

---

---

ภาคผนวก

---

---

---

ภาคผนวก ก

หนังสือรับรองผลการตรวจวิเคราะห์

---

คุณภาพอากาศจากปล่องระบาย

**Report No. : 2023-500000291 / 001-1 (Page 1 of 3)**

**Issued date :** January 8, 2024

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality

**SAMPLING DATE :** December 12, 2023

**SAMPLING LOCATION :** RTO Stack

**SAMPLING TIME :** 12.10-12.58

**SAMPLING BY :**

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	110.5	-	-	-
Dry Gas Temperature	°C	35.1	-	-	-
Absolute Stack Pressure	mm.Hg	757.7	-	-	-
Air Velocity	m/s	11.43	-	-	U.S.EPA Method 2
Volumetric Flow Rate	Nm <sup>3</sup> /hr	76,349	-	-	U.S.EPA Method 2
Moisture	%	7.86	-	-	U.S.EPA Method 4
O <sub>2</sub>	%	20.48	-	-	U.S.EPA Method 3
CO <sub>2</sub>	%	0.41	-	-	U.S.EPA Method 3
TSP	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	0.51	320	200
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	16.73	-	-
	Emission Rate	g/sec	0.01072	-	5.94
SO <sub>2</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	9.93 (3.79)	157 (60)	157 (60)
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	329.02 (125.56)	-	-
	Emission Rate	g/sec	0.12106	-	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 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.

E 273725

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

**Report No. : 2023-500000291 / 001-1 (Page 2 of 3)**
**Issued date :** January 8, 2024

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** [REDACTED]

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality  
**SAMPLING LOCATION :** RTO Stack  
**SAMPLING BY :** [REDACTED]
**SAMPLING DATE :** December 12, 2023  
**SAMPLING TIME :** 12.10-12.58

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)	33.35 (17.72)	376 (200)	376 (200)	U.S.EPA Method 7
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	1,105.20 (587.31)	-	-	
	Emission Rate	g/sec	0.70719	-	11.17	-
CO	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	18.30 (15.97)	790 (690)	250 (218)	U.S.EPA Method 10
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	606.32 (529.26)	-	-	
	Emission Rate	g/sec	0.38801	-	7.43	-
Acrylonitrile	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	-
Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	
	Emission Rate	g/sec	N.D.	-	-	-
1,3-Butadiene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	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 <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s), Styrene <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s), 1,3-Butadiene <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s) and Alpha Methyl Styrene <0.89 mg/Nm<sup>3</sup>, <29.50 mg/Nm<sup>3</sup> (<0.01891 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



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.

**E 273726**

SGS (Thailand) Limited | Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
 t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com



**Report No. : 2023-500000291 / 001-1 (Page 3 of 3)**

**Issued date : January 8, 2024**

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

## Analysis Report

**SAMPLE DESIGNATED AS : Emission Air Quality**  
**SAMPLING LOCATION : RTO Stack**  
**SAMPLING BY :**

**SAMPLING DATE : December 12, 2023**  
**SAMPLING TIME : 12.10-12.58**

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>	N.D.	-	-	Based on NIOSH 1501
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	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)	10.51 (7.14)	-	-	U.S.EPA Method 25
	at 7 % O <sub>2</sub>	mg/Nm <sup>3</sup>	347.76 (236.19)	-	-	
	Emission Rate	g/sec	0.22296	-	-	-

**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 <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s), Styrene <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s), 1,3-Butadiene <1.78 mg/Nm<sup>3</sup>, <59.01 mg/Nm<sup>3</sup> (<0.03781 g/s) and Alpha Methyl Styrene <0.89 mg/Nm<sup>3</sup>, <29.50 mg/Nm<sup>3</sup> (<0.01891 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.

E 273727

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
 t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

**Report No. : 2023-500000291 / 001-2 (Page 1 of 3)**

**Issued date : January 8, 2024**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Emission Air Quality**

**SAMPLING DATE : December 20, 2023**

**SAMPLING LOCATION : Therminol Oil Heater Unit 2/3 of SAN (DN) ABS/SAN Plant**

**SAMPLING TIME : 15.35-16.23**

**SAMPLING BY : [REDACTED] 7)**

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	158.5	-	-	-
Dry Gas Temperature	°C	37.4	-	-	-
Absolute Stack Pressure	mm.Hg	758.7	-	-	-
Air Velocity	m/s	2.30	-	-	U.S.EPA Method 2
Volumetric Flow Rate	Nm <sup>3</sup> /hr	3,558	-	-	U.S.EPA Method 2
Moisture	%	13.76	-	-	U.S.EPA Method 4
O <sub>2</sub>	%	7.63	-	-	U.S.EPA Method 3
CO <sub>2</sub>	%	7.24	-	-	U.S.EPA Method 3
TSP	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	4.59	-	U.S.EPA Method 5
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	4.81	320	
	Emission Rate	g/sec	0.00454	0.039	-
SO <sub>2</sub>	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	1.86 (0.71)	-	U.S.EPA Method 6
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	1.94 (0.74)	157 (60)	
	Emission Rate	g/sec	0.00192	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.

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.

