
08:00-09:00	NE	1.8	NE	1.8	ENE	1.8	ENE	2.2	NE	2.2	NE	3.1	NE	2.7
09:00-10:00	NE	2.2	NE	2.7	ENE	2.2	NE	2.7	NE	3.6	ENE	3.1	NE	3.1
10:00-11:00	NE	2.7	NE	3.1	NE	2.7	NE	2.2	NE	2.7	ENE	3.6	NE	4.0

**Measurement Method : - Wind speed and direction recording meter**

**Remarks :** - WS = Wind Speed  
- WD = Wind Direction

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009294

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>-21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-5 (Page 2 of 3)**

**Issued date : January 6, 2025**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**

**CONTACT : [REDACTED]**

**ADDRESS : 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang. Rayong 21150**

**Fax. 038-910-777**

**E-mail: [REDACTED]**

## Analysis Report

**SAMPLE DESIGNATED AS : Wind Speed and Direction**

**MEASUREMENT LOCATION : Ban Aow Pradoo**

**MEASUREMENT DATE : December 9-16, 2024**

**MEASURED BY : [REDACTED]**

Wind Speed Wind Direction	Percent of Wind Speed (%)				
	0.5-1.0 m/s	1.1-2.0 m/s	2.1-3.0 m/s	3.1-4.0 m/s	>4.0 m/s
N	-	-	-	-	-
NNE	-	-	-	-	-
NE	8.93	18.45	24.40	4.17	-
ENE	1.19	5.36	14.88	8.93	-
E	-	-	-	0.60	-
ESE	0.60	0.60	-	-	-
SE	0.60	0.60	-	-	-
SSE	-	0.60	-	-	-
S	-	1.79	-	-	-
SSW	0.60	0.60	-	-	-
SW	-	1.19	-	-	-
WSW	-	-	-	-	-
W	-	-	-	-	-
WNW	-	-	-	-	-
NW	-	-	-	-	-
NNW	-	-	-	-	-
CALM	5.95				

**Technical Manager**

**SGS (THAILAND) LIMITED**



TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**IE 009295**

**SGS (Thailand) Limited**

238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-5 (Page 3 of 3)**

**Issued date :** January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :**

**ADDRESS :**

4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

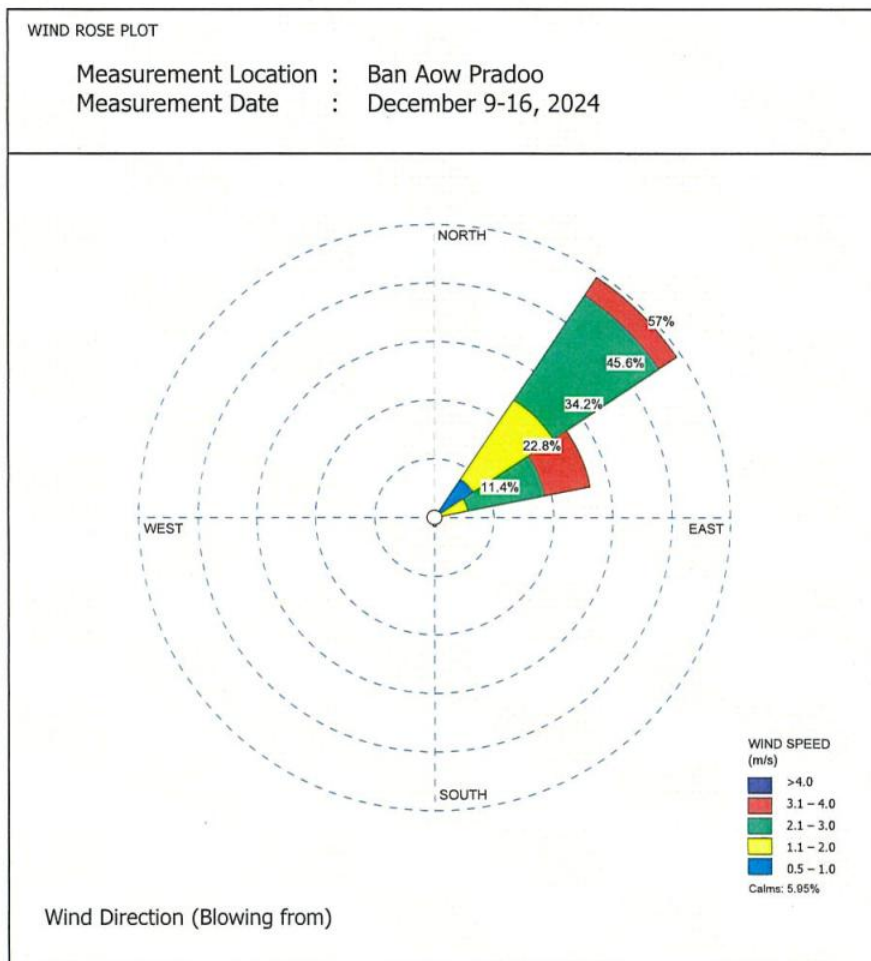
## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction

