



**Bureau of Laboratory Quality Standards
Ministry of Public Health**

This is to certify that

The laboratory of

Central Laboratory (Thailand) Co., Ltd. Songkhla Branch

9/116 Kanchanawanich Road, Hatyai, Hatyai,

Songkhla 90110, Thailand

has been accepted as an
accredited laboratory complying with the ISO/IEC 17025 : 2017
and the requirements of the Bureau of Laboratory Quality Standards

The laboratory has been accredited for specific tests
listed in the scope within the field of

Food and Feeding stuffs Testing

Patavee Soisangwan
(Dr. Patavee Soisangwan)

Director of Bureau of Laboratory Quality Standards

Date of Accreditation : 24 December 2021

Valid Until : 23 December 2025

Accreditation Number 1085/49

The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

| No. | Type of Sample | Test | Method |
|-----|----------------|---|--|
| 1. | Food* | 1. Total Dietary Fiber | AOAC (2023) 985.29 |
| | | 2. Total Energy | Journal of AOAC International, 1993, P.106 |
| | | 3. Total Carbohydrate | Journal of AOAC International, 1993, P.8 |
| | | 4. Cholesterol | In-house method TE-CH-143 based on AOAC (2023) 976.26 |
| | | 5. Total Sugar | AOAC (2023) 925.35 (B) |
| | | 6. Total Phosphorus | AOAC (2023) 986.24 |
| | | 7. Total Phosphorus (as P ₂ O ₅) | In-house method TE-CH-312 based on Pearson's Chemical Analysis of Foods, Eighth Edition, 1981, P.29-31 USA |
| | | 8. Sulphur dioxide | AOAC (2023) 990.28 |
| | | 9. Sorbic acid | Nordic Committee on Food Analysis., No.124, 2 nd Edition, 1997, P.1-7 |
| | | 10. Benzoic acid | |
| | | 11. Histamine | AOAC (2023) 977.13 |
| | | 12. Vitamin A (Retinol) | In-house method TE-CH-022 based on Bull. Dept. Med. Sci. 1995; 37(1): P.57-64 |
| | | 13. Vitamin B2 (Riboflavin) | In-house method TE-CH-225 based on Journal Agriculture Food Chemistry (1984) 32, P.1326-1341 |
| | | 14. Vitamin C | In-house method TE-CH-177 based on Bull. Dept. Med. Sci.1998; 40(3): P.347-357 |

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| No. | Type of Sample | Test | Method |
|-----|---|--|--|
| 1. | Food* | 15. Aflatoxin B ₁ 16. Aflatoxin B ₂ 17. Aflatoxin G ₁ 18. Aflatoxin G ₂ | In-house method TE-CH-343 based on AOAC (2023) 991.31 |
| | | 19. Water Activity (aw) | In-house method TE-PH-019 based on AOAC (2023) 978.18 |
| 2. | - Food* - Beverages in Sealed Container* | 20. Arsenic (As) 21. Lead (Pb) 22. Mercury (Hg) 23. Cadmium (Cd) | In-house method TE-CH-035 based on AOAC (2023) 974.14, 986.15 and 999.10 |
| | | 24. Tin (Sn) | In-house method TE-CH-135 based on AOAC (2023) 985.16 |
| 3. | Cereal | 25. Ash | AOAC (2023) 923.03 |
| 4. | Baked Products | 26. Ash | AOAC (2023) 935.39 |
| 5. | Rice, Flour, Cereal and Products | 27. Fat | AOAC (2023) 922.06 |
| 6. | Seafood and seafood products | 28. Ash | AOAC (2023) 938.08 |
| | | 29. Crude Fiber | In-house method TE-CH-122 based on AOAC (2023) 978.10 |
| | | 30. Moisture | In-house method TE-CH-180 based on AOAC (2023) 950.46 (B) |
| | | 31. Fat | AOAC (2023) 948.15 |
| | | 32. Water Activity (aw) | In-house method TE-PH-019 based on Journal of AOAC (2023) 978.18 |