E 273429

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com



**Report No. : 2023-500000291 / 001-2 (Page 2 of 3)** Issued date : January 8, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :   
ADDRESS :

## Analysis Report

**SAMPLE DESIGNATED AS** : Emission Air Quality **SAMPLING DATE** : December 20, 2023  
**SAMPLING LOCATION** : Therminol Oil Heater Unit 2/3 of SAN (DN) **SAMPLING TIME** : 15.35-16.23  
ABS/SAN Plant  
**SAMPLING BY** :

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)	27.83 (14.79)	-	-	U.S.EPA Method 7
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	29.17 (15.50)	376 (200)	139 (74)	
	Emission Rate	g/sec	0.02883	-	0.170	
CO	at actual O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	4.73 (4.13)	-	-	U.S.EPA Method 10
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	4.95 (4.32)	790 (690)	-	
	Emission Rate	g/sec	0.00489	-	-	
Acrylonitrile	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	15.0	
	Emission Rate	g/sec	N.D.	-	0.018	
Styrene	at actual O <sub>2</sub>	mg/Nm <sup>3</sup>	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	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>	N.D.	-	-	Based on NIOSH 1501
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	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 <1.77 mg/Nm<sup>3</sup>, <1.86 mg/Nm<sup>3</sup> (<0.00175 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <0.19 mg/Nm<sup>3</sup>, (<0.00018 g/s), Alpha Methyl Styrene <0.89 mg/Nm<sup>3</sup>, <0.93 mg/Nm<sup>3</sup> (<0.00088 g/s) and Ethylbenzene <0.18 mg/Nm<sup>3</sup>, <0.19 mg/Nm<sup>3</sup> (<0.00018 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.

E 273430

SGS (Thailand) Limited | Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com



**Report No. : 2023-500000291 / 001-2 (Page 3 of 3)** Issued date : January 8, 2024

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Emission Air Quality

**SAMPLING DATE :** December 20, 2023

**SAMPLING LOCATION :** Therminol Oil Heater Unit 2/3 of SAN (DN) ABS/SAN Plant

**SAMPLING TIME :** 15.35-16.23

**SAMPLING BY :**

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>	N.D.	-	-	U.S.EPA Method 18
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup>	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)	2.29 (1.56)	-	-	U.S.EPA Method 25
	at 7% O <sub>2</sub>	mg/Nm <sup>3</sup> (ppm)	2.40 (1.63)	-	-	
	Emission Rate	g/sec	0.00237	-	-	-

**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 <1.77 mg/Nm<sup>3</sup>, <1.86 mg/Nm<sup>3</sup> (<0.00175 g/s), Styrene <0.18 mg/Nm<sup>3</sup>, <0.19 mg/Nm<sup>3</sup> (<0.00018 g/s), Alpha Methyl Styrene <0.89 mg/Nm<sup>3</sup>, <0.93 mg/Nm<sup>3</sup> (<0.00088 g/s) and Ethylbenzene <0.18 mg/Nm<sup>3</sup>, <0.19 mg/Nm<sup>3</sup> (<0.00018 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



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.

E 273431

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group

คุณภาพอากาศในบรรยากาศ

**Report No. : 2023-500000291 / 002-1 (Page 1 of 2)** Issued date : January 5, 2024

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Air Quality

MEASUREMENT DATE : December 12-19, 2023

MEASUREMENT LOCATION : Ban Aow Pradoo

MEASURED BY :

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
13:00-14:00	0.021	0.036	0.029	0.020	0.006	0.006	0.029
14:00-15:00	0.022	0.034	0.029	0.028	0.008	0.016	0.026
15:00-16:00	0.014	0.028	0.030	0.018	0.006	0.034	0.023
16:00-17:00	0.020	0.038	0.024	0.016	0.005	0.024	0.012
17:00-18:00	0.016	0.040	0.023	0.020	0.006	0.033	0.020
18:00-19:00	0.024	0.043	0.017	0.015	0.022	0.027	0.022
19:00-20:00	0.028	0.041	0.014	0.023	0.009	0.024	0.026
20:00-21:00	0.031	0.027	0.018	0.014	0.016	0.015	0.024
21:00-22:00	0.025	0.026	0.021	0.018	0.015	0.029	0.022
22:00-23:00	0.024	0.016	0.027	0.015	0.018	0.021	0.019
23:00-00:00	0.020	0.013	0.020	0.012	0.020	0.022	0.017
00:00-01:00	0.011	0.012	0.016	0.014	0.018	0.025	0.011
01:00-02:00	0.008	0.012	0.011	0.016	0.013	0.023	0.013
02:00-03:00	0.007	0.015	0.009	0.018	0.014	0.016	0.011
03:00-04:00	0.008	0.014	0.007	0.014	0.012	0.015	0.009
04:00-05:00	0.010	0.005	0.005	0.006	0.009	0.014	0.010
05:00-06:00	0.020	0.011	0.006	0.011	0.011	0.012	0.007
06:00-07:00	0.017	0.014	0.007	0.006	0.006	0.017	0.013
07:00-08:00	0.014	0.017	0.006	0.005	0.008	0.014	0.011
08:00-09:00	0.010	0.019	0.008	0.014	0.008	0.012	0.019
09:00-10:00	0.020	0.022	0.016	0.019	0.017	0.016	0.025
10:00-11:00	0.027	0.026	0.018	0.013	0.020	0.018	0.023
11:00-12:00	0.016	0.024	0.020	0.012	0.013	0.022	0.019
12:00-13:00	0.020	0.031	0.024	0.014	0.008	0.016	0.021
1 hr-Minimum	0.007	0.005	0.005	0.005	0.005	0.006	0.007
1 hr-Maximum	0.031	0.043	0.030	0.028	0.022	0.034	0.029
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/JM/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.