**MEASUREMENT LOCATION :** Ban Aow Pradoo

**MEASUREMENT DATE :** December 9-16, 2024

**MEASURED BY :**



Technical Manager

TY/RS/SV/SV

SGS (THAILAND) LIMITED

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009296

SGS (Thailand) Limited

238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group

**Report No. : 2024-500003145 / 003-6 (Page 1 of 3)**

**Issued date :** January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :**

**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction

**MEASUREMENT LOCATION :** New CO Plant of BTC

**MEASUREMENT DATE :** December 9-16, 2024

**MEASURED BY :**

TIME	December 09-10, 2024		December 10-11, 2024		December 11-12, 2024		December 12-13, 2024		December 13-14, 2024		December 14-15, 2024		December 15-16, 2024	
	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)
15:00-16:00	S	1.3	S	1.3	NNW	1.3	N	1.8	NNE	1.8	N	2.2	N	2.2
16:00-17:00	S	1.3	S	1.3	SSE	1.8	NNE	1.3	NNE	1.3	N	2.7	N	2.7
17:00-18:00	ESE	0.9	S	1.3	SE	1.3	NNE	0.9	N	1.8	NNE	1.8	N	1.8
18:00-19:00	SE	0.9	-	CALM	SE	0.9	NNE	0.9	N	1.8	N	1.3	N	1.3
19:00-20:00	NE	0.9	NW	1.3	-	CALM	NNE	1.8	N	2.2	NNE	1.8	NNE	1.3
20:00-21:00	NNE	1.3	-	CALM	-	CALM	NNE	0.9	NNE	1.8	N	1.8	N	1.8
21:00-22:00	NNE	1.3	-	CALM	ENE	0.9	NNE	0.9	NNE	1.8	N	1.8	N	2.2
22:00-23:00	NNE	0.9	NE	0.9	NNE	0.9	NNE	0.9	N	1.3	N	2.2	NNE	1.8
23:00-00:00	NNE	1.3	N	2.2	-	CALM	-	CALM	N	2.2	N	2.2	N	1.8
00:00-01:00	NNE	0.9	N	2.7	-	CALM	-	CALM	N	2.2	N	1.8	NNE	1.8
01:00-02:00	NNE	0.9	N	1.8	-	CALM	NNE	0.9	N	1.8	NNE	1.3	N	1.8
02:00-03:00	N	0.9	N	2.7	NNE	0.9	NNE	0.9	N	2.2	N	1.8	N	2.2
03:00-04:00	NNE	0.9	N	2.2	NNE	0.9	NNE	0.9	N	2.2	N	1.8	N	1.8
04:00-05:00	NNE	0.9	N	1.8	NNE	0.9	N	1.8	N	2.2	N	1.8	NNE	1.8
05:00-06:00	N	0.9	NE	0.9	N	1.3	NNE	1.3	N	2.2	NNE	1.8	N	1.8
06:00-07:00	N	0.9	NNE	0.9	N	1.8	NNE	1.3	N	2.2	N	1.8	N	2.2
07:00-08:00	NNE	1.3	NNE	1.3	NNE	1.3	N	1.3	N	2.2	N	2.7	N	2.7
08:00-09:00	N	2.2	N	2.2	N	1.8	N	2.2	N	2.7	N	3.1	N	3.1
09:00-10:00	N	2.2	N	2.7	N	2.2	N	2.7	N	3.1	N	3.1	N	3.1
10:00-11:00	N	1.8	N	2.7	N	1.8	N	2.2	N	1.8	N	3.1	NNE	3.1
11:00-12:00	NNE	1.8	N	2.7	N	2.2	N	2.2	NNE	2.2	N	3.1	N	3.6
12:00-13:00	NNE	1.8	N	2.2	N	1.8	N	2.2	NNE	1.8	N	2.7	N	3.1
13:00-14:00	N	1.8	N	2.2	NNE	2.2	N	1.8	NNE	1.8	N	2.7	N	2.2
14:00-15:00	S	1.3	N	1.8	N	2.2	NNE	1.8	NNE	1.8	N	2.7	NNE	1.8