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| No. | Type of Sample | Test | Method |
|-----|---|---|--|
| 7. | - Food** - Oil | 33. Fatty acid profile | In-house method TE-CH-208 based on AOAC (2023) 996.06 |
| 8. | - Bird's Nest - Bird's Nest Drink | 34. Nitrite (NO ₂) | In-house method TE-CH-303 based on AOAC (2023) 973.31 |
| | | 35. Arsenic (As) 36. Lead (Pb) 37. Mercury (Hg) 38. Cadmium (Cd) | In-house method TE-CH-356 based on AOAC (2023) 999.10 |
| | | 39. Moisture | In-house method TE-CH-358 based on AOAC (2023) 931.04 (A) |
| | | | |
| 9. | Sugar confectionary mixture | 40. Moisture | In-house method TE-CH-357 based on AOAC (2023) 925.45 |
| 10. | Meat and meat product | 41. Moisture | AOAC (2023) 950.46 (B) |
| 11. | - Meat and Meat product - Seafood and seafood products | 42. Protein | In-house method TE-CH-042 based on AOAC (2023) 981.10 |
| 12 | Aquatic animals and aquatic animals products | 43. TVB-N | In-house method TE-CH 196 based on Journal of European Union 2019 |
| | | 44. Lead (Pb) 45. Mercury (Hg) 46. Cadmium (Cd) | In-house method TE-CH-035 based on AOAC (2023) 974.14, 986.15 and 999.10 |
| | | | |
| | | | |
| 13 | - Food* - Pet food | 47. Vitamin B1 (Thiamine) | In-house method TE-CH-311 based on Journal of AOAC International, Vol 85, No.4, 2002 |
| | | 48. Taurine | In-house method TE-CH-299 based on AOAC (2023) 999.12 |
| | | 49. Protein | In-house method TE-CH-042 based on AOAC (2023) 981.10 |

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| No. | Type of Sample | Test | Method |
|-----|---|---|---|
| 14 | - Food* - Pet food - Beverages in Sealed Container* | 50. Cadmium (Cd) 51. Copper (Cu) 52. Iron (Fe) 53. Zinc (Zn) 54. Manganese (Mn) 55. Aluminium (Al) 56. Sodium (Na) 57. Potassium (K) 58. Magnesium (Mg) 59. Calcium (Ca) | In-house method TE-CH-134 based on AOAC (2023) 984.27, 999.10 and 999.11 |
| 15. | Feeding stuffs and raw material | 60. Ash | AOAC (2023) 942.05 |
| 16. | Feeding stuffs and raw material | Melamine and Analogues 61. Melamine 62. Cyanuric Acid 63. Ammelide 64. Ammeline | In-house method TE-CH-361 based on Laboratory Information Bulletin LIB, No. 4421, Volume 24, October 2008 |
| | | 65. Nitrogen and Protein | In-house method TE-CH-012 based on AOAC (2023) 981.10 |
| | | 66. Aflatoxin B ₁ 67. Aflatoxin B ₂ 68. Aflatoxin G ₁ 69. Aflatoxin G ₂ | In-house method TE-CH-025 based on AOAC (2023) 991.31 and 971.22 |
| | | Nitrofurans (Parent Drug) 70. Nitrofurazone (NFZ) 71. Nitrofurantoin (NFT) 72. Furazolidone (FZD) 73. Furaltadone (FTD) | In-house method TE-CH-001 based on Journal of Chromatography A, 771 (1997), page 349-354 |
| | | | |

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| No. | Type of Sample | Test | Method |
|-----|---|---|--|
| 17. | - Feeding stuffs and raw Material - Pet food | 74. Crude Fiber | In-house method TE-CH-122 based on AOAC (2023) 978.10 |
| 18. | Pet food | 75. Fat | AOAC (2023) 954.02 |
| 19. | Vegetables and Fruits (High water and low or no chlorophyll content) | Pyrethroid group 76. bifenthrin 77. cyfluthrin 78. cypermethrin 79. deltamethrin 80. fenvalerate 81. lambda-cyhalothrin 82. permethrin Organochlorine group 83. aldrin (HHDN) 84. alpha-BHC or alpha-HCH 85. alpha-Endosulfan 86. beta-BHC or beta-HCH 87. beta-Endosulfan 88. dieldrin (HEOD) 89. endosulfan-sulfate 90. endrin 91. heptachlor 92. heptachlor-endo-epoxide 93. lindane 94. o,p' -DDD 95. o,p' -DDE 96. p,p' -DDT | In-house method TE-CH-030 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC- μ ECD Technique |

