

คุณภาพน้ำเสีย และน้ำทิ้ง

**Report No. : 2023-5007330 / 001-3 (Page 1 of 1)**

Issued date : August 3, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Wastewater Quality**

**SAMPLING DATE : July 6, 2023**

**SAMPLING LOCATION : Sanitary Biological**

**SAMPLING BY :**

Treatment Unit, ABS/SAN Plant

**LABORATORY NAME : SGS (Thailand) Limited (๓-197)**

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	31.0	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.2	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,006	≤ 9,085 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	4.9	≤ 50
COD	mg/l	APHA, 5220 C	36	≤ 120
BOD	mg/l	APHA, 5210 B	8	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks : -** Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of June plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of June 2023 = 4,085 mg/l).

**Source : \*** Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007330 / 001-1 (Page 1 of 2)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality

**SAMPLING DATE** : July 6, 2023

**SAMPLING LOCATION** : Equalization Tank,

**SAMPLING BY** :

ABS/SAN Plant

**LABORATORY NAME** : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	41.2
pH	-	APHA, 4500-H <sup>+</sup> B	7.4
TDS	mg/l	APHA, 2540 C	2,290
SS	mg/l	APHA, 2540 D	1,282
COD	mg/l	APHA, 5220 C	4,386
BOD	mg/l	APHA, 5210 B	964
Fat, Oil and Grease	mg/l	APHA, 5520 B	25

- Remarks** :
- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
  - Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-5007330 / 001-1 (Page 2 of 2)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality

**SAMPLING DATE** : July 6, 2023

**SAMPLING LOCATION** : Equalization Tank,  
ABS/SAN Plant

**SAMPLING BY** :

**LABORATORY NAME** : SGS (Thailand) Limited

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	18.304
Styrene	mg/l	APHA, 6200B	0.0138

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-5007330 / 001-2 (Page 1 of 2)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality **SAMPLING DATE** : July 6, 2023  
**SAMPLING LOCATION** : Treated Wastewater Tank, **SAMPLING BY** :   
ABS/SAN Plant  
**LABORATORY NAME** : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	35.1	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.0	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,596	≤ 9,085 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	5.0	≤ 50
COD	mg/l	APHA, 5220 C	47	≤ 120
BOD	mg/l	APHA, 5210 B	10	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks** : - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of June plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of June 2023 = 4,085 mg/l).

**Source** : \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007330 / 001-2 (Page 2 of 2)**

Issued date : August 3, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Treated Wastewater Tank,  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : July 6, 2023

SAMPLING BY :

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

- United States Environmental Protection Agency, Revision 2, December 1996.

**Source :** \* Notification of Ministry of Industry B.E. 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007553 / 001-3 (Page 1 of 1)**

Issued date : August 22, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality

**SAMPLING DATE** : August 8, 2023

**SAMPLING LOCATION** : Sanitary Biological

**SAMPLING BY** :

Treatment Unit, ABS/SAN Plant

**LABORATORY NAME** : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	30.3	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.5	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,340	≤ 9,132 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	<2.5	≤ 50
COD	mg/l	APHA, 5220 C	32	≤ 120
BOD	mg/l	APHA, 5210 B	7	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks** : - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of July plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of July 2023 = 4,132 mg/l).

**Source** : \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007553 / 001-1 (Page 1 of 2)**

Issued date : August 22, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Wastewater Quality**

**SAMPLING DATE : August 8, 2023**

**SAMPLING LOCATION : Equalization Tank,**

**SAMPLING BY :**

ABS/SAN Plant

**LABORATORY NAME : SGS (Thailand) Limited (๓-197)**

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	46.8
pH	-	APHA, 4500-H <sup>+</sup> B	7.6
TDS	mg/l	APHA, 2540 C	1,950
SS	mg/l	APHA, 2540 D	4,838
COD	mg/l	APHA, 5220 C	1,016
BOD	mg/l	APHA, 5210 B	226
Fat, Oil and Grease	mg/l	APHA, 5520 B	32

**Remarks :**

- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-5007553 / 001-1 (Page 2 of 2)**

Issued date : August 22, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Wastewater Quality**

**SAMPLING DATE : August 8, 2023**

**SAMPLING LOCATION : Equalization Tank,  
ABS/SAN Plant**

**SAMPLING BY :**

**LABORATORY NAME : SGS (Thailand) Limited**

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	0.0116
Styrene	mg/l	APHA, 6200B	0.2258

**Remarks :**

- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
- United States Environmental Protection Agency, Revision 2, December 1996.
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-5007553 / 001-2 (Page 1 of 2)**

Issued date : August 22, 2023

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality

SAMPLING DATE : August 8, 2023

SAMPLING LOCATION : Treated Wastewater Tank,

SAMPLING BY :

ABS/SAN Plant

LABORATORY NAME : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	38.0	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	6.8	5.5-9.0
TDS	mg/l	APHA, 2540 C	2,450	≤ 9,132 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	5.2	≤ 50
COD	mg/l	APHA, 5220 C	44	≤ 120
BOD	mg/l	APHA, 5210 B	8	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of July plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of July 2023 = 4,132 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007553 / 001-2 (Page 2 of 2)**

Issued date : August 22, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Treated Wastewater Tank, ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : August 8, 2023

SAMPLING BY :

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007772 / 001-3 (Page 1 of 1)** Issued date : September 22, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality **SAMPLING DATE** : September 6, 2023  
**SAMPLING LOCATION** : Sanitary Biological **SAMPLING BY** :  
Treatment Unit, ABS/SAN Plant  
**LABORATORY NAME** : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	30.5	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.4	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,458	≤ 9,298 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	24	≤ 50
COD	mg/l	APHA, 5220 C	29	≤ 120
BOD	mg/l	APHA, 5210 B	6	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks** : - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of August plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of August 2023 = 4,298 mg/l).

**Source** : \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007772 / 001-1 (Page 1 of 2)** Issued date : September 22, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Wastewater Quality**

**SAMPLING DATE : September 6, 2023**

**SAMPLING LOCATION : Equalization Tank,**

**SAMPLING BY :**

ABS/SAN Plant

**LABORATORY NAME : SGS (Thailand) Limited (๓-197)**

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	41.4
pH	-	APHA, 4500-H <sup>+</sup> B	7.1
TDS	mg/l	APHA, 2540 C	3,020
SS	mg/l	APHA, 2540 D	1,310
COD	mg/l	APHA, 5220 C	3,840
BOD	mg/l	APHA, 5210 B	678
Fat, Oil and Grease	mg/l	APHA, 5520 B	19

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-5007772 / 001-1 (Page 2 of 2)** Issued date : September 22, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Equalization Tank,  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : September 6, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001
Styrene	mg/l	APHA, 6200B	1.7698

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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E 267210



**Report No. : 2023-5007772 / 001-2 (Page 1 of 2)** Issued date : September 22, 2023

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality

SAMPLING DATE : September 6, 2023

SAMPLING LOCATION : Treated Wastewater Tank,

SAMPLING BY :

ABS/SAN Plant

LABORATORY NAME : SGS (Thailand) Limited (2-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	37.1	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	6.7	5.5-9.0
TDS	mg/l	APHA, 2540 C	2,235	≤ 9,298 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	9	≤ 50
COD	mg/l	APHA, 5220 C	41	≤ 120
BOD	mg/l	APHA, 5210 B	9	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of August plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of August 2023 = 4,298 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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E 267211

**Report No. : 2023-5007772 / 001-2 (Page 2 of 2)** Issued date : September 22, 2023

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality

SAMPLING DATE : September 6, 2023

SAMPLING LOCATION : Treated Wastewater Tank,

SAMPLING BY :

ABS/SAN Plant

LABORATORY NAME : SGS (Thailand) Limited

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

- United States Environmental Protection Agency, Revision 2, December 1996.

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5008033 / 001-3 (Page 1 of 1)**

**Issued date :** October 24, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality **SAMPLING DATE :** October 5, 2023  
**SAMPLING LOCATION :** Sanitary Biological **SAMPLING BY :**  
 Treatment Unit, ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited (1-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	29.1	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.2	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,719	≤ 8,600 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	<2.5	≤ 50
COD	mg/l	APHA, 5220 C	40	≤ 120
BOD	mg/l	APHA, 5210 B	7	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of September plus 5,000 mg/l.  
 (TDS of Khlong Chak Mark (Upstream) of September 2023 = 3,600 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5008033 / 001-1 (Page 1 of 2)** Issued date : October 24, 2023

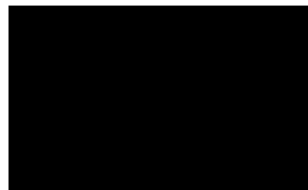
CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.  
CONTACT :   
ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Equalization Tank,  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited (๓-197)  
SAMPLING DATE : October 5, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	34.9
pH	-	APHA, 4500-H <sup>+</sup> B	7.2
TDS	mg/l	APHA, 2540 C	2,082
SS	mg/l	APHA, 2540 D	4,250
COD	mg/l	APHA, 5220 C	722
BOD	mg/l	APHA, 5210 B	178
Fat, Oil and Grease	mg/l	APHA, 5520 B	14

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.



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E 270142

**Report No. : 2023-5008033 / 001-1 (Page 2 of 2)** Issued date : October 24, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Equalization Tank,  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : October 5, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	2.177
Styrene	mg/l	APHA, 6200B	<0.001

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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E 270143



**Report No. : 2023-5008033 / 001-2 (Page 1 of 2)**

**Issued date :** October 24, 2023

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

## Analysis Report

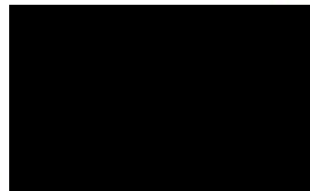
**SAMPLE DESIGNATED AS :** Wastewater Quality **SAMPLING DATE :** October 5, 2023  
**SAMPLING LOCATION :** Treated Wastewater Tank, **SAMPLING BY :** [REDACTED]  
 ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	33.4	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.0	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,535	≤ 8,600 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	4.5	≤ 50
COD	mg/l	APHA, 5220 C	12	≤ 120
BOD	mg/l	APHA, 5210 B	<2	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of September plus 5,000 mg/l.  
 (TDS of Khlong Chak Mark (Upstream) of September 2023 = 3,600 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).



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E 270144

**Report No. : 2023-5008033 / 001-2 (Page 2 of 2)**

**Issued date :** October 24, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality **SAMPLING DATE :** October 5, 2023  
**SAMPLING LOCATION :** Treated Wastewater Tank, **SAMPLING BY :**  
 ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
 - United States Environmental Protection Agency, Revision 2, December 1996.  
**Source :** \* Notification of Ministry of Industry B.E. 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000077 / 001-3 (Page 1 of 1)** Issued date : November 21, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality

**SAMPLING DATE :** November 3, 2023

**SAMPLING LOCATION :** Sanitary Biological

**SAMPLING BY :**

Treatment Unit, ABS/SAN Plant

**LABORATORY NAME :** SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	31.0	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.5	5.5-9.0
TDS	mg/l	APHA, 2540 C	1,810	≤ 6,733 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	3.2	≤ 50
COD	mg/l	APHA, 5220 C	24	≤ 120
BOD	mg/l	APHA, 5210 B	<2	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of August plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of October 2023 = 1,733 mg/l).

**Source :** \* Notification of Ministry of Industry B.E. 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000077 / 001-1 (Page 1 of 2)**

Issued date : November 21, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality

**SAMPLING DATE** : November 3, 2023

**SAMPLING LOCATION** : Equalization Tank,  
ABS/SAN Plant

**SAMPLING BY** :

**LABORATORY NAME** : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	32.8
pH	-	APHA, 4500-H <sup>+</sup> B	7.6
TDS	mg/l	APHA, 2540 C	2,720
SS	mg/l	APHA, 2540 D	820
COD	mg/l	APHA, 5220 C	724
BOD	mg/l	APHA, 5210 B	159
Fat, Oil and Grease	mg/l	APHA, 5520 B	19

**Remarks :**

- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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E 271502

**Report No. : 2023-500000077 / 001-1 (Page 2 of 2)**

Issued date : November 21, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality  
SAMPLING LOCATION : Equalization Tank,  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : November 3, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	3.332
Styrene	mg/l	APHA, 6200B	18.088

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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E 271503



**Report No. : 2023-500000077 / 001-2 (Page 1 of 2)** Issued date : November 21, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality **SAMPLING DATE :** November 3, 2023  
**SAMPLING LOCATION :** Treated Wastewater Tank, **SAMPLING BY :**  
 ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	35.9	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	6.9	5.5-9.0
TDS	mg/l	APHA, 2540 C	2,780	≤ 6,733 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	22	≤ 50
COD	mg/l	APHA, 5220 C	54	≤ 120
BOD	mg/l	APHA, 5210 B	10	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of August plus 5,000 mg/l.  
 (TDS of Khlong Chak Mark (Upstream) of October 2023 = 1,733 mg/l).