**Measurement Method :** - Wind speed and direction recording meter

**Remarks :** - WS = Wind Speed  
- WD = Wind Direction

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009297

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-6 (Page 2 of 3)**

**Issued date :** January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.

**CONTACT :**

**ADDRESS :**

4/2. I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction

**MEASUREMENT DATE :** December 9-16, 2024

**MEASUREMENT LOCATION :** New CO Plant of BTC

**MEASURED BY :**

Wind Speed Wind Direction	Percent of Wind Speed (%)				
	0.5-1.0 m/s	1.1-2.0 m/s	2.1-3.0 m/s	3.1-4.0 m/s	>4.0 m/s
N	1.79	20.24	26.79	5.36	-
NNE	10.71	17.26	1.19	0.60	-
NE	1.79	-	-	-	-
ENE	0.60	-	-	-	-
E	-	-	-	-	-
ESE	0.60	-	-	-	-
SE	1.19	0.60	-	-	-
SSE	-	0.60	-	-	-
S	-	3.57	-	-	-
SSW	-	-	-	-	-
SW	-	-	-	-	-
WSW	-	-	-	-	-
W	-	-	-	-	-
WNW	-	-	-	-	-
NW	-	0.60	-	-	-
NNW	-	0.60	-	-	-
<b>CALM</b>	<b>5.95</b>				

Technical Manager

TY/RS/SV/SV

SGS (THAILAND) LIMITED



This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009298

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-6 (Page 3 of 3)**  
2025

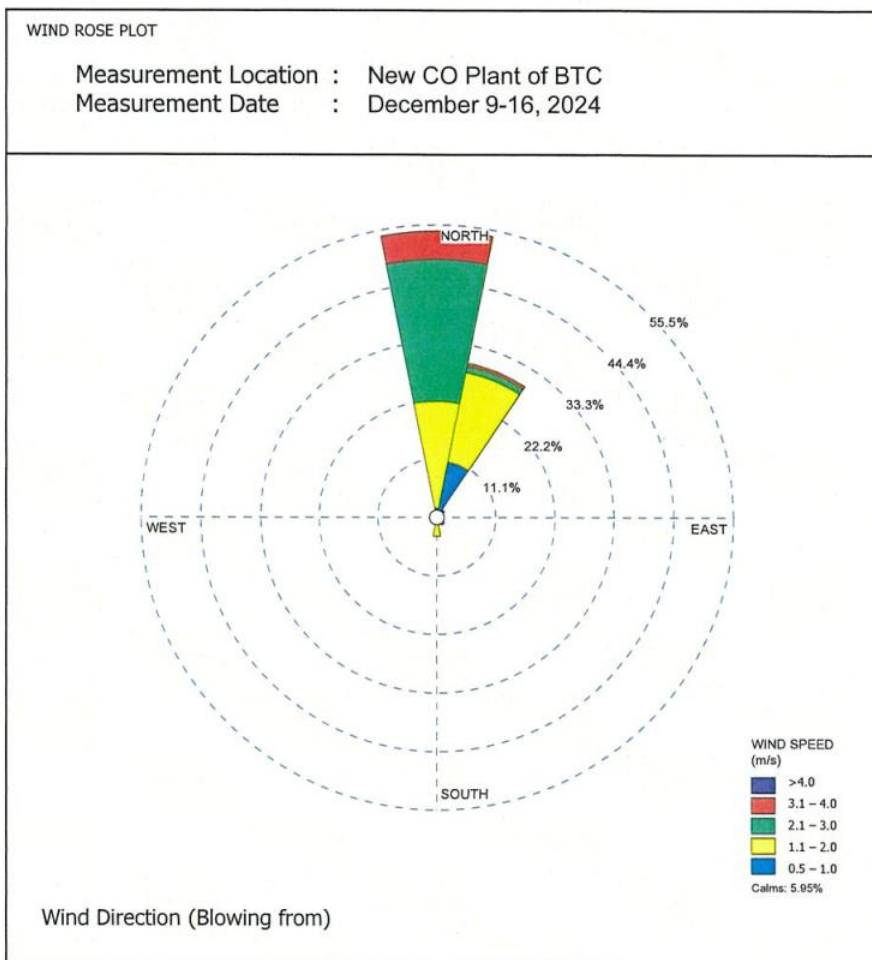
Issued date : January 6,

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
Fax. 038-910-777 E-mail: [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction  
**MEASUREMENT LOCATION :** New CO Plant of BTC