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| No. | Type of Sample | Test | Method |
|-----|---|---|---|
| 19. | Vegetables and Fruits (High water and low or no chlorophyll content) | Organophosphate group 97. chlorpyrifos 98. diazinon 99. dicotophos 100. dimethoate 101. fenitrothion 102. malathion 103. methamidophos 104. mevinphos 105. monocrotophos 106. parathion-methyl 107. pirimiphos-ethyl 108. pirimiphos-methyl 109. profenophos 110. prothiophos 111. triazophos | In-house method TE-CH-031 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC-FPD Technique |
| | | Carbamate group 112. aldicarb 113. aldicarb-sulfone 114. aldicarb-sulfoxide 115. carbaryl 116. carbofuran 117. fenobucarb 118. isoprocarb 119. methiocarb 120. methomyl 121. oxamyl | In-house method TE-CH-246 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by LC-MS Technique |

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| No. | Type of Sample | Test | Method |
|-----|---|--|--|
| 20. | Vegetables and Fruits (High water and High acid content) | Organochlorine Groups 122. aldrin (HHDN) 123. alpha-BHC or alpha- HCH 124. alpha-Endosulfan 125. beta-BHC or beta-HCH 126. beta-Endosulfan 127. dieldrin (HEOD) 128. endosulfan-sulfate 129. endrin 130. heptachlor 131. heptachlor-endo-epoxide 132. lindane 133. o,p'-DDD 134. o,p'-DDE 135. p,p'-DDT | In-house method TE-CH-030 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC-μECD Technique |
| | | Pyrethroid group 136. bifenthrin 137. cyfluthrin 138. cypermethrin 139. deltamethrin 140. fenvalerate 141. lambda-cyhalothrin 142. permethrin | |

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| No. | Type of Sample | Test | Method |
|-----|---|--|---|
| 20. | Vegetables and Fruits (High water and High acid content) | Organophosphate group 143. chlorpyrifos 144. diazinon 145. dicotophos 146. dimethoate 147. fenitrothion 148. malathion 149. methamidophos 150. mevinphos 151. monocrotophos 152. parathion-methyl 153. pirimiphos-ethyl 154. pirimiphos-methyl 155. profenophos 156. prothiophos 157. triazophos | In-house method TE-CH-031 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC-FPD Technique |

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| No. | Type of Sample | Test | Method |
|-----|--|---|--|
| 21. | Vegetables and Fruits (High water and High chlorophyll content) | Organochlorine group 158. aldrin (HHDN) 159. alpha-BHC or alpha-HCH 160. alpha-Endosulfan 161. beta-BHC or beta-HCH 162. beta-Endosulfan 163. delta-BHC or delta-HCH 164. dieldrin (HEOD) 165. endosulfan-sulfate 166. endrin 167. heptachlor 168. heptachlor-endo-epoxide 169. lindane 170. o,p'-DDD 171. o,p'-DDE 172. o,p'-DDT 173. p,p'-DDT Pyrethroid group 174. bifenthrin 175. cyfluthrin 176. cypermethrin 177. deltamethrin 178. fenvalerate 179. lambda-cyhalothrin 180. permethrin | In-house method TE-CH-030 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC-μECD Technique |

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| No. | Type of Sample | Test | Method |
|-----|--|---|---|
| 21. | Vegetables and Fruits (High water and High chlorophyll content) | Organophosphate group 181. chlorpyrifos 182. chlorpyrifos-methyl 183. diazinon 184. dichlorvos or DDVP 185. dicotophos 186. dimethoate 187. ethion 188. fenitrothion 189. malathion 190. methamidophos 191. mevinphos 192. parathion-ethyl 193. parathion-methyl 194. pirimiphos-ethyl 195. pirimiphos-methyl 196. profenophos 197. prothiophos | In-house method TE-CH-031 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by GC-FPD Technique |
| | | Carbamate group 198. aldicarb 199. aldicarb-sulfone 200. aldicarb-sulfoxide 201. carbaryl 202. carbofuran 203. fenobucarb 204. isoprocarb 205. methiocarb 206. methomyl 207. oxamyl | In-house method TE-CH-246 based on Steinwandter, H. Universal 5 min On-Line Method for Extracting and Isolating Pesticide Residues and Industrial Chemicals, Fresenius Z Anal. Chem., 322 (1985). P.752-754 by LC-MS Technique |