E 273432



**Report No. : 2023-500000291 / 002-1 (Page 2 of 2)** Issued date : January 5, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :   
ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Air Quality MEASUREMENT DATE : December 12-19, 2023  
MEASUREMENT LOCATION : Ban Aow Pradoo MEASURED BY :

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
13:00-14:00	0.005	0.003	0.005	0.005	0.003	0.005	0.005
14:00-15:00	0.009	0.007	0.005	0.004	0.006	0.008	0.006
15:00-16:00	0.005	0.005	0.003	0.003	0.003	0.005	0.006
16:00-17:00	0.005	0.003	0.005	0.005	0.005	0.005	0.003
17:00-18:00	0.003	0.003	0.005	0.005	0.003	0.005	0.005
18:00-19:00	0.003	0.005	0.003	0.003	0.006	0.003	0.005
19:00-20:00	0.003	0.005	0.003	0.005	0.008	0.005	0.011
20:00-21:00	0.005	0.005	0.003	0.005	0.005	0.003	0.005
21:00-22:00	0.005	0.003	0.005	0.003	0.011	0.005	0.005
22:00-23:00	0.005	0.003	0.005	0.003	0.011	0.005	0.005
23:00-00:00	0.007	0.004	0.005	0.005	0.008	0.005	0.003
00:00-01:00	0.008	0.005	0.005	0.005	0.005	0.007	0.005
01:00-02:00	0.005	0.005	0.004	0.005	0.005	0.005	0.003
02:00-03:00	0.005	0.005	0.004	0.005	0.005	0.005	0.005
03:00-04:00	0.003	0.004	0.003	0.003	0.003	0.005	0.005
04:00-05:00	0.004	0.005	0.005	0.005	0.003	0.003	0.003
05:00-06:00	0.005	0.005	0.004	0.004	0.005	0.003	0.004
06:00-07:00	0.005	0.005	0.005	0.005	0.003	0.005	0.005
07:00-08:00	0.005	0.005	0.004	0.005	0.005	0.005	0.005
08:00-09:00	0.005	0.005	0.005	0.005	0.005	0.003	0.003
09:00-10:00	0.005	0.005	0.005	0.005	0.005	0.005	0.005
10:00-11:00	0.006	0.005	0.007	0.003	0.004	0.005	0.005
11:00-12:00	0.005	0.005	0.005	0.003	0.005	0.007	0.005
12:00-13:00	0.005	0.003	0.005	0.005	0.005	0.005	0.003
1 hr-Minimum	0.003	0.003	0.003	0.003	0.003	0.003	0.003
1 hr-Maximum	0.009	0.007	0.007	0.005	0.011	0.008	0.011
Avg. 24 hr	0.005	0.005	0.005	0.005	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)

TY/JM/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.

E 273433



**Report No. : 2023-500000291 / 002-2 (Page 1 of 2)**

Issued date : January 5, 2024

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

CONTACT :

ADDRESS :

## Analysis Report

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

MEASUREMENT DATE : December 12-19, 2023

MEASURED BY :

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
11:00-12:00	0.018	0.006	0.007	0.004	0.005	0.009	0.006
12:00-13:00	0.025	0.007	0.005	0.005	0.008	0.012	0.008
13:00-14:00	0.030	0.007	0.004	0.030	0.003	0.011	0.012
14:00-15:00	0.036	0.011	0.030	0.011	0.018	0.012	0.009
15:00-16:00	0.022	0.006	0.010	0.015	0.018	0.013	0.007
16:00-17:00	0.021	0.005	0.012	0.010	0.021	0.009	0.012
17:00-18:00	0.021	0.009	0.013	0.005	0.015	0.006	0.020
18:00-19:00	0.016	0.008	0.012	0.010	0.009	0.009	0.018
19:00-20:00	0.014	0.009	0.005	0.024	0.010	0.005	0.019
20:00-21:00	0.007	0.017	0.013	0.016	0.009	0.008	0.044
21:00-22:00	0.017	0.023	0.020	0.011	0.007	0.020	0.036
22:00-23:00	0.019	0.031	0.031	0.008	0.026	0.018	0.031
23:00-00:00	0.015	0.021	0.013	0.046	0.032	0.014	0.004
00:00-01:00	0.025	0.007	0.013	0.011	0.019	0.004	0.013
01:00-02:00	0.009	0.006	0.011	0.010	0.020	0.006	0.026
02:00-03:00	0.010	0.005	0.003	0.015	0.019	0.010	0.028
03:00-04:00	0.006	0.006	0.006	0.009	0.011	0.010	0.020
04:00-05:00	0.003	0.008	0.006	0.005	0.016	0.008	0.020
05:00-06:00	0.005	0.006	0.008	0.004	0.017	0.010	0.031
06:00-07:00	0.010	0.008	0.010	0.009	0.009	0.019	0.033
07:00-08:00	0.008	0.007	0.012	0.021	0.006	0.024	0.035
08:00-09:00	0.023	0.012	0.018	0.027	0.017	0.023	0.039
09:00-10:00	0.024	0.015	0.020	0.019	0.014	0.017	0.028
10:00-11:00	0.004	0.008	0.006	0.010	0.008	0.010	0.007
1 hr-Minimum	0.003	0.005	0.003	0.004	0.003	0.004	0.004
1 hr-Maximum	0.036	0.031	0.031	0.046	0.032	0.024	0.044
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/JM/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.