**MEASUREMENT DATE :** December 9-16, 2024  
**MEASURED BY :** [REDACTED]



TY/RS/SV/SV

SGS (THAILAND) LIMITED

Technical Manager

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009299

**Report No. : 2024-500003145 / 003-7 (Page 1 of 3)** Issued date : January 6, 2025

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :**  
**ADDRESS :** 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150  
 Fax. 038-910-777 E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction  
**MEASUREMENT LOCATION :** In Front of Siam Yamato Steel Plant  
**MEASUREMENT DATE :** December 9-16, 2024  
**MEASURED BY :**

TIME	December 09-10, 2024		December 10-11, 2024		December 11-12, 2024		December 12-13, 2024		December 13-14, 2024		December 14-15, 2024		December 15-16, 2024	
	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)	WD	WS (m/s)
14:00-15:00	SSW	1.8	SW	1.3	NNE	1.8	ENE	1.3	NE	1.3	ENE	2.2	NE	1.8
15:00-16:00	SSW	1.8	SW	1.3	SSW	1.3	ENE	1.3	ENE	1.3	NE	1.3	NE	1.8
16:00-17:00	SSW	1.3	SSE	1.8	SSE	0.9	ENE	1.8	ENE	1.8	NE	1.3	NNE	1.8
17:00-18:00	E	1.8	SSE	1.3	SE	2.2	ENE	1.3	ENE	1.3	NE	1.3	NE	1.3
18:00-19:00	E	1.3	-	CALM	E	1.3	ENE	0.9	NE	1.3	NNE	1.3	NE	0.9
19:00-20:00	ENE	0.9	N	0.9	-	CALM	NNE	1.3	NNE	1.8	NNE	1.8	ENE	0.9
20:00-21:00	NE	1.3	-	CALM	NE	0.9	ENE	0.9	NE	1.3	NE	2.2	NE	0.9
21:00-22:00	NE	2.2	-	CALM	NE	0.9	ENE	0.9	NE	0.9	NNE	0.9	NE	1.3
22:00-23:00	NE	1.3	NE	0.9	E	0.9	NNE	0.9	NNE	1.8	NE	1.8	E	1.3
23:00-00:00	NE	1.3	NE	0.9	ENE	0.9	NNE	0.9	NE	1.8	NE	1.8	ENE	1.3
00:00-01:00	NNE	0.9	NE	1.3	-	CALM	NNE	0.9	NE	1.3	NE	0.9	NE	0.9
01:00-02:00	NE	1.8	NE	1.8	-	CALM	ENE	0.9	NE	1.8	NE	0.9	NNE	0.9
02:00-03:00	NE	1.8	NNE	0.9	NNE	1.3	ENE	1.8	NNE	1.8	NE	1.3	NNE	1.8
03:00-04:00	NNE	1.8	NW	0.9	NE	0.9	ENE	1.3	NE	2.2	NE	1.3	NE	2.2
04:00-05:00	NNE	1.8	NE	0.9	NNE	1.3	NNE	1.3	NE	2.2	NE	1.3	NNE	1.8
05:00-06:00	NE	1.8	NE	1.3	NNE	0.9	ENE	1.3	NE	1.8	ENE	0.9	NE	1.8
06:00-07:00	NE	1.3	NE	0.9	NNE	1.3	ENE	1.3	NE	1.8	NE	1.3	NE	2.2
07:00-08:00	NE	1.3	NE	2.2	ENE	1.3	ENE	0.9	NE	1.8	NE	1.8	NE	2.7
08:00-09:00	NNE	1.3	NE	1.8	ENE	1.3	ENE	0.9	NE	1.8	NE	2.2	NE	2.7
09:00-10:00	NE	1.3	NE	1.8	NE	1.3	NE	1.8	NNE	1.8	NE	2.2	NE	2.2
10:00-11:00	NE	1.8	NE	1.8	NNE	1.3	NNE	1.8	NE	1.3	NE	2.2	NE	2.2
11:00-12:00	ENE	1.8	NE	1.8	ENE	1.3	NE	1.8	ENE	1.8	NE	2.2	NE	2.2
12:00-13:00	ENE	1.8	ENE	1.8	NE	1.3	ENE	1.8	ENE	1.8	NE	1.8	NE	2.2
13:00-14:00	ENE	1.8	ENE	1.8	NE	1.8	ENE	1.3	ENE	1.8	NE	2.2	NE	1.8