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| No. | Type of Sample | Test | Method |
|-----|----------------|------------------------------|---|
| 22. | Aquatic animal | Fluoroquinolone group | In-house method TE-CH-115 based on Journal of Chromatography A., (2002), Vol.952, page 121-129 |
| | | 208. ciprofloxacin | |
| | | 209. danofloxacin | |
| | | 210. difloxacin | |
| | | 211. enrofloxacin | |
| | | 212. marbofloxacin | |
| | | 213. norfloxacin | |
| | | 214. ofloxacin | |
| | | 215. sarafloxacin | |
| | | Quinolone group | In-house method TE-CH-115 based on Journal of Chromatography A., (2002), Vol.952, page 121-129. |
| | | 216. flumequine | |
| | | 217. nalidixic acid | |
| | | 218. oxolinic acid | Journal of AOAC International, Vol.88, No.3, 2005 |
| | | 219. Malachite Green | |
| | | 220. Leuco-malachite Green | |
| | | 221. Crystal Violet | |
| | | 222. Leuco-crystal Violet | In-house method TE-CH-004 based on Journal of Assoc. Off. Anal. Chem. Vol.74, No.4, 1991 |
| | | 223. Oxolinic acid | |
| | | Tetracycline group | In-house method TE-CH-200 based on AOAC (2023) 995.09 |
| | | 224. chlortetracycline | |
| | | 225. doxycycline | |
| | | 226. oxytetracycline | |
| | | 227. tetracycline | |

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| No. | Type of Sample | Test | Method |
|-----|--|---|---|
| 22. | Aquatic animal | Cephalosporins 228. cefalexin 229. cefotaxime 230. cefpodoxime 231. cefquinome 232. ceftiofur 233. ceftriaxone | In-house method TE-CH-390 based on Journal of Chromatography B., 899 (2012), page 57-65 |
| 23. | Aquatic animal and Aquatic animal products | 234. Florfenicol 235. Difloxacin 236. Erythromycin | In-house method TE-CH-256 based on Biosci. Biotechnol. Biochem 70 (1) 2006 |
| 24. | Animal tissue | 237. Ash | AOAC (2023) 920.153 |
| | | Nitrofurans metabolites 238. 1-Aminohydantoin (AHD) 239. 3-Amino-2-oxazolidinone (AOZ) 240. 3-Amino-5-morpholinomethyl-2-oxazolidinone (AMOZ) 241. semicarbazide (SEM) | In-house method TE-CH-002 based on Journal of Chromatography B., (1997), Vol.691, page 87-94 (Tissue Bound Residues and Total Residues) |
| | | 242. Chloramphenicol | Euro Proxima B. V, 5091 CAP (23) 04.20 In-house method TE-CH-027 based on Journal of Chromatography B., (2003), Vol.791, page 31-38 |

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| No. | Type of Sample | Test | Method |
|-----|---|--|--|
| 25. | Animal tissue and Animal tissue products | Sulfonamide group 243. ormetoprim (OMP) 244. sulfachloropyridazine (SCPD) 245. sulfadiazine (SDZ) 246. sulfadimethoxine (SDM) 247. sulfamerazine (SMR) 248. sulfamethazine (SMZ) 249. sulfamethoxazole (SMXZ) 250. sulfamonomethoxine (SMONO) 251. sulfapyridine (SPD) 252. sulfaquinoxaline (SQX) 253. sulfathiazole (STZ) 254. sulfisoxazole (SIX) 255. trimethoprim (TMP) | In-house method TE-CH-156 based on Analytical chimica Acta, 546 (2005), page 174-181 |
| 26. | Shrimp | 256. Oxytetracycline | In-house method TE-CH-003 based on AOAC (2023) 995.09 |
| | | 257. Oxolinic acid | In-house method TE-CH-004 based on Journal of Assoc. Off. Anal. Chem. Vol.74, No.4, 1991 |
| 27. | - Food* - Beverages in Sealed Container* - Seasoning - Feeding stuff | 258. Salt (as Sodium Chloride) | In-house method TE-CH-175 based on AOAC (2023) 937.09 |

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| No. | Type of Sample | Test | Method |
|-----|---|---------------------------------------|--|
| 28. | - Acidified Foods - Flour and Flour products - Baked Products - Bread - Macaroni Products | 259. pH | AOAC (2023) 981.12, 943.02, 935.39, 945.42 and 940.23 |
| 29. | Shrimp (Freeze) | 260. White Spot Syndrome Virus (WSSV) | In-house method TE-MO-001 based on WOAHA (2023), Manual of Diagnostic Tests for Aquatic Animals. (Chapter 2.2.8.) |
| | | 261. White Spot Syndrome Virus (WSSV) | In-house method TE-MO-002 based on method of CSIRO-Australian Animal Health Laboratory (AAHL) : 2015 |
| | | 262. Yellow Head Virus (YHV) | In-house method TE-MO-003 based on Tang and Lightner. Development of real-time PCR assays for detection of white spot syndrome virus, yellow head virus, Taura syndrome virus, and infectious hypodermal and hematopoietic necrosis virus in penaeid shrimp (2001) |
| | | 263. Yellow Head Virus (YHV) | In-house method TE-MO-004 based on method of OIE Reference Laboratory; CSIRO-Australian Animal Health Laboratory (AAHL): 2015 |