E 273434

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group

**Report No. : 2023-500000291 / 002-2 (Page 2 of 2)** Issued date : January 5, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :   
ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Air Quality MEASUREMENT DATE : December 12-19, 2023  
MEASUREMENT LOCATION : New CO Plant of BTC MEASURED BY :

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
11:00-12:00	0.002	0.006	0.005	0.005	0.006	0.005	0.004
12:00-13:00	0.003	0.005	0.006	0.006	0.006	0.004	0.004
13:00-14:00	0.004	0.007	0.006	0.007	0.024	0.007	0.006
14:00-15:00	0.002	0.008	0.007	0.007	0.022	0.006	0.007
15:00-16:00	0.003	0.007	0.006	0.007	0.009	0.007	0.007
16:00-17:00	0.004	0.003	0.004	0.003	0.005	0.004	0.003
17:00-18:00	0.006	0.003	0.005	0.003	0.004	0.004	0.002
18:00-19:00	0.006	0.004	0.004	0.004	0.004	0.008	0.003
19:00-20:00	0.001	0.004	0.003	0.005	0.005	0.007	0.004
20:00-21:00	0.003	0.004	0.004	0.005	0.005	0.006	0.005
21:00-22:00	0.004	0.005	0.004	0.005	0.005	0.004	0.004
22:00-23:00	0.003	0.006	0.004	0.005	0.004	0.005	0.004
23:00-00:00	0.004	0.005	0.004	0.005	0.004	0.004	0.004
00:00-01:00	0.004	0.004	0.004	0.004	0.004	0.004	0.004
01:00-02:00	0.004	0.004	0.004	0.004	0.004	0.005	0.005
02:00-03:00	0.004	0.005	0.005	0.005	0.006	0.005	0.005
03:00-04:00	0.005	0.004	0.005	0.006	0.007	0.005	0.007
04:00-05:00	0.004	0.004	0.005	0.006	0.006	0.004	0.005
05:00-06:00	0.005	0.004	0.004	0.007	0.007	0.004	0.004
06:00-07:00	0.004	0.004	0.004	0.007	0.006	0.004	0.004
07:00-08:00	0.005	0.005	0.005	0.006	0.006	0.004	0.004
08:00-09:00	0.006	0.006	0.007	0.007	0.007	0.004	0.005
09:00-10:00	0.007	0.007	0.005	0.008	0.006	0.005	0.005
10:00-11:00	0.005	0.005	0.005	0.006	0.005	0.004	0.003
1 hr-Minimum	0.001	0.003	0.003	0.003	0.004	0.004	0.002
1 hr-Maximum	0.007	0.008	0.007	0.008	0.024	0.008	0.007
Avg. 24 hr	0.004	0.005	0.005	0.006	0.007	0.005	0.004
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)

TY/JM/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.

E 273435





Report No. : 2023-500000291 / 002-3 (Page 1 of 2) Issued date : January 5, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :  
ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Air Quality MEASUREMENT DATE : December 12-19, 2023  
MEASUREMENT LOCATION : Siam Yamato Steel Plant (I-8 road) MEASURED BY :

Time	NO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
10:00-11:00	0.015	0.027	0.007	0.016	0.013	0.011	0.010
11:00-12:00	0.016	0.016	0.006	0.009	0.007	0.012	0.009
12:00-13:00	0.030	0.012	0.005	0.010	0.010	0.014	0.010
13:00-14:00	0.046	0.008	0.008	0.048	0.015	0.018	0.008
14:00-15:00	0.071	0.011	0.042	0.007	0.011	0.015	0.005
15:00-16:00	0.020	0.010	0.015	0.023	0.016	0.014	0.010
16:00-17:00	0.016	0.022	0.018	0.035	0.010	0.014	0.013
17:00-18:00	0.051	0.013	0.009	0.070	0.009	0.009	0.014
18:00-19:00	0.066	0.027	0.007	0.067	0.021	0.020	0.034
19:00-20:00	0.058	0.047	0.009	0.011	0.015	0.005	0.050
20:00-21:00	0.051	0.030	0.009	0.011	0.011	0.016	0.027
21:00-22:00	0.052	0.029	0.033	0.053	0.007	0.011	0.028
22:00-23:00	0.064	0.036	0.029	0.034	0.013	0.005	0.013
23:00-00:00	0.054	0.029	0.008	0.021	0.021	0.009	0.012
00:00-01:00	0.049	0.025	0.007	0.006	0.004	0.007	0.015
01:00-02:00	0.036	0.014	0.010	0.009	0.006	0.005	0.030
02:00-03:00	0.040	0.011	0.010	0.018	0.008	0.016	0.062
03:00-04:00	0.027	0.017	0.013	0.019	0.008	0.005	0.069
04:00-05:00	0.021	0.013	0.008	0.012	0.013	0.008	0.078
05:00-06:00	0.023	0.012	0.015	0.012	0.014	0.010	0.042
06:00-07:00	0.021	0.020	0.014	0.018	0.014	0.034	0.062
07:00-08:00	0.031	0.045	0.015	0.028	0.008	0.038	0.051
08:00-09:00	0.048	0.041	0.030	0.036	0.014	0.040	0.058
09:00-10:00	0.053	0.025	0.024	0.025	0.011	0.031	0.047
1 hr-Minimum	0.015	0.008	0.005	0.006	0.004	0.005	0.005
1 hr-Maximum	0.071	0.047	0.042	0.070	0.021	0.040	0.078
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/JM/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.