**Source :** \* Notification of Ministry of Industry B.E. 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000077 / 001-2 (Page 2 of 2)** Issued date : November 21, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality

**SAMPLING DATE :** November 3, 2023

**SAMPLING LOCATION :** Treated Wastewater Tank,  
ABS/SAN Plant

**SAMPLING BY :**

**LABORATORY NAME :** SGS (Thailand) Limited

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	-
Styrene	mg/l	APHA, 6200B	0.015	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

- United States Environmental Protection Agency, Revision 2, December 1996.

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000291 / 004-1 (Page 1 of 2)**

**Issued date :** January 3, 2024

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality

**SAMPLING DATE :** December 1, 2023

**SAMPLING LOCATION :** Equalization Tank,  
 ABS/SAN Plant

**SAMPLING BY :**

**LABORATORY NAME :** SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result
Temperature	°C	APHA, 2550 B	33.7
pH	-	APHA, 4500-H <sup>+</sup> B	9.0
TDS	mg/l	APHA, 2540 C	1,680
SS	mg/l	APHA, 2540 D	427
COD	mg/l	APHA, 5220 C	2,040
BOD	mg/l	APHA, 5210 B	380
Fat, Oil and Grease	mg/l	APHA, 5520 B	42

**Remarks :**

- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-500000291 / 004-1 (Page 2 of 2)**

**Issued date :** January 3, 2024

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Wastewater Quality  
**SAMPLING LOCATION :** Equalization Tank,  
 ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited

**SAMPLING DATE :** December 1, 2023

**SAMPLING BY :**

Parameter	Unit	Method	Result
Acrylonitrile	mg/l	Based on USEPA, 8260B	182.2
Styrene	mg/l	APHA, 6200B	8.4

**Remarks :**

- Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.
- United States Environmental Protection Agency, Revision 2, December 1996.
- Because wastewater from equalization tank is not directly discharged to surface water sources, the analysis result is not compared with the effluent standard.

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**Report No. : 2023-500000291 / 004-2 (Page 1 of 2)** Issued date : January 3, 2024

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

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality SAMPLING DATE : December 1, 2023  
SAMPLING LOCATION : Treated Wastewater Tank, SAMPLING BY :  
ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	33.0	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	6.9	5.5-9.0
TDS	mg/l	APHA, 2540 C	2,062	≤ 8,360 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	6.6	≤ 50
COD	mg/l	APHA, 5220 C	38	≤ 120
BOD	mg/l	APHA, 5210 B	7	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of November plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of November 2023 = 3,360 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000291 / 004-2 (Page 2 of 2)**

**Issued date : January 3, 2024**

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Wastewater Quality **SAMPLING DATE** : December 1, 2023  
**SAMPLING LOCATION** : Treated Wastewater Tank, **SAMPLING BY** :   
 ABS/SAN Plant  
**LABORATORY NAME** : SGS (Thailand) Limited

Parameter	Unit	Method	Result	Standard*
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	-

**Remarks** : - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

- United States Environmental Protection Agency, Revision 2, December 1996.

**Source** : \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-500000291 / 004-3 (Page 1 of 1)** Issued date : January 3, 2024

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Wastewater Quality

SAMPLING DATE : December 1, 2023

SAMPLING LOCATION : Sanitary Biological

SAMPLING BY :

Treatment Unit, ABS/SAN Plant

LABORATORY NAME : SGS (Thailand) Limited (๓-197)

Parameter	Unit	Method	Result	Standard*
Temperature	°C	APHA, 2550 B	29.1	≤ 40
pH	-	APHA, 4500-H <sup>+</sup> B	7.5	5.5-9.0
TDS	mg/l	APHA, 2540 C	912	≤ 8,360 <sup>1/</sup>
SS	mg/l	APHA, 2540 D	15	≤ 50
COD	mg/l	APHA, 5220 C	45	≤ 120
BOD	mg/l	APHA, 5210 B	8	≤ 20
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	≤ 5

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

<sup>1/</sup> TDS standard is varied by TDS of Khlong Chak Mark (Upstream) of November plus 5,000 mg/l.  
(TDS of Khlong Chak Mark (Upstream) of November 2023 = 3,360 mg/l).

**Source :** \* Notification of Ministry of Industry B.E 2560 (2017), issued under Factory Act B.E. 2535 (1992), dated May 30, B.E. 2560 (2017), published in the Royal Government Gazette Vol.134, Part Special 153D, dated June 7, B.E. 2560 (2017).

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**Report No. : 2023-5007330 / 001-4 (Page 1 of 1)** Issued date : August 3, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Surface Water Quality  
SAMPLING LOCATION : Khlong Chak Mark, ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited  
SAMPLING DATE : July 6, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	33.1	34.2	n'
pH	-	APHA, 4500-H <sup>+</sup> B	8.3	8.2	5.0-9.0
BOD	mg/l	APHA, 5210 B	17	21	≤ 4
COD	mg/l	APHA, 5220 C	77	95	-
TDS	mg/l	APHA, 2540 C	4,132	5,577	-
SS	mg/l	APHA, 2540 D	18	20	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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**Report No. : 2023-5007553 / 001-4 (Page 1 of 1)** Issued date : August 22, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Surface Water Quality  
**SAMPLING LOCATION** : Khlong Chak Mark, ABS/SAN Plant  
**LABORATORY NAME** : SGS (Thailand) Limited  
**SAMPLING DATE** : August 8, 2023  
**SAMPLING BY** :

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	33.7	34.0	n'
pH	-	APHA, 4500-H <sup>+</sup> B	8.4	8.6	5.0-9.0
BOD	mg/l	APHA, 5210 B	9	9	≤ 4
COD	mg/l	APHA, 5220 C	51	51	-
TDS	mg/l	APHA, 2540 C	4,298	4,418	-
SS	mg/l	APHA, 2540 D	31	19	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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E 266369

**Report No. : 2023-5007772 / 001-4 (Page 1 of 1)** Issued date : September 22, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Surface Water Quality  
SAMPLING LOCATION : Khlong Chak Mark, ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : September 6, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	33.3	33.6	n'
pH	-	APHA, 4500-H <sup>+</sup> B	8.3	8.0	5.0-9.0
BOD	mg/l	APHA, 5210 B	4	6	≤ 4
COD	mg/l	APHA, 5220 C	35	41	-
TDS	mg/l	APHA, 2540 C	3,600	9,400	-
SS	mg/l	APHA, 2540 D	25	20	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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E 267214

**Report No. : 2023-5008033 / 001-4 (Page 1 of 1)** Issued date : October 24, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Surface Water Quality  
SAMPLING LOCATION : Khlong Chak Mark, ABS/SAN Plant  
LABORATORY NAME : SGS (Thailand) Limited

SAMPLING DATE : October 5, 2023  
SAMPLING BY :

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	30.1	30.2	n'
pH	-	APHA, 4500-H <sup>+</sup> B	7.8	7.8	5.0-9.0
BOD	mg/l	APHA, 5210 B	7	4	≤ 4
COD	mg/l	APHA, 5220 C	40	29	-
TDS	mg/l	APHA, 2540 C	1,733	1,468	-
SS	mg/l	APHA, 2540 D	50	105	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
- United States Environmental Protection Agency, Revision 2, December 1996.  
- n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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E 270147



**Report No. : 2023-500000077 / 001-4 (Page 1 of 1)** Issued date : November 21, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Surface Water Quality  
**SAMPLING LOCATION :** Khlong Chak Mark, ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited

**SAMPLING DATE :** November 3, 2023  
**SAMPLING BY :** [REDACTED]

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	32.8	34.0	n'
pH	-	APHA, 4500-H <sup>+</sup> B	8.3	8.2	5.0-9.0
BOD	mg/l	APHA, 5210 B	9	15	≤ 4
COD	mg/l	APHA, 5220 C	48	66	-
TDS	mg/l	APHA, 2540 C	3,360	4,720	-
SS	mg/l	APHA, 2540 D	19	14	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.

- United States Environmental Protection Agency, Revision 2, December 1996.

- n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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**Report No. : 2023-500000291 / 004-4 (Page 1 of 1)**
**Issued date : January 3, 2024**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Surface Water Quality  
**SAMPLING LOCATION :** Khlong Chak Mark, ABS/SAN Plant  
**LABORATORY NAME :** SGS (Thailand) Limited

**SAMPLING DATE :** December 1, 2023

**SAMPLING BY :** [REDACTED]

Parameter	Unit	Method	Result		Standard*
			Upstream	Downstream	
Temperature	°C	APHA, 2550 B	31.3	32.1	n'
pH	-	APHA, 4500-H <sup>+</sup> B	8.2	8.2	5.0-9.0
BOD	mg/l	APHA, 5210 B	9	11	≤ 4
COD	mg/l	APHA, 5220 C	51	64	-
TDS	mg/l	APHA, 2540 C	4,040	6,280	-
SS	mg/l	APHA, 2540 D	17	15	-
Fat, Oil and Grease	mg/l	APHA, 5520 B	<2	<2	-
Acrylonitrile	mg/l	Based on USEPA, 8260B	<0.001	<0.001	-
Styrene	mg/l	APHA, 6200B	<0.001	<0.001	-

**Remarks :** - Analytical Methods followed to Standard Methods for the Examination of Water and Wastewater, recommended by APHA-AWWA-WEF 23<sup>rd</sup> edition, 2017.  
 - United States Environmental Protection Agency, Revision 2, December 1996.  
 - n' = naturally but changing not more than 3 °C

**Source :** \* Notification of National Environment Board No.8, B.E.2537 (1994), issued under the Enhancement & Conservation of National Environmental Quality Act B.E.2535 (1992), dated January 20, B.E.2537 (1994), published in the Royal Government Gazette Vol.111, Part 16D, dated June 24, B.E.2537 (1994).

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**Report No. : 2023-5007330 / 004 (Page 1 of 4)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Ambient Noise Level **MEASUREMENT DATE** : July 5-12, 2023  
**MEASUREMENT LOCATION** : Boundary of ABS/SAN Plant **MEASUREMENT BY** :   
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.8 dB(A)  
**SOUND LEVEL METER NO.** : Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820711

Time	Noise Level at North Boundary of ABS/SAN [dB(A)]							Standard*
	05-06/07/2023	06-07/07/2023	07-08/07/2023	08-09/07/2023	09-10/07/2023	10-11/07/2023	11-12/07/2023	
14:00-15:00	67.9	67.1	81.3	67.4	68.5	67.5	67.3	
15:00-16:00	67.2	66.9	67.5	66.7	67.9	67.7	67.6	
16:00-17:00	66.8	66.9	66.7	66.9	67.7	67.4	68.1	
17:00-18:00	66.8	66.4	67.0	66.6	67.4	66.6	67.6	
18:00-19:00	66.8	67.1	67.2	67.7	66.9	67.7	65.9	
19:00-20:00	67.0	66.3	67.9	66.7	66.8	66.3	66.7	
20:00-21:00	66.8	66.6	67.5	66.6	66.4	66.6	67.2	
21:00-22:00	66.4	66.8	67.6	66.4	66.6	66.0	66.7	
22:00-23:00	66.3	66.8	68.3	66.7	67.3	67.1	66.6	
23:00-00:00	66.6	66.8	67.7	66.3	66.7	66.9	66.8	
00:00-01:00	67.4	66.7	68.3	67.2	66.9	67.2	67.7	
01:00-02:00	67.4	66.5	66.3	67.7	66.7	67.2	67.6	
02:00-03:00	67.5	66.5	66.8	67.7	66.8	67.2	67.3	
03:00-04:00	67.3	66.3	67.2	67.6	67.3	67.0	66.8	
04:00-05:00	67.4	66.4	67.1	66.1	67.1	67.0	67.1	
05:00-06:00	67.6	66.4	69.1	67.1	67.2	66.9	66.8	
06:00-07:00	67.5	66.5	67.9	66.4	67.4	66.8	66.5	
07:00-08:00	67.3	66.2	67.5	66.6	66.7	66.9	66.0	
08:00-09:00	67.0	66.2	67.9	67.0	67.4	66.9	66.8	
09:00-10:00	66.6	67.0	66.5	67.0	69.4	67.2	68.0	
10:00-11:00	66.5	66.9	67.3	66.8	67.5	66.6	67.2	
11:00-12:00	66.6	67.0	67.6	67.5	67.7	67.0	67.4	
12:00-13:00	67.0	67.0	66.5	67.9	67.5	66.5	65.1	
13:00-14:00	66.3	68.8	67.4	68.4	67.6	66.6	66.6	
Leq-24 hrs	67.0	66.8	70.4	67.1	67.4	67.0	67.0	≤ 70
Lmax	89.6	92.6	101.9	88.5	95.6	89.3	92.0	≤ 115
Ldn	73.6	73.0	74.9	73.5	73.5	73.4	73.5	-