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| No. | Type of Sample | Test | Method |
|-----|--|---|--|
| 29. | Shrimp (Freeze) | 264. Infectious Hypodermal and Hematopoietic Necrosis Virus (IHHNV) | In-house method TE-MO-005 based on WOA. (2023), Manual of Diagnostic Tests for Aquatic Animals. (Chapter 2.2.4.) |
| | | 265. Taura syndrome virus (TSV) | In-house method TE-MO-006 based on WOA. (2023), Manual of Diagnostic Tests for Aquatic Animals. (Chapter 2.2.7.) |
| 30. | <ul style="list-style-type: none"> Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water Ice Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | 266. Hardness | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 2340 C |
| | | 267. Nitrate | AOAC (2023) 973.50 |
| | | 268. Anionic Surfactants as Methylene Blue Active Substances (MBAS) <ul style="list-style-type: none"> - MBAS, calculated as Linear Alkylbenzene Sulfonate (LAS), MW = 444.56 - MBAS as ABS, Calculated as Linear Alkylbenzene Sulfonate (LAS), MW = 444.56 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 5540 C |

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|-----|--|--|---|
| 30. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | 269. Cyanide | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-CN ⁻ E and 4500-CN ⁻ H |
| | | 270. Total Dissolved Solid | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 2540 C |
| | | 271. Fluoride | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-F ⁻ D |
| | | 272. Total Solid | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 2540 B |
| | | 273. Aluminium (Al) 274. Barium (Ba) 275. Cadmium (Cd) 276. Copper (Cu) 277. Chromium (Cr) 278. Iron (Fe) 279. Lead (Pb) 280. Manganese (Mn) 281. Silver (Ag) 282. Zinc (Zn) 283. Arsenic (As) | In-house method TE-CH-037 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 3120 |

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|-----|---|--|---|
| 30. | <ul style="list-style-type: none"> Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water Ice | 284. Selenium (Se) 285. Nickel (Ni) 286. Antimony (Sb) 287. Beryllium (Be) | In-house method TE-CH-037 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 3120 |
| | <ul style="list-style-type: none"> Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | 288. Aluminium (Al) 289. Barium (Ba) 290. Cadmium (Cd) 291. Copper (Cu) 292. Chromium (Cr) 293. Iron (Fe) 294. Lead (Pb) 295. Manganese (Mn) 296. Silver (Ag) 297. Zinc (Zn) 298. Arsenic (As) 299. Selenium (Se) 300. Nickel (Ni) 301. Antimony (Sb) 302. Beryllium (Be) 303. Tin (Sn) | In-house method TE-CH-038 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 3125 |

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|-----|--|--|---|
| 30. | <ul style="list-style-type: none"> Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water Ice Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | Polychlorinated Biphenyls (PCBs) 304. PCB-28 305. PCB-52 306. PCB-101 307. PCB-138 308. PCB-153 309. PCB-180 | In-house method TE-CH-254 based on EPA (2007) 8082A |
| | | Organochlorine group 310. aldrin (HHDN) 311. alpha-BHC or alpha- HCH 312. alpha-Endosulfan 313. beta-BHC or beta-HCH 314. beta-Endosulfan 315. delta-BHC or delta-HCH 316. dieldrin (HEOD) 317. endosulfan-sulfate 318. endrin 319. heptachlor 320. heptachlor-endo-epoxide 321. lindane 322. o,p'-DDD 323. o,p'-DDE 324. o,p'-DDT | In-house method TE-CH-131 based on AOAC (2023) 990.06 |

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| No. | Type of Sample | Test | Method |
|-----|--|--|---|
| 30. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | Pyrethroids group 325. bifenthrin 326. cyfluthrin 327. cypermethrin 328. deltamethrin 329. fenvalerate 330. lambda-cyhalothrin 331. permethrin | In-house method TE-CH-131 based on AOAC (2023) 990.06 |
| | | Organophosphate group 332. chlorpyrifos 333. chlorpyrifos-methyl 334. diazinon 335. dimethoate 336. EPN 337. ethion 338. fenitrothion 339. malathion 340. mevinphos 341. parathion-ethyl 342. parathion-methyl 343. pirimiphos-ethyl 344. pirimiphos-methyl 345. profenophos 346. prothiophos 347. triazophos | In-house method TE-CH-129 based on AOAC (2023) 991.07 |