E 273436

SGS (Thailand) Limited | Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group

**Report No. : 2023-500000291 / 002-3 (Page 2 of 2)** Issued date : January 5, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :   
ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Air Quality MEASUREMENT DATE : December 12-19, 2023  
MEASUREMENT LOCATION : Siam Yamato Steel Plant (I-8 road) MEASURED BY :

Time	SO <sub>2</sub> Concentration (mg/m <sup>3</sup> )						
	December 12-13,2023	December 13-14,2023	December 14-15,2023	December 15-16,2023	December 16-17,2023	December 17-18,2023	December 18-19,2023
10:00-11:00	0.002	0.006	0.006	0.006	0.006	0.005	0.006
11:00-12:00	0.004	0.006	0.007	0.006	0.006	0.006	0.006
12:00-13:00	0.004	0.004	0.006	0.005	0.005	0.005	0.005
13:00-14:00	0.006	0.006	0.003	0.004	0.005	0.005	0.004
14:00-15:00	0.003	0.004	0.003	0.003	0.003	0.003	0.004
15:00-16:00	0.006	0.005	0.004	0.004	0.004	0.004	0.004
16:00-17:00	0.002	0.003	0.004	0.004	0.004	0.004	0.004
17:00-18:00	0.002	0.003	0.003	0.004	0.004	0.004	0.004
18:00-19:00	0.003	0.004	0.006	0.004	0.004	0.005	0.004
19:00-20:00	0.004	0.004	0.006	0.004	0.004	0.005	0.005
20:00-21:00	0.004	0.005	0.005	0.004	0.004	0.006	0.005
21:00-22:00	0.006	0.006	0.005	0.005	0.005	0.005	0.008
22:00-23:00	0.007	0.007	0.006	0.005	0.006	0.003	0.005
23:00-00:00	0.005	0.006	0.003	0.006	0.005	0.005	0.005
00:00-01:00	0.005	0.008	0.003	0.004	0.004	0.006	0.006
01:00-02:00	0.008	0.006	0.006	0.005	0.006	0.007	0.009
02:00-03:00	0.010	0.007	0.006	0.006	0.006	0.005	0.009
03:00-04:00	0.013	0.007	0.006	0.006	0.006	0.006	0.009
04:00-05:00	0.010	0.007	0.006	0.006	0.006	0.006	0.006
05:00-06:00	0.008	0.006	0.006	0.006	0.006	0.007	0.007
06:00-07:00	0.010	0.007	0.007	0.003	0.006	0.007	0.009
07:00-08:00	0.009	0.015	0.009	0.006	0.007	0.010	0.008
08:00-09:00	0.008	0.008	0.007	0.007	0.006	0.007	0.008
09:00-10:00	0.008	0.008	0.008	0.007	0.006	0.007	0.006
1 hr-Minimum	0.002	0.003	0.003	0.003	0.003	0.003	0.004
1 hr-Maximum	0.013	0.015	0.009	0.007	0.007	0.010	0.009
Avg. 24 hr	0.006	0.006	0.006	0.005	0.005	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)

TY/JM/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.

E 273437

SGS (Thailand) Limited | Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group



**Report No. : 2023-500000291 / 002-5 (Page 1 of 3)**

Issued date : January 5, 2024

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction  
**MEASUREMENT LOCATION :** Ban Aow Pradoo

**MEASUREMENT DATE :** December 12-19, 2023  
**MEASURED BY :**

TIME	December 12-13, 2023		December 13-14, 2023		December 14-15, 2023		December 15-16, 2023		December 16-17, 2023		December 17-18, 2023		December 18-19, 2023	
	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)
13:00-14:00	SSE	1.8	SE	2.2	SE	1.8	SE	1.8	SE	2.2	ENE	2.7	SE	2.2
14:00-15:00	SE	1.8	SE	3.1	SSE	1.8	SSW	1.8	SE	2.2	E	2.2	SE	2.2
15:00-16:00	SSW	1.8	SE	1.8	SSW	1.3	SW	1.3	SSE	1.8	SE	2.7	SE	2.2
16:00-17:00	S	1.3	SE	1.8	SSW	1.8	S	1.8	S	1.8	SE	2.2	SE	1.8
17:00-18:00	S	1.3	SSE	0.9	WNW	3.1	WNW	1.3	S	1.3	SE	1.8	SW	1.3
18:00-19:00	WNW	0.9	S	0.9	NW	2.7	WNW	1.3	SW	0.9	SSW	1.3	SSW	0.9
19:00-20:00	WNW	0.9	-	CALM	NW	2.7	WNW	2.2	ESE	0.9	-	CALM	-	CALM
20:00-21:00	WNW	1.8	-	CALM	NW	1.3	WNW	2.7	-	CALM	-	CALM	-	CALM
21:00-22:00	-	CALM	-	CALM	-	CALM	WNW	2.2	-	CALM	-	CALM	-	CALM
22:00-23:00	-	CALM	-	CALM	-	CALM	NW	0.9	-	CALM	-	CALM	-	CALM
23:00-00:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM
00:00-01:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM
01:00-02:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM
02:00-03:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	NE	0.9
03:00-04:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	NE	0.9	NE	0.9
04:00-05:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	ENE	0.9	NE	0.9
05:00-06:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	NE	0.9	NE	0.9
06:00-07:00	ENE	0.9	-	CALM	-	CALM	ENE	0.9	ENE	0.9	NE	0.9	NE	0.9
07:00-08:00	-	CALM	ENE	0.9	-	CALM	-	CALM	ENE	0.9	NE	0.9	NE	0.9
08:00-09:00	ENE	0.9	ENE	0.9	-	CALM	ENE	1.3	ENE	0.9	NE	1.8	NE	1.3
09:00-10:00	ENE	1.3	NE	1.3	NE	0.9	ENE	1.3	ENE	1.3	NE	2.2	NE	2.2
10:00-11:00	ENE	1.8	ENE	1.3	ENE	1.3	NE	1.3	ENE	2.2	ENE	2.7	ENE	2.2
11:00-12:00	E	2.7	E	1.3	ENE	1.8	E	2.7	E	3.1	ENE	2.2	E	1.3
12:00-13:00	E	1.8	E	1.8	SE	1.8	ENE	2.2	ENE	2.2	ENE	2.2	SE	1.3

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

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

TY/JM/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.