**Source :** \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 265676



**Report No. : 2023-5007330 / 004 (Page 2 of 4)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Ambient Noise Level **MEASUREMENT DATE** : July 5-12, 2023  
**MEASUREMENT LOCATION** : Boundary of ABS/SAN Plant **MEASUREMENT BY** :   
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO.** : Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820706

Time	Noise Level at South Boundary of ABS/SAN [dB(A)]							Standard*
	05-06/07/2023	06-07/07/2023	07-08/07/2023	08-09/07/2023	09-10/07/2023	10-11/07/2023	11-12/07/2023	
15:00-16:00	64.8	65.5	65.6	62.7	63.0	64.2	64.4	
16:00-17:00	65.7	63.9	66.2	64.3	61.7	65.0	64.6	
17:00-18:00	63.8	63.6	65.0	63.7	61.8	64.3	64.2	
18:00-19:00	63.0	63.2	63.1	63.9	62.5	63.7	64.0	
19:00-20:00	63.4	63.4	63.1	63.6	63.8	63.7	63.3	
20:00-21:00	63.0	62.9	63.4	63.8	63.5	63.5	63.0	
21:00-22:00	61.8	63.5	63.2	63.9	63.2	63.6	63.0	
22:00-23:00	62.0	63.3	62.9	63.8	63.0	63.9	63.1	
23:00-00:00	63.2	63.8	62.2	63.5	62.0	63.7	63.1	
00:00-01:00	61.3	63.8	63.0	63.5	62.4	63.8	63.1	
01:00-02:00	61.9	63.8	62.2	63.7	63.6	64.0	63.2	
02:00-03:00	62.2	64.9	62.2	63.3	63.6	63.9	63.2	
03:00-04:00	61.7	63.1	62.4	63.7	63.5	63.7	63.2	
04:00-05:00	62.2	62.7	62.5	63.1	63.5	63.6	63.7	
05:00-06:00	63.8	62.7	65.6	63.0	64.3	64.0	63.4	
06:00-07:00	63.2	63.1	62.2	63.4	64.5	64.3	63.5	
07:00-08:00	62.6	63.1	63.5	63.1	63.6	64.1	63.2	
08:00-09:00	63.9	64.5	62.9	63.3	65.1	64.4	64.3	
09:00-10:00	65.5	63.5	61.9	63.2	66.6	64.0	66.5	
10:00-11:00	69.4	63.7	62.4	62.9	63.7	63.9	64.2	
11:00-12:00	67.2	64.5	63.0	63.4	63.7	63.6	68.9	
12:00-13:00	63.5	64.0	62.6	63.1	63.6	63.8	64.1	
13:00-14:00	66.2	65.3	61.5	63.5	64.4	63.9	64.0	
14:00-15:00	68.0	66.4	61.8	63.1	64.5	64.6	63.7	
Leq-24 hrs	64.5	63.9	63.3	63.5	63.7	64.0	64.2	≤ 70
Lmax	94.7	88.6	95.0	82.2	97.2	88.0	92.6	≤ 115
Ldn	69.4	70.0	69.4	69.9	69.9	70.3	69.9	-

Source : \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).



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E 265677



**Report No. : 2023-5007330 / 004 (Page 3 of 4)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Ambient Noise Level **MEASUREMENT DATE** : July 5-12, 2023  
**MEASUREMENT LOCATION** : Boundary of ABS/SAN Plant **MEASUREMENT BY** :  
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.8 dB(A)  
**SOUND LEVEL METER NO.** : Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820710

Time	Noise Level at East Boundary of ABS/SAN [dB(A)]							Standard*
	05-06/07/2023	06-07/07/2023	07-08/07/2023	08-09/07/2023	09-10/07/2023	10-11/07/2023	11-12/07/2023	
14:00-15:00	57.9	56.1	58.8	59.9	55.9	56.7	56.3	
15:00-16:00	57.4	56.3	57.9	57.2	55.5	57.0	55.9	
16:00-17:00	55.6	58.1	54.9	56.5	57.6	55.5	55.6	
17:00-18:00	58.8	57.4	54.9	56.0	56.3	56.1	55.5	
18:00-19:00	58.6	56.5	55.2	56.5	56.6	56.4	56.3	
19:00-20:00	56.2	56.8	53.6	56.3	56.3	56.3	56.0	
20:00-21:00	55.5	58.1	54.5	56.4	56.5	55.3	55.8	
21:00-22:00	54.8	58.7	53.7	55.9	56.9	55.4	55.6	
22:00-23:00	55.9	58.5	53.6	54.9	55.9	55.4	55.8	
23:00-00:00	55.6	55.7	53.1	54.1	55.7	56.2	55.6	
00:00-01:00	55.3	55.5	54.6	54.0	55.7	56.1	55.7	
01:00-02:00	55.5	55.6	54.5	55.2	55.7	56.4	55.2	
02:00-03:00	55.6	56.0	55.2	55.8	56.8	56.7	55.9	
03:00-04:00	56.0	55.9	56.0	55.7	56.7	57.1	56.1	
04:00-05:00	55.3	55.8	54.7	55.1	56.1	56.8	56.2	
05:00-06:00	55.4	56.2	60.5	55.0	56.2	56.5	56.1	
06:00-07:00	56.3	56.8	56.1	54.8	57.1	57.1	57.4	
07:00-08:00	55.5	56.3	55.3	54.6	56.5	56.9	56.3	
08:00-09:00	56.4	57.3	57.3	54.4	57.9	56.9	57.4	
09:00-10:00	55.8	57.4	56.5	54.3	62.1	56.7	57.3	
10:00-11:00	55.4	58.1	60.0	58.1	57.6	56.3	56.6	
11:00-12:00	56.6	57.4	61.0	56.6	57.6	56.2	59.1	
12:00-13:00	58.5	57.3	57.1	56.2	56.7	56.4	56.5	
13:00-14:00	56.0	55.7	56.5	58.3	56.5	56.4	56.3	
Leq-24 hrs	56.4	56.9	56.7	56.2	57.0	56.4	56.4	≤ 70
Lmax	78.5	86.3	90.2	78.3	88.6	80.7	80.5	≤ 115
Ldn	62.2	62.9	62.5	61.7	62.9	62.9	62.5	-

Source : \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 265678



**Report No. : 2023-5007330 / 004 (Page 4 of 4)**

Issued date : August 3, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Ambient Noise Level MEASUREMENT DATE : July 5-12, 2023  
MEASUREMENT LOCATION : Boundary of ABS/SAN Plant MEASUREMENT BY :  
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.7 dB(A)  
SOUND LEVEL METER NO. : Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820702

Time	Noise Level at West Boundary of ABS/SAN [dB(A)]							Standard*
	05-06/07/2023	06-07/07/2023	07-08/07/2023	08-09/07/2023	09-10/07/2023	10-11/07/2023	11-12/07/2023	
15:00-16:00	57.4	57.9	57.6	57.8	57.3	57.9	57.9	
16:00-17:00	57.6	57.6	58.2	59.1	56.3	58.3	58.5	
17:00-18:00	58.2	58.3	58.9	59.7	57.9	58.7	59.8	
18:00-19:00	59.5	57.7	57.9	59.6	58.2	59.2	58.3	
19:00-20:00	58.2	58.1	57.3	58.8	57.7	57.8	57.3	
20:00-21:00	57.0	63.4	57.3	58.6	57.2	57.3	58.0	
21:00-22:00	55.7	60.6	56.9	58.4	58.0	56.4	55.7	
22:00-23:00	58.0	58.5	58.1	57.8	57.0	58.4	58.1	
23:00-00:00	57.0	58.0	57.9	57.1	56.0	57.6	57.5	
00:00-01:00	56.4	57.8	58.7	57.4	56.5	58.1	57.6	
01:00-02:00	57.0	58.0	57.9	58.1	56.7	57.8	57.4	
02:00-03:00	57.6	58.3	57.5	57.1	57.2	57.9	57.5	
03:00-04:00	57.5	57.7	57.9	57.3	57.2	58.0	57.7	
04:00-05:00	58.0	57.1	57.4	56.8	57.3	58.1	59.4	
05:00-06:00	58.6	58.1	63.9	57.7	58.6	58.8	58.8	
06:00-07:00	59.4	60.0	60.0	58.4	59.7	60.2	60.3	
07:00-08:00	60.9	60.1	60.0	58.4	60.0	61.2	61.0	
08:00-09:00	60.0	59.1	59.8	58.3	60.2	60.1	61.0	
09:00-10:00	58.3	59.0	59.3	57.9	66.7	58.7	62.0	
10:00-11:00	58.5	59.0	58.0	58.3	59.0	58.0	60.4	
11:00-12:00	57.6	59.8	59.2	59.6	58.9	57.8	63.3	
12:00-13:00	56.8	60.7	58.8	57.6	58.7	57.2	63.2	
13:00-14:00	68.6	60.8	59.2	58.8	58.2	58.4	60.9	
14:00-15:00	58.3	57.7	59.9	57.8	58.0	58.1	57.6	
Leq-24 hrs	59.7	59.2	58.9	58.3	59.1	58.5	59.6	≤ 70
Lmax	89.7	85.9	92.5	85.8	103.4	81.1	79.4	≤ 115
Ldn	64.7	64.9	65.7	64.1	64.3	64.8	65.1	-

Source : \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 265679



**Report No. : 2023-5008033 / 005 (Page 1 of 4)**

**Issued date :** November 6, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Noise Level **MEASUREMENT DATE :** October 10-17, 2023  
**MEASUREMENT LOCATION :** Boundary of ABS/SAN Plant **MEASUREMENT BY :** [REDACTED]  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.9 dB(A)  
**SOUND LEVEL METER NO. :** Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820703

Time	Noise Level at North Boundary of ABS/SAN [dB(A)]							Standard*
	10-11/10/2023	11-12/10/2023	12-13/10/2023	13-14/10/2023	14-15/10/2023	15-16/10/2023	16-17/10/2023	
10:00-11:00	71.8	71.1	71.0	72.7	70.8	71.4	71.2	
11:00-12:00	72.1	71.1	72.1	71.7	70.1	70.9	71.5	
12:00-13:00	71.6	70.6	71.6	71.2	70.2	70.7	70.6	
13:00-14:00	70.9	71.0	71.0	71.0	70.2	71.0	70.9	
14:00-15:00	71.2	70.6	71.6	71.9	72.8	71.6	71.0	
15:00-16:00	71.0	70.8	72.2	72.1	72.6	72.2	71.2	
16:00-17:00	70.9	70.6	71.2	71.2	70.6	71.2	71.8	
17:00-18:00	71.0	70.6	71.0	70.8	70.9	71.1	70.6	
18:00-19:00	70.0	70.5	70.9	70.9	70.3	70.8	70.0	
19:00-20:00	69.6	70.6	70.9	70.9	70.3	70.9	69.9	
20:00-21:00	70.0	70.3	70.7	70.7	70.4	70.7	70.1	
21:00-22:00	69.8	70.0	70.6	70.7	70.6	70.7	70.1	
22:00-23:00	69.5	69.7	70.2	70.2	70.0	70.3	70.3	
23:00-00:00	69.2	69.7	70.3	70.4	70.1	70.3	70.1	
00:00-01:00	69.4	70.1	70.3	70.2	69.8	70.4	70.2	
01:00-02:00	69.5	70.5	69.8	69.7	70.1	69.9	70.0	
02:00-03:00	69.5	70.5	69.6	69.5	70.3	69.6	70.1	
03:00-04:00	69.8	70.4	69.6	69.6	70.1	69.6	70.4	
04:00-05:00	69.5	70.3	69.5	69.4	70.5	69.5	70.5	
05:00-06:00	69.3	73.0	69.4	69.5	70.4	69.4	70.3	
06:00-07:00	69.4	71.0	69.5	69.4	70.2	69.5	70.3	
07:00-08:00	69.2	70.3	70.3	69.5	70.5	69.8	70.6	
08:00-09:00	69.9	70.1	71.1	69.8	70.6	70.8	71.3	
09:00-10:00	71.0	71.7	72.6	70.8	70.9	71.6	70.8	
Leq-24 hrs	70.3	70.7	70.8	70.7	70.6	70.6	70.6	≤ 70
Lmax	82.9	97.8	89.8	88.3	92.3	88.3	85.8	≤ 115
Ldn	76.1	77.1	76.5	76.4	76.7	76.4	76.7	-