**Measurement Method :** - Wind speed and direction recording meter

**Remarks :**  
 - WS = Wind Speed  
 - WD = Wind Direction

Technical Manager  
 SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed hereon. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009300

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-7 (Page 2 of 3)**

**Issued date : January 6, 2025**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**

**CONTACT :**

**ADDRESS : 4/2, I-8 Rd., Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150**

**Fax. 038-910-777**

**E-mail:**

## Analysis Report

**SAMPLE DESIGNATED AS : Wind Speed and Direction**

**MEASUREMENT DATE : December 9-16, 2024**

**MEASUREMENT LOCATION : In Front of Siam Yamato Steel Plant**

**MEASURED BY : Rawin Sangiemngam**

Wind Speed Wind Direction	Percent of Wind Speed (%)				
	0.5-1.0 m/s	1.1-2.0 m/s	2.1-3.0 m/s	3.1-4.0 m/s	>4.0 m/s
N	0.60	-	-	-	-
NNE	4.76	11.90	-	-	-
NE	7.74	29.76	10.71	-	-
ENE	5.95	14.88	0.60	-	-
E	0.60	2.38	-	-	-
ESE	-	-	-	-	-
SE	-	-	0.60	-	-
SSE	0.60	1.19	-	-	-
S	-	-	-	-	-
SSW	-	2.38	-	-	-
SW	-	1.19	-	-	-
WSW	-	-	-	-	-
W	-	-	-	-	-
WNW	-	-	-	-	-
NW	0.60	-	-	-	-
NNW	-	-	-	-	-
<b>CALM</b>	<b>3.57</b>				

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed overleaf. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009301

SGS (Thailand) Limited | 238 TRR Tower, 19<sup>th</sup>- 21<sup>st</sup> Floor, Naradhiwas Rajanagarindra Road, Chong Nonsi, Yannawa, Bangkok 10120 t +66 (0)2 678 18 13 www.sgs.co.th

Member of the SGS Group



**Report No. : 2024-500003145 / 003-7 (Page 3 of 3)**

**Issued date : January 6, 2025**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**

**CONTACT :**

**ADDRESS :**

4/2. I-8 Rd.. Map Ta Phut Industrial Estate, T. Map Ta Phut, A. Muang, Rayong 21150

Fax. 038-910-777

E-mail:

## Analysis Report

**SAMPLE DESIGNATED AS : Wind Speed and Direction**

**MEASUREMENT DATE : December 9-16, 2024**

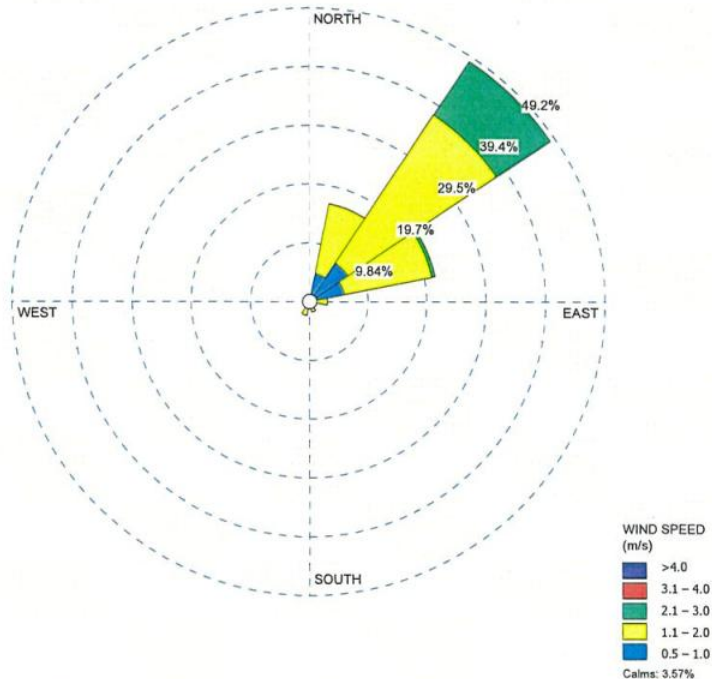
**MEASUREMENT LOCATION : In Front of Siam Yamato Steel Plant**

**MEASURED BY :**

### WIND ROSE PLOT

Measurement Location : In Front of Siam Yamato Steel Plant

Measurement Date : December 9-16, 2024



Wind Direction (Blowing from)

Technical Manager

SGS (THAILAND) LIMITED

TY/RS/SV/SV

This document is issued by the Company under its General Conditions of Service printed on the back cover. The Company is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IE 009302