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| No. | Type of Sample | Test | Method |
|-----|--|---|--|
| 30. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | Carbamate group 348. aldicarb 349. aldicarb-sulfone 350. carbaryl 351. carbofuran 352. fenobucarb 353. isoprocarb 354. methiocarb 355. methomyl 356. oxamyl | In-house method TE-CH-132 based on EPA (1999) Method 632 |
| | | 357. Sulfate | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-SO ₄ ²⁻ E |
| | | 358. Color | Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24 th Edition, 2023. Part 2120 B and 2120 C |
| | | 359. Turbidity | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 2130 B |

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| No. | Type of Sample | Test | Method |
|-----|--|-----------------------|---|
| 30. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | 360. Boron (B) | In-house method TE-CH-037 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 3120 |
| | | 361. Calcium (Ca) | |
| | | 362. Magnesium (Mg) | |
| | | 363. Sodium (Na) | |
| 31. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water - Natural water - Aquaculture water - Brackish water - Sea water ● Saline ● Wastewater from aquaculture | 364. Potassium (K) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 5530 C |
| | | 365. Phenol | |
| | | 366. Odour | |
| | | 367. pH | |
| | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water - Natural water - Aquaculture water - Brackish water - Sea water ● Saline ● Wastewater from aquaculture | 368. Chloride | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-H ⁺ B |
| | | 369. Total phosphorus | |
| | | | |
| | | | |

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| No. | Type of Sample | Test | Method |
|-----|--|---|---|
| 31. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water - Natural water - Aquaculture water - Brackish water - Sea water ● Saline ● Wastewater from aquaculture | 370. Total Nitrogen | In-house method TE-CH-266 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-N |
| | | 371. Ammonia Nitrogen (NH ₃ -N) 372. Total Ammonia Nitrogen | In-house method TE-CH-265 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 4500-NH ₃ F |
| | | 373. Total Suspended Solids | In-house method TE-CH-054 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 2540 D |
| 32. | <ul style="list-style-type: none"> ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Natural water - Aquaculture water ● Wastewater | 374. Mercury (Hg) | In-house method TE-CH-181 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 3125 and 3500-Hg |

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| No. | Type of Sample | Test | Method |
|-----|--|--|---|
| 33. | <ul style="list-style-type: none"> ● Non-Potable water <ul style="list-style-type: none"> - Natural water - Aquaculture water - Sea water ● Wastewater | 375. Biochemical Oxygen Demand (BOD) | In-house method TE-CH-124 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 5210 B |
| 34. | <ul style="list-style-type: none"> ● Non-Potable water <ul style="list-style-type: none"> - Sea water ● Wastewater | 376. Nitrite | A practical handbook of seawater analysis, Fisheries Research Board of Canada Ottawa, 1972, II.7., P.77-80 |
| 35. | Food* | 377. Aerobic Plate Count (CFU) | FDA BAM <i>Online</i> , 2001 (Chapter 3) |
| | | 378. Coliforms (MPN) | FDA BAM <i>Online</i> , 2020 (Chapter 4) |
| | | 379. Fecal Coliforms (MPN) | |
| | | 380. <i>Escherichia coli</i> (MPN) | |
| | | 381. Coliforms (CFU) | AOAC (2023) 998.08 and 991.14 |
| | | 382. <i>Escherichia coli</i> (CFU) | |
| | | 383. <i>Staphylococcus aureus</i> (CFU, MPN, Detected or not detected) | FDA BAM <i>Online</i> , 2016 (Chapter 12) |
| | | 384. <i>Vibrio cholera</i> (Detected or not detected) | FDA BAM <i>Online</i> , 2004 (Chapter 9) |
| | | 385. <i>Vibrio parahaemolyticus</i> (MPN) | FDA BAM <i>Online</i> , 2004 (Chapter 9) |