**Source :** \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 270190

SGS (Thailand) Limited

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Member of the SGS Group



**Report No. : 2023-5008033 / 005 (Page 2 of 4)** Issued date : November 6, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Ambient Noise Level **MEASUREMENT DATE** : October 10-17, 2023  
**MEASUREMENT LOCATION** : Boundary of ABS/SAN Plant **MEASUREMENT BY** :  
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO.** : Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820713

Time	Noise Level at South Boundary of ABS/SAN [dB(A)]							Standard*
	10-11/10/2023	11-12/10/2023	12-13/10/2023	13-14/10/2023	14-15/10/2023	15-16/10/2023	16-17/10/2023	
11:00-12:00	70.3	70.3	64.8	64.4	63.2	62.6	68.1	
12:00-13:00	70.3	66.1	65.0	63.6	64.1	62.8	68.9	
13:00-14:00	66.0	65.4	66.1	66.3	65.5	63.7	67.3	
14:00-15:00	66.1	65.8	71.6	66.0	69.3	65.1	66.6	
15:00-16:00	65.9	65.9	66.4	65.5	68.1	65.3	66.6	
16:00-17:00	65.5	64.3	64.5	64.8	65.4	64.9	66.7	
17:00-18:00	66.5	64.6	65.2	64.9	64.9	73.4	65.6	
18:00-19:00	64.1	64.5	64.6	64.9	64.0	73.7	64.6	
19:00-20:00	64.5	64.1	65.2	64.3	63.6	65.2	65.8	
20:00-21:00	63.7	63.8	64.5	64.8	63.4	64.9	65.5	
21:00-22:00	63.3	63.2	64.1	64.1	63.6	65.0	65.4	
22:00-23:00	63.5	63.2	64.4	64.0	64.0	64.8	64.3	
23:00-00:00	63.6	65.4	64.3	63.4	64.2	64.1	63.7	
00:00-01:00	63.5	63.2	65.1	63.4	65.3	63.9	65.2	
01:00-02:00	63.3	64.4	64.6	62.6	63.5	64.0	65.1	
02:00-03:00	62.8	65.2	63.8	62.9	65.2	64.7	64.0	
03:00-04:00	63.3	64.3	65.1	63.3	62.7	63.8	64.6	
04:00-05:00	63.4	65.0	63.8	63.3	63.3	66.1	65.8	
05:00-06:00	63.6	69.6	64.0	63.5	63.5	64.8	66.4	
06:00-07:00	64.1	66.1	64.3	63.6	64.5	65.1	65.2	
07:00-08:00	64.0	65.1	64.2	63.9	63.5	64.3	64.0	
08:00-09:00	64.5	65.6	65.3	64.5	63.5	64.9	64.8	
09:00-10:00	65.9	65.3	63.6	63.8	63.4	63.5	64.6	
10:00-11:00	65.9	65.3	63.4	63.6	62.7	67.4	64.4	
Leq-24 hrs	65.5	65.6	65.3	64.2	64.7	66.6	65.8	≤ 70
Lmax	90.9	95.5	103.6	80.3	82.2	99.3	85.5	≤ 115
Ldn	70.4	72.0	71.0	70.0	70.7	71.6	71.6	-

Source : \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 270191



**Report No. : 2023-5008033 / 005 (Page 3 of 4)**

**Issued date :** November 6, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Noise Level **MEASUREMENT DATE :** October 10-17, 2023  
**MEASUREMENT LOCATION :** Boundary of ABS/SAN Plant **MEASUREMENT BY :** [REDACTED]  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO. :** Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820712

Time	Noise Level at East Boundary of ABS/SAN [dB(A)]							Standard*
	10-11/10/2023	11-12/10/2023	12-13/10/2023	13-14/10/2023	14-15/10/2023	15-16/10/2023	16-17/10/2023	
11:00-12:00	57.0	57.4	57.0	55.0	55.6	56.4	56.6	
12:00-13:00	56.9	54.1	54.2	55.6	56.6	54.7	56.9	
13:00-14:00	56.4	56.1	56.1	56.5	56.8	53.5	56.0	
14:00-15:00	56.7	54.4	56.4	56.6	58.0	55.1	56.7	
15:00-16:00	57.4	55.0	56.8	56.8	58.8	56.3	56.5	
16:00-17:00	56.5	57.1	56.9	56.1	55.9	54.4	60.1	
17:00-18:00	56.0	56.2	55.5	55.4	54.8	72.3	57.8	
18:00-19:00	55.3	55.4	55.3	54.6	54.0	72.8	55.6	
19:00-20:00	56.3	55.7	55.5	55.1	54.5	57.5	55.9	
20:00-21:00	56.1	56.3	54.4	55.2	53.4	56.9	55.2	
21:00-22:00	55.6	56.1	54.4	54.7	53.9	56.1	54.7	
22:00-23:00	54.5	55.2	53.7	54.1	53.8	56.4	55.6	
23:00-00:00	54.5	54.9	53.6	54.3	54.2	55.6	54.2	
00:00-01:00	54.7	56.8	54.3	54.7	55.7	55.5	54.6	
01:00-02:00	54.8	58.3	54.1	54.2	55.6	55.3	54.4	
02:00-03:00	55.0	57.3	54.4	53.9	56.7	55.7	54.6	
03:00-04:00	54.9	57.9	55.1	53.5	57.0	56.0	54.7	
04:00-05:00	54.1	58.6	55.1	53.6	56.1	61.1	54.0	
05:00-06:00	54.6	67.7	55.0	54.1	54.9	57.7	55.3	
06:00-07:00	55.5	58.7	55.7	54.9	55.7	57.8	56.2	
07:00-08:00	55.5	57.3	56.3	56.4	54.7	56.6	55.1	
08:00-09:00	56.3	57.2	55.6	56.0	55.5	57.1	56.7	
09:00-10:00	55.8	57.2	56.5	56.5	56.4	55.9	56.6	
10:00-11:00	56.8	58.3	55.8	56.0	54.1	55.6	56.5	
Leq-24 hrs	55.8	58.5	55.4	55.3	55.8	62.8	56.1	≤ 70
Lmax	71.6	96.5	96.8	72.6	71.7	101.5	79.2	≤ 115
Ldn	61.4	66.6	61.2	60.9	62.1	65.7	61.6	-

**Source :** \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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E 270192



**Report No. : 2023-5008033 / 005 (Page 4 of 4)** Issued date : November 6, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS :** Ambient Noise Level **MEASUREMENT DATE :** October 10-17, 2023  
**MEASUREMENT LOCATION :** Boundary of ABS/SAN Plant **MEASUREMENT BY :** [REDACTED]  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.8 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO. :** Model ST-21D, Scarlet Tech Co., Ltd., Serial No. 820717

Time	Noise Level at West Boundary of ABS/SAN [dB(A)]							Standard*
	10-11/10/2023	11-12/10/2023	12-13/10/2023	13-14/10/2023	14-15/10/2023	15-16/10/2023	16-17/10/2023	
11:00-12:00	60.5	61.8	61.2	60.2	59.8	59.2	60.6	
12:00-13:00	59.8	60.2	59.4	58.5	59.3	58.8	60.7	
13:00-14:00	68.4	60.1	61.4	61.0	61.3	58.6	60.9	
14:00-15:00	65.0	60.4	61.3	61.5	61.5	60.3	61.1	
15:00-16:00	59.7	61.0	61.9	61.3	60.9	60.5	61.9	
16:00-17:00	60.4	60.2	61.6	61.4	61.2	60.7	62.6	
17:00-18:00	61.0	60.9	61.8	62.7	61.1	73.0	62.8	
18:00-19:00	59.1	61.5	61.0	61.4	60.2	72.0	61.3	
19:00-20:00	59.5	60.5	61.3	60.3	59.2	60.7	60.4	
20:00-21:00	58.5	60.3	60.7	60.1	58.9	60.3	59.4	
21:00-22:00	57.3	58.5	58.6	59.7	58.5	61.0	58.9	
22:00-23:00	57.6	58.2	58.1	59.5	59.6	60.4	58.6	
23:00-00:00	58.0	58.2	57.5	57.5	59.5	58.9	58.8	
00:00-01:00	57.6	58.7	57.8	57.5	59.9	58.5	58.2	
01:00-02:00	56.7	62.3	58.4	56.9	59.4	58.5	57.2	
02:00-03:00	56.9	60.7	58.5	56.9	58.4	57.8	57.6	
03:00-04:00	57.0	60.2	57.6	57.8	58.4	57.8	57.3	
04:00-05:00	57.4	60.6	58.2	58.1	59.2	64.5	58.0	
05:00-06:00	58.0	68.0	58.4	58.3	59.8	60.5	58.3	
06:00-07:00	60.5	63.0	60.5	61.4	60.6	62.3	61.2	
07:00-08:00	61.3	63.1	60.9	60.7	60.3	62.6	61.9	
08:00-09:00	61.3	62.2	59.1	59.9	58.9	61.2	61.5	
09:00-10:00	59.9	60.9	59.5	59.6	58.4	60.2	59.8	
10:00-11:00	60.6	61.0	59.2	59.3	58.0	60.7	57.6	
Leq-24 hrs	60.8	61.5	60.0	59.9	59.8	64.0	60.2	≤ 70
Lmax	86.4	97.2	82.0	82.8	81.9	97.4	82.6	≤ 115
Ldn	65.2	68.6	65.2	65.2	66.0	68.0	65.4	-

**Source :** \* Notification of the National Environment Board No.15, B.E. 2540 (1997) dated April 3, B.E. 2540 (1997).

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ระดับเสียงในพื้นที่ทำงาน



**Report No. : 2023-5007330 / 005-2 (Page 1 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Workplace Noise Level MEASUREMENT DATE : July 7, 2023  
MEASUREMENT LOCATION : ABS/SAN Plant MEASURED BY :  
CALIBRATION DATA : Model CR-515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
SOUND LEVEL METER NO. : Model CR-171B, Cirrus Research plc, Serial No. G078138

Period	Noise Level at Polymerization SAN (DN) [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	75.7	
10:00-11:00	75.6	
11:00-12:00	76.0	
12:00-13:00	78.1	
13:00-14:00	76.2	
14:00-15:00	76.2	
15:00-16:00	75.7	
16:00-17:00	76.6	
17:00-18:00	76.6	
18:00-19:00	76.4	
19:00-20:00	77.5	
20:00-21:00	77.0	
<b>Leq-12 hrs</b>	<b>76.5</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>83.9</b>	<b>≤ 140</b>

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-2 (Page 2 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Workplace Noise Level MEASUREMENT DATE : July 7, 2023  
MEASUREMENT LOCATION : ABS/SAN Plant MEASURED BY :   
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.6 dB(A)  
SOUND LEVEL METER NO. : Model CR-171B, Cirrus Research plc, Serial No. G078141

Period	Noise Level at Polymerization SAN (CN) [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	79.6	
10:00-11:00	80.1	
11:00-12:00	80.8	
12:00-13:00	89.7	
13:00-14:00	80.6	
14:00-15:00	80.2	
15:00-16:00	81.2	
16:00-17:00	88.2	
17:00-18:00	88.7	
18:00-19:00	88.9	
19:00-20:00	81.4	
20:00-21:00	81.2	
<b>Leq-12 hrs</b>	<b>85.3</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>94.1</b>	<b>≤ 140</b>

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-2 (Page 3 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Workplace Noise Level MEASUREMENT DATE : July 7, 2023  
MEASUREMENT LOCATION : ABS/SAN Plant MEASURED BY :   
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
SOUND LEVEL METER NO. : Model CR:161B, Cirrus Research plc, Serial No. G078054

Period	Noise Level at Polymerization Powder (6MG) [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	79.2	
10:00-11:00	80.9	
11:00-12:00	78.3	
12:00-13:00	80.4	
13:00-14:00	79.5	
14:00-15:00	81.1	
15:00-16:00	80.1	
16:00-17:00	78.2	
17:00-18:00	77.9	
18:00-19:00	78.6	
19:00-20:00	79.2	
20:00-21:00	80.1	
<b>Leq-12 hrs</b>	<b>79.6</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>84.3</b>	<b>≤ 140</b>