E 273440

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group

**Report No. : 2023-500000291 / 002-5 (Page 2 of 3)**

**Issued date : January 5, 2024**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

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

**MEASUREMENT DATE : December 12-19, 2023**

**MEASUREMENT LOCATION : Ban Aow Pradoo**

**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	-	-	-	-	-
NNE	-	-	-	-	-
NE	6.55	2.38	1.19	-	-
ENE	5.36	4.76	4.76	-	-
E	-	2.38	1.79	0.60	-
ESE	0.60	-	-	-	-
SE	-	5.36	4.76	0.60	-
SSE	0.60	1.79	-	-	-
S	0.60	2.98	-	-	-
SSW	0.60	2.98	-	-	-
SW	0.60	1.19	-	-	-
WSW	-	-	-	-	-
W	-	-	-	-	-
WNW	1.19	1.79	1.79	0.60	-
NW	0.60	0.60	1.19	-	-
NNW	-	-	-	-	-
CALM	39.88				

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.

E 273441

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com





**Report No. : 2023-500000291 / 002-6 (Page 1 of 3)**

**Issued date :** January 5, 2024

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

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

**MEASUREMENT DATE :** December 12-19, 2023

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

**MEASURED BY :**

TIME	December 12-13, 2023		December 13-14, 2023		December 14-15, 2023		December 15-16, 2023		December 16-17, 2023		December 17-18, 2023		December 18-19, 2023	
	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	S	1.8	N	1.8	N	1.3	NNE	1.3	N	1.8	N	1.8	N	1.8
12:00-13:00	S	1.8	N	1.8	NNW	1.3	NNW	1.3	SE	1.8	NNW	2.2	N	1.8
13:00-14:00	SW	1.8	SE	2.2	SW	1.8	S	2.2	SE	2.2	N	2.2	SSE	1.8
14:00-15:00	SW	2.2	ESE	2.2	SW	1.8	SW	2.2	ESE	2.7	N	1.8	ESE	2.2
15:00-16:00	SW	1.8	SE	2.2	SW	2.7	SW	2.7	S	1.8	ESE	2.7	SE	2.2
16:00-17:00	SW	2.2	ESE	1.8	SW	2.7	SW	2.2	SW	1.8	ESE	2.2	SW	2.2
17:00-18:00	SW	1.8	SW	1.8	SW	2.2	SW	2.7	SW	1.8	SE	1.8	SW	2.2
18:00-19:00	SW	1.3	SW	1.8	NW	1.8	SW	2.2	SW	1.3	SW	1.3	SW	1.3
19:00-20:00	SW	1.3	SSW	0.9	NW	2.2	SW	1.8	SW	0.9	-	CALM	-	CALM
20:00-21:00	SW	0.9	-	CALM	NW	1.8	SW	1.8	-	CALM	-	CALM	-	CALM
21:00-22:00	N	0.9	-	CALM	NNE	0.9	SW	1.8	-	CALM	-	CALM	-	CALM
22:00-23:00	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	-	CALM	-	CALM
23:00-00:00	-	CALM	-	CALM	-	CALM	-	CALM	NNE	0.9	-	CALM	-	CALM
00:00-01:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM
01:00-02:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9
02:00-03:00	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	-	CALM	NNW	1.3
03:00-04:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	NNW	2.2
04:00-05:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	NNW	2.2
05:00-06:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	N	1.3
06:00-07:00	-	CALM	-	CALM	-	CALM	-	CALM	NNE	0.9	N	1.8	N	1.3
07:00-08:00	-	CALM	-	CALM	-	CALM	-	CALM	N	0.9	N	1.8	NNW	1.3
08:00-09:00	N	0.9	-	CALM	-	CALM	NNE	0.9	N	0.9	NNW	2.2	N	1.3
09:00-10:00	NNE	0.9	N	1.3	NNE	1.3	N	1.3	N	1.3	NNW	2.7	N	1.8
10:00-11:00	N	1.8	NNW	1.8	NNE	1.3	NNW	1.3	N	1.8	NNW	2.2	N	2.7

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

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

SGS (THAILAND) LIMITED

TY/JM/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.

E 273443

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com



**Report No. : 2023-500000291 / 002-6 (Page 2 of 3)**

Issued date : January 5, 2024

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wind Speed and Direction

MEASUREMENT DATE : December 12-19, 2023

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	5.95	11.31	1.19	-	-
NNE	2.98	1.79	-	-	-
NE	-	-	-	-	-
ENE	-	-	-	-	-
E	-	-	-	-	-
ESE	-	0.60	2.98	-	-
SE	-	1.19	2.38	-	-
SSE	-	0.60	-	-	-
S	-	1.79	0.60	-	-
SSW	0.60	-	-	-	-
SW	1.19	10.12	7.14	-	-
WSW	-	-	-	-	-
W	-	-	-	-	-
WNW	-	-	-	-	-
NW	-	1.19	0.60	-	-
NNW	-	3.57	3.57	-	-
CALM	38.69				

TY/JM/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.