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| No. | Type of Sample | Test | Method |
|-----|--------------------------------------|--|---|
| 35. | Food* | 386. <i>Listeria monocytogenes</i> (Detected or not detected) | ISO 11290-1: 2017 (E) |
| | | 387. Yeasts and Molds (CFU) | FDA BAM Online, 2001 (Chapter 18) |
| | | 388. <i>Clostridium perfringens</i> (CFU, Detected or not detected) | FDA BAM Online, 2001 (Chapter 16) |
| | | 389. <i>Clostridium botulinum</i> (Detected or not detected) | FDA BAM Online, 2001 (Chapter 17) |
| | | 390. <i>Bacillus cereus</i> (CFU, MPN) | FDA BAM Online, 2020 (Chapter 14) |
| | | 391. Enterobacteriaceae (CFU) | ISO 21528-2: 2017 (E) |
| | | 392. Enterococci (CFU) | Compendium of Method for the Microbiology Examination of Foods, (APHA), 5 th Edition, 2015, Chapter 10 |
| | | 393. <i>Escherichia coli</i> (MPN) | ISO 7251: 2005 and FDA BAM Online, 2020 (Chapter 4) |
| | | 394. Total Plate Count (CFU) | ISO 4833: 2013 (E) |
| | | 395. <i>Salmonella</i> spp. (Detected or not detected) | ISO 6579-1: 2017/ Amd 1: 2020 (E) |
| 36. | - Bird's Nest - Bird's Nest Drink | 396. Aerobic Plate Count (CFU) | FDA BAM Online, 2001 (Chapter 3) |
| | | 397. Coliforms (CFU) | AOAC (2023) 998.08 and 991.14 |
| | | 398. <i>Escherichia coli</i> (CFU) | |

The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

| No. | Type of Sample | Test | Method |
|-----|--------------------------------------|---|--|
| 36. | - Bird's Nest - Bird's Nest Drink | 399. <i>Staphylococcus aureus</i> (CFU) | FDA BAM Online, 2016 (Chapter 12) |
| | | 400. <i>Bacillus cereus</i> (CFU) | FDA BAM Online, 2020 (Chapter 14) |
| | | 401. Yeasts and Molds (CFU) | FDA BAM Online, 2001 (Chapter 18) |
| | | 402. <i>Salmonella</i> spp. (Detected or not detected) | ISO 6579-1: 2017/ Amd 1: 2020 (E) |
| 37. | Canned food Low acid food | 403. Incubation Test (Accepted or not accepted) | FDA BAM Online, 2001 (Chapter 21 A) |
| | | 404. Mesophilic Flat sour (Detected or not detected) | |
| | | 405. Thermophilic Flat sour (Detected or not detected) | |
| 38. | - Canned food | 406. <i>Clostridium botulinum</i> (Detected or not detected) | FDA BAM Online, 2001 (Chapter 17) |
| 39. | - Feeding stuff | 407. <i>Escherichia coli</i> (MPN) | ISO 7251: 2005 and FDA BAM Online, 2020 (Chapter 4) |
| | | 408. Total Plate Count (CFU) | ISO 4833: 2013 (E) |
| | | 409. <i>Salmonella</i> spp. (Detected or not detected) | ISO 6579-1: 2017/ Amd 1: 2020 (E) |

The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

| No. | Type of Sample | Test | Method |
|-----|--|---|--|
| 40. | <ul style="list-style-type: none"> Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water Ice Non-Potable water <ul style="list-style-type: none"> - Processed water - Surface water - Ground water | 410. Total Plate Count (CFU) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 9215 |
| | | 411. <i>Escherichia coli</i> (MPN, Detected or not detected) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 9221 |
| | | 412. Total Coliforms (MPN) | |
| | | 413. Fecal Coliforms (CFU, MPN) | |
| | | 414. <i>Salmonella</i> spp. (Detected or not detected) | ISO 19250: 2010 (E) |
| | | 415. <i>Clostridium perfringens</i> (CFU, Detected or not detected) | Environment Agency, The Microbiology of Drinking Water, 2010. Part 6 |
| | | 416. <i>Staphylococcus aureus</i> (CFU, Detected or not detected) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 9213 |
| | | 417. <i>Vibrio cholera</i> (Detected or not detected) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 9278 |
| | | 418. Enterococci (CFU, Detected or not detected) | ISO 7899-2: 2000 (E) |