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-2 (Page 4 of 5)**

Issued date : July 26, 2023

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Workplace Noise Level

MEASUREMENT DATE : July 7, 2023

MEASUREMENT LOCATION : ABS/SAN Plant

MEASURED BY :

CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,

Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.6 dB(A)

SOUND LEVEL METER NO. : Model CR-171B, Cirrus Research plc, Serial No. G078141

Period	Noise Level at Compounding (Floor 1) [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	82.4	
10:00-11:00	83.6	
11:00-12:00	82.9	
12:00-13:00	81.7	
13:00-14:00	82.1	
14:00-15:00	82.2	
15:00-16:00	79.1	
16:00-17:00	80.6	
17:00-18:00	81.9	
18:00-19:00	81.9	
19:00-20:00	81.8	
20:00-21:00	83.8	
<b>Leq-12 hrs</b>	<b>82.2</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>85.1</b>	<b>≤ 140</b>

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-2 (Page 5 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Workplace Noise Level **MEASUREMENT DATE** : July 7, 2023  
**MEASUREMENT LOCATION** : ABS/SAN Plant **MEASURED BY** :   
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO.** : Model CR:161B, Cirrus Research plc, Serial No. G078054

Period	Noise Level at Utility [dB(A)]	Standard <sup>1/</sup>
10:00-11:00	83.3	
11:00-12:00	82.1	
12:00-13:00	82.2	
13:00-14:00	82.8	
14:00-15:00	82.0	
15:00-16:00	81.9	
16:00-17:00	82.0	
17:00-18:00	81.9	
18:00-19:00	82.0	
19:00-20:00	82.1	
20:00-21:00	81.9	
21:00-22:00	81.9	
<b>Leq-12 hrs</b>	<b>82.2</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>86.3</b>	<b>≤ 140</b>

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-4 (page 2 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Octave Band  
MEASUREMENT LOCATION : ABS/SAN Plant  
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.6 dB(A)  
SOUND LEVEL METER NO. : Model CR-171B, Cirrus Research plc, Serial No. G078141

MEASUREMENT DATE : July 7, 2023

MEASURED BY :

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Polymerization SAN (CN) [dB(A)]*											
1 <sup>st</sup> hour	79.6	23.1	40.2	53.9	61.8	66.5	71.0	73.4	73.0	72.6	70.5	59.5
2 <sup>nd</sup> hour	80.1	23.8	44.0	54.5	61.9	67.1	72.0	73.9	73.6	72.9	70.8	60.2
3 <sup>rd</sup> hour	80.8	23.6	40.9	53.2	61.4	67.4	72.5	74.5	74.5	73.9	71.7	61.3
4 <sup>th</sup> hour	89.7	29.1	42.7	55.8	65.8	73.6	77.3	80.4	82.6	84.9	83.8	70.1
5 <sup>th</sup> hour	80.6	22.5	39.1	53.0	61.5	67.4	72.3	74.3	74.2	73.8	71.1	60.1
6 <sup>th</sup> hour	80.2	22.6	39.5	53.1	60.1	67.2	71.9	74.3	73.8	73.1	70.7	59.8
7 <sup>th</sup> hour	81.2	22.8	39.8	53.4	60.6	67.7	72.0	74.2	74.2	75.1	73.5	64.6
8 <sup>th</sup> hour	88.2	23.8	40.8	54.2	61.7	68.5	72.7	75.8	81.6	84.4	82.5	68.8
9 <sup>th</sup> hour	88.7	23.5	42.0	54.3	61.5	68.7	72.8	75.8	81.9	84.9	82.9	69.1
10 <sup>th</sup> hour	88.9	24.4	41.3	54.0	61.4	68.9	73.2	76.8	82.4	85.0	83.1	69.6
11 <sup>th</sup> hour	81.4	22.9	40.3	53.8	61.9	67.5	72.6	74.6	74.9	75.0	72.8	62.7
12 <sup>th</sup> hour	81.2	24.5	41.5	54.4	61.9	67.3	72.6	74.5	74.3	74.9	73.0	63.7
Leq-12 hrs	85.3	24.3	41.2	54.0	62.0	68.7	73.1	75.7	78.5	80.7	78.9	66.0
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

Remark : \* Measuring Leq 1 hour by Octave-band meter.

Source : 1/ Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-4 (page 3 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Octave Band  
MEASUREMENT LOCATION : ABS/SAN Plant  
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
SOUND LEVEL METER NO. : Model CR:161B, Cirrus Research plc, Serial No. G078054

MEASUREMENT DATE : July 7, 2023

MEASURED BY :

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Polymerization Powder (6MG) [dB(A)]*											
1 <sup>st</sup> hour	79.2	21.8	38.9	50.6	58.6	67.4	69.0	71.8	71.5	73.7	71.7	63.4
2 <sup>nd</sup> hour	80.9	23.1	42.6	51.7	64.2	69.4	73.5	74.9	74.0	73.2	70.7	62.2
3 <sup>rd</sup> hour	78.3	23.4	40.1	50.5	59.6	67.2	70.3	73.1	71.9	70.3	65.7	56.4
4 <sup>th</sup> hour	80.4	23.6	39.1	50.7	59.5	67.8	70.6	73.7	73.4	74.2	72.2	64.2
5 <sup>th</sup> hour	79.5	21.3	37.9	49.8	58.7	68.3	69.6	72.5	71.0	72.8	72.8	66.0
6 <sup>th</sup> hour	81.1	21.2	38.3	50.3	58.8	68.0	69.5	72.8	71.7	75.1	75.9	69.4
7 <sup>th</sup> hour	80.1	22.0	39.1	50.8	59.6	68.4	70.5	73.4	73.5	73.0	72.2	65.3
8 <sup>th</sup> hour	78.2	23.0	40.0	50.6	59.4	68.2	69.8	72.4	71.5	71.1	67.1	52.4
9 <sup>th</sup> hour	77.9	24.1	40.7	51.2	59.6	68.0	69.5	71.7	71.1	71.2	67.2	52.3
10 <sup>th</sup> hour	78.6	23.1	39.8	50.7	59.3	67.1	70.0	72.4	72.4	72.0	68.0	54.0
11 <sup>th</sup> hour	79.2	22.7	41.3	50.8	62.4	67.9	71.6	72.7	72.5	71.8	69.5	60.9
12 <sup>th</sup> hour	80.1	23.2	44.3	51.3	65.6	69.8	73.3	74.0	73.5	71.1	68.1	59.6
Leq-12 hrs	79.6	22.8	40.6	50.8	61.1	68.2	70.8	73.0	72.4	72.7	71.1	63.3
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

Remark : \* Measuring Leq 1 hour by Octave-band meter.

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-4 (page 4 of 5)**

Issued date : July 26, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Octave Band**

**MEASUREMENT DATE : July 7, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,**

Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.6 dB(A)

**SOUND LEVEL METER NO. : Model CR-171B, Cirrus Research plc, Serial No. G078141**

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Compounding (Floor 1) [dB(A)]*											
1 <sup>st</sup> hour	82.4	21.1	38.6	49.4	60.8	69.7	74.1	75.9	77.5	75.2	70.5	58.3
2 <sup>nd</sup> hour	83.6	21.9	39.4	50.4	61.8	71.4	75.2	77.0	78.7	76.4	71.8	59.6
3 <sup>rd</sup> hour	82.9	22.2	39.2	50.0	61.5	71.1	74.6	76.0	77.8	76.0	71.6	59.6
4 <sup>th</sup> hour	81.7	21.6	39.2	49.5	61.4	71.3	73.4	74.2	76.2	75.1	70.8	59.2
5 <sup>th</sup> hour	82.1	22.0	39.9	49.6	61.2	71.3	73.7	75.6	76.5	75.2	70.8	59.1
6 <sup>th</sup> hour	82.2	22.6	40.1	48.9	60.4	69.0	73.8	75.9	77.1	75.3	69.9	57.6
7 <sup>th</sup> hour	79.1	24.5	39.5	45.4	57.7	64.7	69.4	71.5	74.9	73.1	65.1	50.8
8 <sup>th</sup> hour	80.6	25.5	40.5	47.8	58.2	66.0	70.9	72.8	75.9	75.2	68.9	56.9
9 <sup>th</sup> hour	81.9	24.7	39.8	48.7	59.3	70.0	72.9	74.0	76.4	76.5	71.2	59.8
10 <sup>th</sup> hour	81.9	23.8	38.9	48.4	59.3	67.3	72.4	74.2	76.6	76.5	71.6	60.0
11 <sup>th</sup> hour	81.8	23.1	38.7	48.1	59.4	66.9	72.7	74.6	76.6	76.1	71.2	59.7
12 <sup>th</sup> hour	83.8	22.7	41.1	49.0	60.7	68.2	74.7	77.2	78.9	77.7	72.3	60.5
Leq-12 hrs	82.2	23.2	39.6	48.9	60.3	69.4	73.4	75.2	77.1	75.8	70.8	58.9
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark : \*** Measuring Leq 1 hour by Octave-band meter.

**Source : <sup>1/</sup>** Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-4 (page 5 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

SAMPLE DESIGNATED AS : Octave Band  
MEASUREMENT LOCATION : ABS/SAN Plant  
CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
SOUND LEVEL METER NO. : Model CR:161B, Cirrus Research plc, Serial No. G078054

MEASUREMENT DATE : July 7, 2023

MEASURED BY :

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Utility [dB(A)]*											
1 <sup>st</sup> hour	83.3	18.8	40.0	53.3	63.2	69.5	76.8	78.4	77.2	74.2	70.0	57.3
2 <sup>nd</sup> hour	82.1	18.7	39.6	53.4	63.1	69.3	76.5	77.6	75.0	71.0	66.3	49.5
3 <sup>rd</sup> hour	82.2	19.1	39.4	53.3	63.4	69.4	76.6	78.0	74.9	70.9	66.3	49.4
4 <sup>th</sup> hour	82.8	19.0	39.1	53.3	63.0	69.4	76.8	79.0	75.3	71.2	66.8	50.0
5 <sup>th</sup> hour	82.0	19.2	39.3	53.3	62.8	69.3	76.6	77.5	74.8	70.5	65.7	48.7
6 <sup>th</sup> hour	81.9	19.0	39.3	53.2	63.0	69.3	76.5	77.4	74.6	70.4	65.9	48.7
7 <sup>th</sup> hour	82.0	19.6	39.4	53.4	63.0	69.2	76.6	77.5	74.8	70.6	66.1	49.0
8 <sup>th</sup> hour	81.9	18.9	39.2	53.6	62.7	69.5	76.5	77.4	74.6	70.5	66.1	49.0
9 <sup>th</sup> hour	82.0	18.8	39.5	53.7	62.7	69.5	76.7	77.5	74.8	70.5	66.0	48.8
10 <sup>th</sup> hour	82.1	19.0	39.6	53.8	63.2	69.6	77.0	77.3	75.0	71.3	66.2	49.2
11 <sup>th</sup> hour	81.9	18.9	39.5	53.6	63.2	69.6	76.6	77.4	74.8	70.6	65.9	49.3
12 <sup>th</sup> hour	81.9	18.8	39.5	53.4	63.1	69.3	76.5	77.4	74.8	70.7	66.0	49.0
Leq-12 hrs	82.2	19.0	39.4	53.4	63.0	69.4	76.6	77.7	75.1	71.2	66.6	50.8
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

Remark : \* Measuring Leq 1 hour by Octave-band meter.

Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-4 (page 1 of 5)**

Issued date : July 26, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Octave Band **MEASUREMENT DATE** : July 7, 2023  
**MEASUREMENT LOCATION** : ABS/SAN Plant **MEASURED BY** :   
**CALIBRATION DATA** : Model CR:515, Cirrus Research plc, Serial No. 80411,  
Calibration Value Reference: 94.0 dB(A), Pre Cal. : 93.7 dB(A), Post Cal. : 93.7 dB(A)  
**SOUND LEVEL METER NO.** : Model CR-171B, Cirrus Research plc, Serial No. G078138

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Polymerization SAN (DN) [dB(A)]*											
1 <sup>st</sup> hour	75.7	20.3	41.7	51.9	57.9	66.3	68.4	69.1	69.5	68.3	62.0	45.8
2 <sup>nd</sup> hour	75.6	19.9	36.6	51.9	58.3	66.3	68.5	69.0	69.4	68.1	61.8	45.6
3 <sup>rd</sup> hour	76.0	22.3	44.0	52.5	59.4	66.0	68.4	69.4	69.8	68.9	63.1	46.4
4 <sup>th</sup> hour	78.1	19.9	36.4	51.7	59.5	74.7	67.8	68.5	70.8	69.1	61.9	45.8
5 <sup>th</sup> hour	76.2	19.9	36.5	51.7	58.0	66.6	68.3	69.0	70.4	69.4	62.9	46.2
6 <sup>th</sup> hour	76.2	19.8	36.7	51.8	57.8	65.2	68.9	69.7	70.6	69.2	61.7	45.4
7 <sup>th</sup> hour	75.7	20.0	36.9	51.8	57.7	65.5	68.9	69.3	69.7	68.0	61.4	46.0
8 <sup>th</sup> hour	76.6	19.9	37.6	51.9	57.8	65.8	68.8	69.8	70.8	69.7	63.6	46.9
9 <sup>th</sup> hour	76.6	20.0	37.4	51.9	57.7	65.6	68.8	69.9	71.1	69.9	63.7	46.9
10 <sup>th</sup> hour	76.4	19.8	36.7	51.9	58.7	64.9	69.1	69.9	71.0	69.2	62.3	46.0
11 <sup>th</sup> hour	77.5	22.6	38.6	52.9	61.7	66.4	69.3	70.7	71.9	70.6	64.3	47.5
12 <sup>th</sup> hour	77.0	20.1	40.8	51.5	61.0	65.3	69.1	70.7	71.5	69.6	62.9	46.5
Leq-12 hrs	76.5	20.5	39.1	52.0	59.0	67.8	68.7	69.6	70.6	69.2	62.7	46.3
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark** : \* Measuring Leq 1 hour by Octave-band meter.

**Source** : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5007330 / 005-3 (Page 1 of 1)**

Issued date : July 26, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Noise Dose  
**MEASUREMENT LOCATION** : ABS/SAN Plant  
**CALIBRATION DATA** : Calibrator Model CEL-120/2, CASELLA Serial No. 3864875  
 Pre Cal. : 114 dB(A), Post Cal. : 114 dB(A)  
**SOUND LEVEL METER NO.** : Model dBadge2, CASELLA Serial No. 1167163, Serial No. 2311488,  
 Serial No. 1167278, Serial No. 1167292, Serial No. 1167272, Serial No. 2311550

**MEASUREMENT DATE** : July 6-7, 2023

**MEASURED BY** :

Monitoring Station	Shift	Name	Noise Dose (%)	TWA <sup>(8)</sup> [dB(A)]	TWA <sup>(8)</sup> [PPE] <sup>1/</sup> [dB(A)]	TWA <sup>(12)</sup> [dB(A)]	TWA <sup>(12)</sup> [PPE] <sup>1/</sup> [dB(A)]
Polymerization SAN (DN) (July 6, 2023)	Day		60.0	82.8	68.0	81.0	66.3
	Night		31.9	80.0	65.3	78.3	63.5
Polymerization SAN (CN) (July 6, 2023)	Day		332.9	90.2	75.5	88.5	73.7
	Night		120.1	85.8	71.0	84.0	69.3
Polymerization Powder (6MG) (Day : July 7, 2023) (Night : July 6, 2023)	Day		71.2	83.5	68.8	81.8	67.0
	Night		201.2	88.0	73.3	86.3	71.5
Compounding (Floor 1) (July 7, 2023)	Day		520.9	92.2	77.4	90.4	75.7
	Night		657.9	93.2	78.4	91.4	76.7
Utility (July 7, 2023)	Day		94.7	84.8	70.0	83.0	68.3
	Night		18.1	77.6	62.8	75.8	61.1
Standards <sup>2/, 3/</sup>				≤ 85		≤ 83	

- Remarks :**
- Working hours per day = 12 hours
  - Setting values for noise dosimeter are as the followings:
    - Range = 70-140 dB
    - Criterion level = 85 dB
    - Exchange rate = 3 decibels
    - Threshold level = 80 dB
    - Response time = Slow
    - Frequency weighting = A
  - TWA<sup>(8)</sup> : Time Weighted Average for 8 working hours per day.
  - TWA<sup>(12)</sup> : Time Weighted Average for 12 working hours per day.
  - TWA [PPE] : The sound level calculation when wearing personal protective equipment (PPE) ; NRR of Ear Muffs =29
- Sources :**
- <sup>1/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The sound level calculation when wearing personal protective equipment' dated February 14, B.E. 2561 (2018).
  - <sup>2/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The allowable standard for exposure noise level in worker's daily work hours' dated January 26, B.E. 2561 (2018).
  - <sup>3/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The criteria, measurement methods and analysis of working condition related to heat, light or noise including a period of time and a category of business to be carried out, dated March 12, B.E. 2561 (2018).

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**Report No. : 2023-5008033 / 004-2 (Page 1 of 5)**

**Issued date : November 6, 2023**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Workplace Noise Level**

**MEASUREMENT DATE : October 18, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,**

**Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.2 dB(A)**

**SOUND LEVEL METER NO. : Model NA-28, RION, Serial No. 00570424**

Period	Noise Level at Polymerization SAN (DN) [dB(A)]	Standard <sup>1/</sup>
10:00-11:00	87.4	
11:00-12:00	86.8	
12:00-13:00	89.4	
13:00-14:00	90.4	
14:00-15:00	90.2	
15:00-16:00	88.9	
16:00-17:00	88.6	
17:00-18:00	88.6	
18:00-19:00	88.7	
19:00-20:00	89.3	
20:00-21:00	89.4	
21:00-22:00	89.4	
<b>Leq-12 hrs</b>	<b>89.0</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>92.1</b>	<b>≤ 140</b>

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-2 (Page 2 of 5)**

**Issued date : November 6, 2023**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Workplace Noise Level**

**MEASUREMENT DATE : October 18, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,**

**Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 93.9 dB(A)**

**SOUND LEVEL METER NO. : Model NA-28, RION, Serial No. 00570431**

Period	Noise Level at Polymerization SAN (CN) [dB(A)]	Standard <sup>1/</sup>
10:00-11:00	87.6	
11:00-12:00	89.5	
12:00-13:00	88.7	
13:00-14:00	83.1	
14:00-15:00	85.5	
15:00-16:00	89.0	
16:00-17:00	83.6	
17:00-18:00	83.0	
18:00-19:00	84.1	
19:00-20:00	89.6	
20:00-21:00	89.0	
21:00-22:00	86.4	
<b>Leq-12 hrs</b>	<b>87.3</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>94.9</b>	<b>≤ 140</b>

**Source : <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).**

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**Report No. : 2023-5008033 / 004-2 (Page 3 of 5)**

**Issued date : November 6, 2023**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Workplace Noise Level  
**MEASUREMENT LOCATION :** ABS/SAN Plant  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.1 dB(A)  
**SOUND LEVEL METER NO. :** Model NA-28, RION, Serial No. 00570433

**MEASUREMENT DATE :** October 18, 2023

**MEASURED BY :** [REDACTED]

Period	Noise Level at Polymerization Powder (6MG) [dB(A)]	Standard <sup>1/</sup>
10:00-11:00	78.6	
11:00-12:00	78.5	
12:00-13:00	80.0	
13:00-14:00	79.1	
14:00-15:00	78.0	
15:00-16:00	80.1	
16:00-17:00	81.2	
17:00-18:00	81.2	
18:00-19:00	78.6	
19:00-20:00	78.0	
20:00-21:00	80.3	
21:00-22:00	79.8	
<b>Leq-12 hrs</b>	<b>79.6</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>84.2</b>	<b>≤ 140</b>

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-2 (Page 4 of 5)**

**Issued date : November 6, 2023**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Workplace Noise Level**

**MEASUREMENT DATE : October 19, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA**

: Model CR:515, Cirrus Research plc, Serial No. 80411,

Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.1 dB(A)

**SOUND LEVEL METER NO.**

: Model NA-28, RION, Serial No. 00570433

Period	Noise Level at Compounding (BBR) [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	81.7	
10:00-11:00	81.9	
11:00-12:00	81.8	
12:00-13:00	81.7	
13:00-14:00	81.7	
14:00-15:00	81.7	
15:00-16:00	81.6	
16:00-17:00	81.5	
17:00-18:00	81.3	
18:00-19:00	81.1	
19:00-20:00	80.8	
20:00-21:00	81.4	
<b>Leq-12 hrs</b>	<b>81.5</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>82.9</b>	<b>≤ 140</b>

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-2 (Page 5 of 5)**

**Issued date : November 6, 2023**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Workplace Noise Level **MEASUREMENT DATE :** October 19, 2023  
**MEASUREMENT LOCATION :** ABS/SAN Plant **MEASURED BY :** [REDACTED]  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 93.9 dB(A)  
**SOUND LEVEL METER NO. :** Model NA-28, RION, Serial No. 00570431

Period	Noise Level at Utility [dB(A)]	Standard <sup>1/</sup>
09:00-10:00	86.3	
10:00-11:00	85.9	
11:00-12:00	84.9	
12:00-13:00	88.0	
13:00-14:00	85.1	
14:00-15:00	85.4	
15:00-16:00	85.9	
16:00-17:00	85.0	
17:00-18:00	84.5	
18:00-19:00	84.5	
19:00-20:00	84.4	
20:00-21:00	84.6	
<b>Leq-12 hrs</b>	<b>85.5</b>	<b>≤ 87</b>
<b>Lmax</b>	<b>94.7</b>	<b>≤ 140</b>

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-4 (page 1 of 5)**

**Issued date : November 6, 2023**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Octave Band  
**MEASUREMENT LOCATION :** ABS/SAN Plant  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.2 dB(A)  
**SOUND LEVEL METER NO. :** Model NA-28, RION, Serial No. 00570424

**MEASUREMENT DATE :** October 18, 2023

**MEASURED BY :** [REDACTED]

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Polymerization SAN (DN) [dB(A)]*											
1 <sup>st</sup> hour	87.4	23.5	38.3	51.8	64.2	79.6	72.3	83.9	79.9	79.8	71.3	61.4
2 <sup>nd</sup> hour	86.8	23.6	38.9	51.9	64.1	79.7	72.0	81.7	80.1	80.2	71.3	61.4
3 <sup>rd</sup> hour	89.4	24.7	39.3	52.5	64.2	78.0	74.0	82.9	86.1	81.8	71.7	61.4
4 <sup>th</sup> hour	90.4	25.9	38.6	51.4	63.1	76.8	75.8	83.6	86.9	83.9	72.2	61.7
5 <sup>th</sup> hour	90.2	25.5	38.4	51.2	63.0	75.9	75.6	81.4	87.2	84.4	72.3	62.0
6 <sup>th</sup> hour	88.9	25.6	39.1	52.5	64.7	76.0	74.5	81.7	84.9	83.9	72.3	61.8
7 <sup>th</sup> hour	88.6	24.8	38.1	50.8	64.3	75.8	74.2	81.6	84.2	83.7	72.2	61.9
8 <sup>th</sup> hour	88.6	25.0	38.3	50.8	64.3	76.0	74.0	81.8	83.9	84.0	72.3	61.9
9 <sup>th</sup> hour	88.7	24.7	38.2	51.2	63.8	75.5	74.1	80.6	84.5	84.2	72.2	61.9
10 <sup>th</sup> hour	89.3	24.8	38.7	51.5	63.3	75.5	75.0	81.9	85.3	84.5	72.4	61.8
11 <sup>th</sup> hour	89.4	24.6	38.8	51.5	63.2	75.4	75.1	82.1	85.2	84.8	72.4	61.8
12 <sup>th</sup> hour	89.4	24.7	38.4	51.7	63.2	75.5	75.6	81.8	85.6	84.0	72.4	61.8
Leq-12 hrs	89.0	24.8	38.6	51.6	63.8	76.9	74.5	82.2	85.0	83.5	72.1	61.7
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark :** \* Measuring Leq 1 hour by Octave-band meter.