E 273444

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com

Member of the SGS Group

**Report No. : 2023-500000291 / 002-6 (Page 3 of 3)**

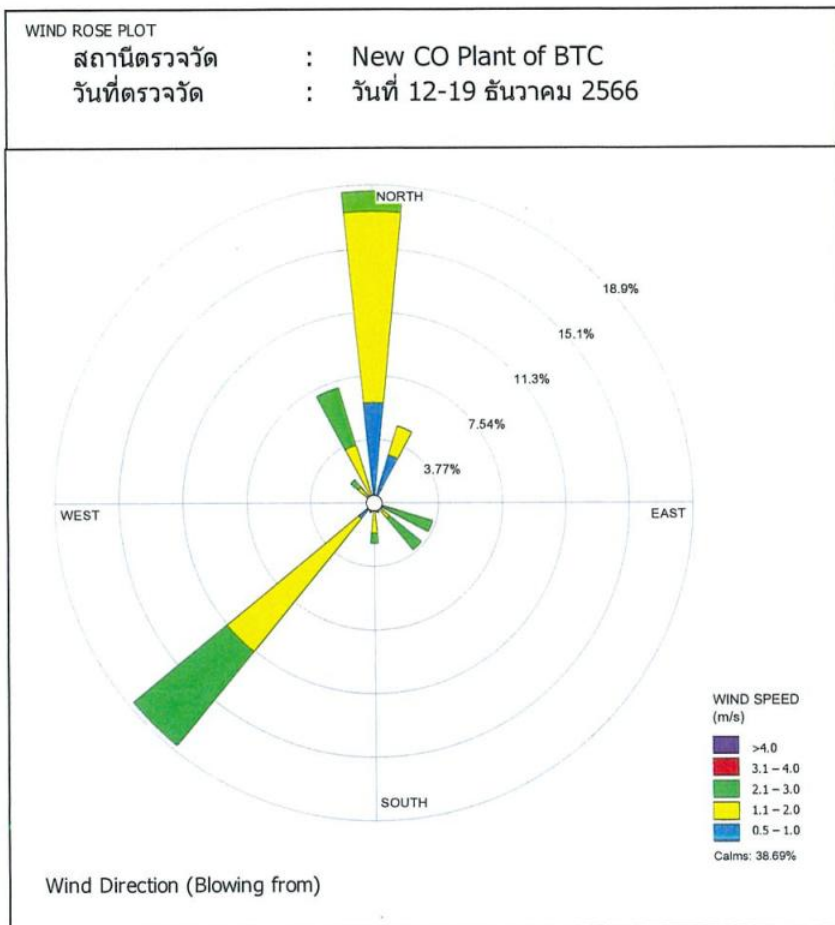
Issued date : January 5, 2024

CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :  
ADDRESS :

## Analysis Report

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

MEASUREMENT DATE : December 12-19, 2023  
MEASURED BY :



TY/JM/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.

E 273445

SGS (Thailand) Limited

Environment, Health and Safety 100 Nanglinchee Road Chongnonsee Yannawa Bangkok 10120  
t +66 (0)2 678 18 13 f +66 (0)2 678 06 22 www.sgs.com



**Report No. : 2023-500000291 / 002-7 (Page 1 of 3)**

**Issued date :** January 5, 2024

**CLIENT :** INEOS STYROLUTION (THAILAND) CO., LTD.  
**CONTACT :** [REDACTED]  
**ADDRESS :** [REDACTED]

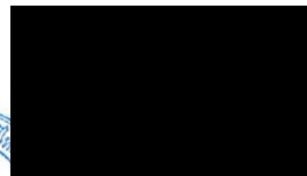
## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction  
**MEASUREMENT DATE :** December 12-19, 2023  
**MEASUREMENT LOCATION :** Siam Yamato Steel Plant (I-8 road)  
**MEASURED BY :** [REDACTED]

TIME	December 12-13,2023		December 13-14,2023		December 14-15,2023		December 15-16,2023		December 16-17,2023		December 17-18,2023		December 18-19,2023	
	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)
10:00-11:00	ENE	1.8	NNE	1.3	ENE	1.3	ENE	1.3	ENE	1.3	NE	1.3	NE	1.3
11:00-12:00	SE	1.8	ESE	2.2	ENE	1.3	NE	1.3	ENE	1.8	ESE	2.2	ENE	1.8
12:00-13:00	SE	1.8	ESE	2.2	ESE	1.8	ESE	1.8	ESE	2.2	ENE	1.3	NE	1.8
13:00-14:00	ESE	1.3	SE	3.1	SSW	1.3	ESE	2.2	ESE	3.1	ENE	1.8	ESE	2.7
14:00-15:00	SW	1.3	ESE	3.6	SW	1.8	SW	2.2	ESE	3.6	NE	1.3	ESE	3.1
15:00-16:00	WSW	1.3	ESE	3.1	SSW	2.2	SW	2.2	ESE	0.9	ESE	3.6	SE	3.1
16:00-17:00	SW	1.3	SE	1.8	SW	2.2	SW	2.2	SSW	0.9	ESE	3.6	SW	2.2
17:00-18:00	SW	1.3	-	CALM	WSW	2.2	SW	2.2	-	CALM	ESE	3.1	SW	2.2
18:00-19:00	SW	0.9	-	CALM	NW	1.8	SSW	1.8	-	CALM	SSW	0.9	SW	1.3
19:00-20:00	SW	0.9	-	CALM	NW	1.3	WNW	1.8	-	CALM	-	CALM	-	CALM
20:00-21:00	-	CALM	-	CALM	NW	0.9	NNW	0.9	-	CALM	-	CALM	-	CALM
21:00-22:00	-	CALM	ENE	0.9	NE	1.3	WNW	0.9	SE	0.9	ENE	0.9	ENE	0.9
22:00-23:00	ENE	0.9	-	CALM	E	0.9	-	CALM	NE	1.3	ENE	0.9	-	CALM
23:00-00:00	-	CALM	ENE	0.9	-	CALM	NE	0.9	NE	1.8	NE	1.3	-	CALM
00:00-01:00	-	CALM	ENE	0.9	-	CALM	ENE	0.9	-	CALM	NE	1.3	-	CALM
01:00-02:00	-	CALM	-	CALM	-	CALM	ENE	0.9	-	CALM	ENE	0.9	NNE	1.3
02:00-03:00	-	CALM	-	CALM	ENE	0.9	-	CALM	-	CALM	NE	0.9	NE	1.3
03:00-04:00	NE	0.9	-	CALM	NNE	0.9	-	CALM	-	CALM	-	CALM	NE	1.3
04:00-05:00	-	CALM	-	CALM	-	CALM	-	CALM	NE	0.9	-	CALM	NE	1.8
05:00-06:00	-	CALM	-	CALM	-	CALM	-	CALM	-	CALM	NNE	0.9	NNE	1.8
06:00-07:00	-	CALM	-	CALM	-	CALM	-	CALM	ENE	0.9	NNE	1.8	NNE	1.8
07:00-08:00	-	CALM	NNE	0.9	-	CALM	-	CALM	ENE	0.9	NNE	1.8	NNE	1.8
08:00-09:00	ENE	0.9	ENE	0.9	-	CALM	ENE	0.9	ENE	0.9	NNE	2.2	NE	1.8
09:00-10:00	ENE	0.9	ENE	0.9	ENE	0.9	ENE	1.3	ENE	1.8	NNE	1.8	NNE	1.8