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| No. | Type of Sample | Test | Method |
|-----|--|---|---|
| 41. | <ul style="list-style-type: none"> ● Beverages in Sealed Container* ● Potable water <ul style="list-style-type: none"> - Drinking water - Drinking water in sealed container - Tap water ● Ice ● Non-Potable water <ul style="list-style-type: none"> - Natural water - Aquaculture water - Brackish water - Sea water ● Saline ● Wastewater <ul style="list-style-type: none"> - Wastewater from aquaculture | 419. <i>Escherichia coli</i> (MPN, Detected or not detected) | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA, WEF, 24 th Edition, 2023. Part 9221 |
| | | 420. Total Coliforms (MPN) | |
| | | 421. Fecal Coliforms (CFU, MPN) | |

The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

| No. | Type of Sample | Test | Method |
|-----|------------------------------|---|--|
| 42 | Swab Test | 422. Total Plate Count (CFU) | Compendium of Method for the Microbiology Examination of Foods, (APHA), 5 th Edition, 2015, Chapter 3 |
| | - Plastic sheet | | |
| | - Paper | | |
| | - Carton | 423. <i>Salmonella</i> spp. (Detected or not detected) | ISO 6579-1: 2017/ Amd 1: 2020 (E) |
| | - Bottle | | |
| | - Lid | 424. <i>Escherichia coli</i> (Detected or not detected) | ISO 7251: 2005 and FDA BAM Online, 2020 (Chapter 4) |
| | - Plastic box | | |
| | - Plastic lid | 425. <i>Staphylococcus aureus</i> (Detected or not detected) | ISO 6888-3 : 2003 (E) |
| | - Sack | | |
| | - Plastic bag | | |
| | - Plastic for food packaging | | |
| | - Plastic spoon | | |
| | - Plastic plates | | |
| | - Plastic cup | | |
| | - Swab cotton bud | | |
| | - Cotton swab | | |
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The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

Food*

- | | |
|--|---|
| 1. Meat and Meat Products (Fresh, Frozen, Processed) | 16. Ready- to- Eat- Foods |
| 2. Poultry and Poultry Products (Fresh, Frozen, Processed) | 17. Fish sauce and Sauce other kinds of sauce |
| 3. Seafood and Seafood Products (Fresh, Frozen, Processed) | 18. Spices and Condiments |
| 4. Vegetable and Vegetable Products (Fresh, Frozen, Processed) | 19. Flavor enhancers |
| 5. Fruit and Fruit Products (Fresh, Frozen, Processed) | 20. Snack, Cookies, Biscuit, Cracker |
| 6. Starch and Starch Products | 21. Jam and Jelly |
| 7. Cereal and Cereal Products | 22. Honey |
| 8. Nut and Nut Products | 23. Chocolate |
| 9. Milk and Milk Products | 24. Candy |
| 10. Egg and Egg Products | 25. Potato and Potato Products |
| 11. Seaweed and Seaweed Products | 26. Ice-cream |
| 12. Noodle and Noodle Products | 27. Salad dressings and Condiments |
| 13. Tea, Coffee, Cocoa | 28. Dietary Supplements product |
| 14. Legume and Legume Products | 29. Dessert Products |
| 15. Semi-Instant Food Products | 30. Complementary Food for Infants and Young Children |

Food**

- | | |
|--|---|
| 1. Meat and Meat Products (Fresh, Frozen, Processed) | 8. Legume and Legume Products |
| 2. Poultry and Poultry Products (Fresh, Frozen, Processed) | 9. Ready- to- Eat- Foods |
| 3. Seafood and Seafood Products (Fresh, Frozen, Processed) | 10. Snack, Cookies, Biscuit, Cracker |
| 4. Vegetable and Vegetable Products (Fresh, Frozen, Processed) | 11. Ice-cream |
| 5. Fruit and Fruit Products (Fresh, Frozen, Processed) | 12. Dietary Supplements product |
| 6. Cereal and Cereal Products | 13. Dessert Products |
| 7. Milk and Milk Products | 14. Complementary Food for Infants and Young Children |

The laboratory of Central Laboratory (Thailand) Co. Ltd. Songkhla Branch has been accepted as an accredited laboratory in the field of food and feeding stuffs testing for the following scopes.

Beverages in Sealed Container*

1. Water with dissolved carbon dioxide or oxygen gas.
2. Beverage, which is containing or made from fruits, plants or vegetables, and may also contain dissolved carbon dioxide or oxygen gas.
3. Beverage which is containing or made from other constitutes, except fruits, plants or vegetables, and may also contain dissolved carbon dioxide or oxygen gas.
4. Beverage as stipulated in (2) or (3), which is concentrated and needs to be diluted before consumption.
5. Beverage as stipulated in (2) or (3) in dried form.