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-4 (page 3 of 5)**

Issued date : November 6, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Octave Band**

**MEASUREMENT DATE : October 18, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA : Model CR:515, Cirrus Research plc, Serial No. 80411,**

Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.1 dB(A)

**SOUND LEVEL METER NO. : Model NA-28, RION, Serial No. 00570433**

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Polymerization Powder (6MG) [dB(A)]*											
1 <sup>st</sup> hour	78.6	24.3	38.9	52.4	61.4	68.9	69.5	71.5	72.1	72.1	68.3	59.0
2 <sup>nd</sup> hour	78.5	24.5	41.0	52.4	61.7	68.7	70.8	72.6	71.9	70.6	66.4	53.0
3 <sup>rd</sup> hour	80.0	24.8	40.4	52.4	60.9	68.9	70.3	72.1	73.0	74.0	72.0	63.7
4 <sup>th</sup> hour	79.1	24.7	40.5	53.0	64.5	70.5	72.7	73.5	71.8	69.0	65.5	57.0
5 <sup>th</sup> hour	78.0	24.3	38.6	52.5	59.8	68.9	70.2	72.3	71.3	69.4	66.5	58.2
6 <sup>th</sup> hour	80.1	25.1	40.9	54.8	62.0	69.3	70.7	72.6	73.4	74.1	71.3	62.7
7 <sup>th</sup> hour	81.2	23.6	38.1	52.0	59.9	69.1	70.4	72.5	73.8	76.1	74.1	66.1
8 <sup>th</sup> hour	81.2	23.6	38.2	51.5	59.8	69.1	69.9	72.8	73.9	76.1	74.2	64.8
9 <sup>th</sup> hour	78.6	23.8	38.7	52.6	60.1	68.4	69.8	71.3	71.2	72.3	69.9	62.0
10 <sup>th</sup> hour	78.0	24.1	40.7	53.3	60.4	68.6	69.9	71.5	71.4	70.7	66.6	52.3
11 <sup>th</sup> hour	80.3	24.1	41.9	53.5	62.3	69.2	71.6	72.6	73.2	74.2	72.0	63.9
12 <sup>th</sup> hour	79.8	24.3	41.7	52.8	63.2	69.8	72.2	73.7	73.1	72.2	68.4	58.6
Leq-12 hrs	79.6	24.3	40.2	52.8	61.6	69.1	70.8	72.5	72.6	73.1	70.6	61.8
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark : \*** Measuring Leq 1 hour by Octave-band meter.

**Source : <sup>1/</sup>** Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-4 (page 4 of 5)**

**Issued date : November 6, 2023**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Octave Band  
**MEASUREMENT LOCATION :** ABS/SAN Plant  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 94.1 dB(A)  
**SOUND LEVEL METER NO. :** Model NA-28, RION, Serial No. 00570433

**MEASUREMENT DATE :** October 19, 2023

**MEASURED BY :** [REDACTED]

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Compounding (BBR) [dB(A)]*											
1 <sup>st</sup> hour	81.7	25.3	37.9	47.7	57.5	67.0	74.5	74.7	76.7	74.0	70.8	60.6
2 <sup>nd</sup> hour	81.9	25.8	38.9	48.4	58.5	67.9	74.3	75.0	77.0	74.4	70.9	60.7
3 <sup>rd</sup> hour	81.8	25.4	38.0	48.2	58.0	66.8	74.6	74.8	76.9	74.2	70.8	60.6
4 <sup>th</sup> hour	81.7	26.1	38.1	48.5	57.9	66.6	74.4	74.7	76.7	74.0	70.6	60.4
5 <sup>th</sup> hour	81.7	26.3	39.3	48.9	58.0	66.9	74.2	74.8	76.8	74.0	70.6	60.3
6 <sup>th</sup> hour	81.7	26.0	39.5	48.8	58.1	67.5	74.1	74.8	76.8	74.0	70.6	60.4
7 <sup>th</sup> hour	81.6	26.6	38.8	48.4	58.0	66.9	74.4	74.5	76.7	73.9	70.6	60.4
8 <sup>th</sup> hour	81.5	25.9	38.7	48.6	58.0	66.3	74.0	74.6	76.7	73.8	70.5	60.3
9 <sup>th</sup> hour	81.3	25.8	38.1	48.2	57.4	66.6	74.2	74.1	76.5	73.6	70.4	60.3
10 <sup>th</sup> hour	81.1	26.1	37.8	48.1	57.3	66.7	73.4	73.2	76.4	74.0	70.7	60.3
11 <sup>th</sup> hour	80.8	26.3	37.4	47.8	57.4	67.1	73.8	72.9	76.0	73.2	69.9	59.9
12 <sup>th</sup> hour	81.4	26.3	37.9	48.4	57.8	67.5	73.8	74.2	76.6	74.0	70.6	60.4
Leq-12 hrs	81.5	26.0	38.4	48.4	57.8	67.0	74.2	74.4	76.7	73.9	70.6	60.4
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark :** \* Measuring Leq 1 hour by Octave-band meter.

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-4 (page 5 of 5)**

**Issued date : November 6, 2023**

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

## Analysis Report

**SAMPLE DESIGNATED AS :** Octave Band  
**MEASUREMENT LOCATION :** ABS/SAN Plant  
**CALIBRATION DATA :** Model CR:515, Cirrus Research plc, Serial No. 80411,  
 Calibration Value Reference: 94.0 dB(A), Pre Cal. : 94.0 dB(A), Post Cal. : 93.9 dB(A)  
**SOUND LEVEL METER NO. :** Model NA-28, RION, Serial No. 00570431

**MEASUREMENT DATE :** October 19, 2023

**MEASURED BY :**

Time	Octave Bands Frequency (Hz)											
	Average	16	31.5	63	125	250	500	1,000	2,000	4,000	8,000	16,000
	Sound Pressure Level at Utility [dB(A)]*											
1 <sup>st</sup> hour	86.3	22.5	38.3	54.6	63.6	71.8	77.1	80.7	81.6	79.0	72.8	57.1
2 <sup>nd</sup> hour	85.9	22.6	38.3	54.3	63.1	71.1	76.6	80.0	81.0	79.1	73.1	56.5
3 <sup>rd</sup> hour	84.9	22.5	38.1	55.4	63.7	71.2	75.8	78.5	79.9	78.5	72.2	55.5
4 <sup>th</sup> hour	88.0	22.4	37.9	55.5	66.3	73.7	79.7	82.2	83.5	79.8	72.1	56.1
5 <sup>th</sup> hour	85.1	22.5	38.3	55.1	64.6	72.4	76.1	78.5	79.8	79.1	72.3	55.6
6 <sup>th</sup> hour	85.4	22.4	38.1	55.5	64.5	72.2	76.3	79.1	80.9	78.6	71.7	56.1
7 <sup>th</sup> hour	85.9	22.6	38.0	55.5	63.6	71.5	76.3	79.6	81.4	79.3	72.5	57.0
8 <sup>th</sup> hour	85.0	22.7	37.7	54.7	63.2	71.2	76.1	79.0	80.2	78.1	71.8	56.2
9 <sup>th</sup> hour	84.5	22.8	37.9	55.2	63.6	72.0	76.0	78.4	79.3	77.5	71.4	56.2
10 <sup>th</sup> hour	84.5	22.7	37.5	55.0	63.0	70.9	75.9	78.7	79.2	77.0	72.4	57.1
11 <sup>th</sup> hour	84.4	22.6	37.4	55.0	63.4	71.7	76.0	78.5	79.2	77.2	71.3	56.2
12 <sup>th</sup> hour	84.6	22.8	37.7	55.2	64.3	72.7	76.3	78.4	79.2	77.8	71.1	56.0
Leq-12 hrs	85.5	22.6	38.0	55.1	64.0	71.9	76.7	79.5	80.7	78.5	72.1	56.3
Standard <sup>1/</sup>	≤ 87	-	-	-	-	-	-	-	-	-	-	-

**Remark :** \* Measuring Leq 1 hour by Octave-band meter.

**Source :** <sup>1/</sup> Notification of the Ministry of Industry, Subjected "Safety Protection Measure for Industry about Working Condition", B.E. 2546 (2003) dated December 3, B.E. 2546 (2003).

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**Report No. : 2023-5008033 / 004-3 (Page 1 of 1)** Issued date : November 6, 2023

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Noise Dose** **MEASUREMENT DATE : October 18-19, 2023**

**MEASUREMENT LOCATION : ABS/SAN Plant**

**MEASURED BY :**

**CALIBRATION DATA : Calibrator Model CEL-120, CASELLA Serial No. 1012767**

Pre Cal. : 114 dB(A), Post Cal. : 114 dB(A)

**SOUND LEVEL METER NO. : Model dBadge2, CASELLA Serial No. 2311744, Serial No. 2311488, Serial No. 2311712, Serial No. 2311490, Serial No. 1167163 and Serial No. 1167292**

Monitoring Station	Shift	Name	Noise Dose (%)	TWA <sup>(8)</sup> [dB(A)]	TWA <sup>(8)</sup> [PPE] <sup>1/</sup> [dB(A)]	TWA <sup>(12)</sup> [dB(A)]	TWA <sup>(12)</sup> [PPE] <sup>1/</sup> [dB(A)]
Polymerization SAN (DN) (October 18, 2023)	Day		45.0	81.5	66.8	79.8	65.0
	Night		215.3	88.3	73.6	86.6	71.8
Polymerization SAN (CN) (October 18, 2023)	Day		192.3	87.8	73.1	86.1	71.3
	Night		101.2	85.1	70.3	83.3	68.5
Polymerization Powder (6MG) (October 18, 2023)	Day		73.2	83.6	68.9	81.9	67.1
	Night		47.6	81.8	67.0	80.0	65.3
Compounding (BBR) (October 19, 2023)	Day		153.5	86.9	72.1	85.1	70.4
	Night		273.7	89.4	74.6	87.6	72.9
Utility (October 19, 2023)	Day		43.6	81.4	66.6	79.6	64.9
	Night		23.5	78.7	64.0	76.9	62.2
Standards <sup>2/, 3/</sup>				≤ 85		≤ 83	

- Remarks :**
- Working hours per day = 12 hours
  - Setting values for noise dosimeter are as the followings;
    - Range = 70-140 dB
    - Criterion level = 85 dB
    - Exchange rate = 3 decibels
    - Threshold level = 80 dB
    - Response time = Slow
    - Frequency weighting = A
  - TWA<sub>(8)</sub> : Time Weighted Average for 8 working hours per day.
  - TWA<sub>(12)</sub> : Time Weighted Average for 12 working hours per day.
  - TWA [PPE] : The sound level calculation when wearing personal protective equipment (PPE) ; NRR of Ear Muffs =29
- Sources :**
- <sup>1/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The sound level calculation when wearing personal protective equipment' dated February 14, B.E. 2561 (2018).
  - <sup>2/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The allowable standard for exposure noise level in worker's daily work hours' dated January 26, B.E. 2561 (2018).
  - <sup>3/</sup> Notification of the Department of Labour Protection and Welfare, Subject 'The criteria, measurement methods and analysis of working condition related to heat, light or noise including a period of time and a category of business to be carried out, dated March 12, B.E. 2561 (2018).

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E 270552

คุณภาพอากาศในสถานที่ทำงาน

**Report No. : 2023-5007330 / 003 (Page 1 of 2)**

Issued date : August 3, 2023

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

## Analysis Report

**SAMPLE DESIGNATED AS** : Workplace Air Quality  
**SAMPLING LOCATION** : ABS/SAN Plant

**SAMPLING DATE** : July 7, 2023  
**SAMPLING BY** :

Station	Parameter	Unit	Result	Standards (TWA)		Analytical Method
				THAI <sup>1/</sup>	ACGIH <sup>2/</sup>	
At the North of SAN (DN)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
At the South of SAN (DN)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
At the South of 6MG	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
Wetside SAN Process : Personal Sampling (Mr. Piyapong)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
Wetside Powder Process : Personal Sampling (Mr. Jirawat)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024

**Remarks :** - TLV-TWA = Threshold Limit Value – Time Weighted Average.

\* The limitation of maximum concentration for hazardous chemical during any time of working.

- N.D. = Not Detected

- Detection Limit : Acrylonitrile <0.4238 ppm, Styrene <0.0288 ppm and 1,3-Butadiene <0.4142 ppm

**Sources :** <sup>1/</sup> Notification of the Department of Labor Protection and Welfare, Subject Limitation of Hazardous Chemical Concentration, Vol.134, Special Part 198 D, dated August 3, B.E. 2560 (2017)

<sup>2/</sup> Recommendation value of Threshold Limit Value issued by ACGIH (American Conference of Governmental Industrial Hygienists), 2022.

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**Report No. : 2023-5007330 / 003 (Page 2 of 2)**

Issued date : August 3, 2023

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

CONTACT :

ADDRESS :

## Analysis Report

SAMPLE DESIGNATED AS : Workplace Air Quality

SAMPLING LOCATION : ABS/SAN Plant

SAMPLING DATE : July 7, 2023

SAMPLING BY :

Station	Parameter	Unit	Result	Standards (TWA)		Analytical Method
				THAI <sup>1/</sup>	ACGIH <sup>2/</sup>	
At the North of SAN (DN)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
At the South of SAN (DN)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
At the South of 6MG	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
Wetside SAN Process : Personal Sampling (Mr. Piyapong)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
Wetside Powder Process : Personal Sampling (Mr. Jirawat)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501

Remarks : - TLV-TWA = Threshold Limit Value – Time Weighted Average.