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

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



SGS (THAILAND) LIMITED

TY/JM/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.

E 273446

**Report No. : 2023-500000291 / 002-7 (Page 2 of 3)**

**Issued date : January 5, 2024**

**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**  
**CONTACT : [REDACTED]**  
**ADDRESS : [REDACTED]**

## Analysis Report

**SAMPLE DESIGNATED AS : Wind Speed and Direction**      **MEASUREMENT DATE : December 12-19, 2023**  
**MEASUREMENT LOCATION : Siam Yamato Steel Plant (I-8 road)**      **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	1.79	5.36	0.60	-	-
NE	2.38	8.33	-	-	-
ENE	11.90	6.55	-	-	-
E	0.60	-	-	-	-
ESE	0.60	1.79	3.57	4.76	-
SE	0.60	1.79	-	1.19	-
SSE	-	-	-	-	-
S	-	-	-	-	-
SSW	1.19	1.19	0.60	-	-
SW	1.19	2.98	4.17	-	-
WSW	-	0.60	0.60	-	-
W	-	-	-	-	-
WNW	0.60	0.60	-	-	-
NW	0.60	1.19	-	-	-
NNW	0.60	-	-	-	-
CALM	32.14				

SGS (THAILAND) LIMITED

TY/JM/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.

E 273447



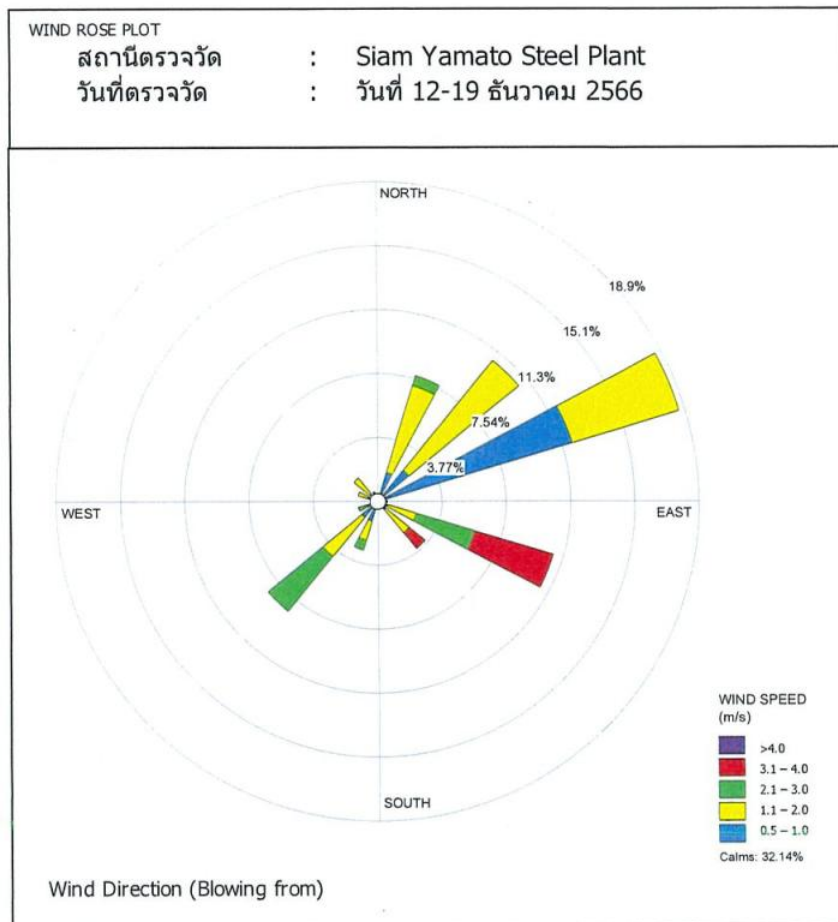
**Report No. : 2023-500000291 / 002-7 (Page 3 of 3)**

**Issued date :** January 5, 2024

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wind Speed and Direction      **MEASUREMENT DATE :** December 12-19, 2023  
**MEASUREMENT LOCATION :** Siam Yamato Steel Plant (I-8 road)      **MEASURED BY :**



TY/JM/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.

E 273448