\* The limitation of maximum concentration for hazardous chemical during any time of working.

- N.D. = Not Detected

- Detection Limit : Alpha Methyl Styrene <0.1270 ppm

Sources : <sup>1/</sup> Notification of the Department of Labor Protection and Welfare, Subject Limitation of Hazardous Chemical Concentration, Vol.134, Special Part 198 D, dated August 3, B.E. 2560 (2017)

<sup>2/</sup> Recommendation value of Threshold Limit Value issued by ACGIH (American Conference of Governmental Industrial Hygienists), 2022.

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**Report No. : 2023-5008033 / 003 (Page 1 of 2)**
**Issued date : November 3, 2023**
**CLIENT : INEOS STYROLUTION (THAILAND) CO., LTD.**
**CONTACT :**
**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Workplace Air Quality**
**SAMPLING LOCATION : ABS/SAN Plant**
**SAMPLING DATE : October 19, 2023**
**SAMPLING BY :**

Station	Parameter	Unit	Result	Standards (TWA)		Analytical Method
				THAI <sup>1/</sup>	ACGIH <sup>2/</sup>	
At the North of SAN (DN)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
At the South of SAN (DN)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
At the South of 6MG	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
Wetside SAN Process : Personal Sampling (K.Soottipat )	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024
Wetside Powder Process : Personal Sampling (K.Korakot)	Acrylonitrile	ppm	N.D.	≤ 2	≤ 2	NIOSH 1604
	Styrene	ppm	N.D.	≤ 100	≤ 10	NIOSH 1501
	1,3-Butadiene	ppm	N.D.	≤ 1	≤ 2	NIOSH 1024

**Remarks :** - TLV-TWA = Threshold Limit Value – Time Weighted Average.

\* The limitation of maximum concentration for hazardous chemical during any time of working.

- N.D. = Not Detected

- Detection Limit : Acrylonitrile &lt;0.3928 ppm, Styrene &lt;0.0272 ppm and 1,3-Butadiene &lt;0.3881 ppm

**Sources :** <sup>1/</sup> Notification of the Department of Labor Protection and Welfare, Subject Limitation of Hazardous Chemical Concentration, Vol.134, Special Part 198 D, dated August 3, B.E. 2560 (2017)

<sup>2/</sup> Recommendation value of Threshold Limit Value issued by ACGIH (American Conference of Governmental Industrial Hygienists), 2022.

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**Report No. : 2023-5008033 / 003 (Page 2 of 2)**

**Issued date : November 3, 2023**

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

**CONTACT :**

**ADDRESS :**

## Analysis Report

**SAMPLE DESIGNATED AS : Workplace Air Quality**

**SAMPLING LOCATION : ABS/SAN Plant**

**SAMPLING DATE : October 19, 2023**

**SAMPLING BY :**

Station	Parameter	Unit	Result	Standards (TWA)		Analytical Method
				THAI <sup>1/</sup>	ACGIH <sup>2/</sup>	
At the North of SAN (DN)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
At the South of SAN (DN)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
At the South of 6MG	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
Wetside SAN Process : Personal Sampling (K.Soottipat )	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501
Wetside Powder Process : Personal Sampling (K.Korakot)	Alpha Methyl Styrene	ppm	N.D.	≤ 100*	-	Based on NIOSH 1501

**Remarks :**

- TLV-TWA = Threshold Limit Value – Time Weighted Average.
- \* The limitation of maximum concentration for hazardous chemical during any time of working.
- N.D. = Not Detected
- Detection Limit : Alpha Methyl Styrene <0.1200 ppm

**Sources :**

- <sup>1/</sup> Notification of the Department of Labor Protection and Welfare, Subject Limitation of Hazardous Chemical Concentration, Vol.134, Special Part 198 D, dated August 3, B.E. 2560 (2017)
- <sup>2/</sup> Recommendation value of Threshold Limit Value issued by ACGIH (American Conference of Governmental Industrial Hygienists), 2022.

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1/2

Ref. No. WR428/06/23

Report No. 2306/564

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนโอแปด ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อเก่า (OW1)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	6.69	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> )			
- TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



Ref. No. WR428/06/23

Report No. 2306/564

26/4/66

## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ปูนเหลือง ตะกอนเล็กน้อย

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางทางไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH ( $C_5-C_8$ ) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH ( $C_{8-C_{16}}$ ) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH ( $C_{16-C_{35}}$ ) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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Ref. No. WR428/06/23

Report No. 2306/564\_1

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ด้าบลมาตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง :   
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อเก่า (OW1)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	16.1	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	20.3	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลืออง ตะกอนเล็กน้อย

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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----- End of Report -----



Ref. No. WR429/06/23

Report No. 2306/564

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อเก่า (OW2)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	5.59	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> )			
- TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



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## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลือง ตะกอนเล็กน้อย

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางทางไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH ( $C_5-C_8$ ) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH ( $C_8-C_{16}$ ) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH ( $C_{16}-C_{35}$ ) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

คำมาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง :   
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อเก่า (OW2)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	29.6	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	12.4	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลืออง ตะกอนเล็กน้อย

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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----- End of Report -----



บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

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7 Soi Phaholyothin 24, Phaholyothin Rd., Jompol, Chatuchak, Bangkok 10900

Tel : (662) 939-4370-72, Fax : (662) 513-4221, E-mail : sale@spscon.com., www.spscon.com

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26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนโอแปด ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW3)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	5.74	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> )			
- TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



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## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลืออง ตะกอนเล็กน้อย

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางแหล่งของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH ( $C_5-C_8$ ) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH ( $C_8-C_{16}$ ) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH ( $C_{16}-C_{35}$ ) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดลอกหรือเผยแพร่ผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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Ref. No. WR430/06/23

Report No. 2306/564\_1

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สตีโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ด้าบลมาตาพุต อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สตีโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง :   
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW3)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	14.6	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	22.9	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้น เหลือง ตะกอนเล็กน้อย

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดลอกหรือเผยแพร่ข้อมูลบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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----- End of Report -----



บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

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Ref. No. WR431/06/23

Report No. 2306/564

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สโตร์โรชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สโตร์โรชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW4)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	6.22	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> )			
- TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



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## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลือง ตะกอนเล็กน้อย

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH (C<sub>5</sub>-C<sub>8</sub>) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH (C<sub>9</sub>-C<sub>16</sub>) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH (C<sub>17</sub>-C<sub>35</sub>) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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----- End of Report -----





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Report No. 2306/564\_1

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนโอบแปด ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW4)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	64.7	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	22.6	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลืออง ตะกอนเล็กน้อย

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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Report No. 2306/564

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW5)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	6.66	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> ) - TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



Ref. No. WR432/06/23

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## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลืออง ตะกอนเล็กน้อย

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH ( $C_5-C_8$ ) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH ( $C_8-C_{16}$ ) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH ( $C_{16}-C_{35}$ ) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

คำมาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

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ผู้ควบคุมห้องวิเคราะห์

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Report No. 2306/564\_1

26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนโอแปด ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สโตร์ลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง :   
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW5)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	84.7	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	27.2	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ชื้นเหลือง ตะกอนเล็กน้อย

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนโอแปด ตำบลมาบตาพุด อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตโรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง : XXXXXXXXXX  
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW6)	ค่ามาตรฐาน
pH	Electrometric Method (4500-H <sup>+</sup> B.)	6.96	6.5-9.2 <sup>(1)</sup>
Styrene (mg/L)	Purge and Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.0008	24
Total Petroleum Hydrocarbon (C <sub>5</sub> -C <sub>35</sub> )			
- TPH (C <sub>5</sub> -C <sub>8</sub> ) (mg/L)	Purge and Trap Capillary-Column, Gas Chromatographic Method (U.S. EPA Method 5030C & 8015D**)	<0.00004	1.4
- TPH (C <sub>8</sub> -C <sub>16</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	1.7
- TPH (C <sub>16</sub> -C <sub>35</sub> ) (mg/L)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method (U.S. EPA Method 3510C & 8015D)	<0.00024	0.1



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## รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

### หมายเหตุ:

ลักษณะตัวอย่าง: ไส้

- (1) ในกรณีที่มีการปนเปื้อนของกรดหรือด่างให้เปรียบเทียบผลการวิเคราะห์ค่าพีเอชจากจุดเก็บตัวอย่างบ่อน้ำที่ใช้ในการติดตามตรวจสอบการปนเปื้อนกับผลการวิเคราะห์จากจุดเก็บตัวอย่างบ่อน้ำที่ใช้เป็นบ่ออ้างอิงบนทิศทางการไหลของน้ำใต้ดินในพื้นที่ โดยค่าพีเอชที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับและไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐานคุณภาพน้ำบาดาลที่ใช้บริโภค คือ 6.5-9.2
- TPH ( $C_5-C_8$ ) : Sum of n-Pentane, n-Hexane, n-Heptane, n-Octane
  - TPH ( $C_9-C_{16}$ ) : Sum of n-Nonane, n-Decane, n-Undecane, n-Dodecane, n-Tridecane, n-Tetradecane, n-Pentadecane, n-Hexadecane
  - TPH ( $C_{17}-C_{35}$ ) : Sum of n-Heptadecane, n-Octadecane, n-Nonadecane, n-Eicosane, n-Heneicosane, n-Docosane, n-Tricosane, n-Tetracosane, n-Pentacosane, n-Hexacosane, n-Heptacosane, n-Octacosane, n-Nonacosane, n-Triacontane, n-Hentriacontane, n-Dotriacontane, n-Tritriacontane, n-Tetratriacontane, n-Pentatriacontane

คำมาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\*\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดถ่ายรายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

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ผู้ควบคุมห้องวิเคราะห์

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26/4/66

### รายงานผลการวิเคราะห์คุณภาพน้ำใต้ดิน

โครงการ : บริษัท อินนิออส สไตรลูชั่น (ประเทศไทย) จำกัด วันที่เก็บตัวอย่าง : 27 มิถุนายน 2566  
ที่ตั้งโครงการ : เลขที่ 4/2 ถนนไอบีต ตำบลมาตาบุตร อำเภอเมือง วันที่รับตัวอย่าง : 28 มิถุนายน 2566  
จังหวัดระยอง 21150 วันที่วิเคราะห์ : 28 มิถุนายน-4 กรกฎาคม 2566  
ชื่อ/ที่อยู่ลูกค้า : บริษัท อินนิออส สไตรลูชั่น (ประเทศไทย) จำกัด วันที่ออกรายงาน : 6 กรกฎาคม 2566  
วิธีเก็บตัวอย่าง : แบบจ้วง  
ผู้เก็บตัวอย่าง :   
บริษัท เอส.พี.เอส. คอนซัลติ้ง เซอร์วิส จำกัด

พารามิเตอร์	วิธีวิเคราะห์	บริเวณบ่อใหม่ (OW6)	ค่ามาตรฐาน
Potassium Hydroxide as Potassium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	18.2	-
Magnesium Sulfate as Magnesium (mg/L)	Digestion, Inductively Coupled Plasma Method (3030 F. & 3120 B.)	23.0	-
1,3 Butadiene (mg/L)	Purge And Trap Capillary-Column Gas Chromatographic/Mass Spectrometric Method (6200 B.)	<0.001	-
Acrylonitrile (mg/L)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method (U.S. EPA Method 5030C & 8260D*)	<0.002	-

#### หมายเหตุ:

ลักษณะตัวอย่าง: ไส้

ค่ามาตรฐาน = ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดเกณฑ์การปนเปื้อนในดินและน้ำใต้ดิน การตรวจสอบคุณภาพดินและน้ำใต้ดิน การแจ้งข้อมูลรวมทั้งการจัดทำรายงานผลการทดสอบคุณภาพดินและน้ำใต้ดิน และรายงานเสนอมาตรการควบคุมและมาตรการลดการปนเปื้อนในดินและน้ำใต้ดิน พ.ศ. 2559

Method = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017.

Method\* = United States Environmental Protection Agency (U.S. EPA) Method

ผลการตรวจวิเคราะห์นี้รับรองเฉพาะตัวอย่างที่ได้ทำการวิเคราะห์เท่านั้น

ห้ามคัดลอกหรือเผยแพร่รายงานผลการตรวจวิเคราะห์เพียงบางส่วนโดยไม่ได้รับอนุญาตจากบริษัทเป็นลายลักษณ์อักษร

เจ้าหน้าที่ประจำห้องวิเคราะห์

6 / 7 / 66

ผู้ควบคุมห้องวิเคราะห์

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