

**Customer:**

Ms. Sarah Chia  
Health Sciences Authority  
11 Outram Road  
HSA Building  
Singapore 169078

Email : sarah\_chia@hsa.gov.sg  
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**ACQ. UPLC H-Class PLUS w/QDA/ISM Sys**

**Quotation No. 22119926 - Expiration Date : 23.10.2019**

**General information**

111030/11840974

**Provider:**

Waters Pacific Pte Ltd  
Joanna Ang  
1 Science Park Road  
#02-1/06 The Capricorn  
Singapore Science Park II  
Singapore 117528

Email : Joanna\_Ang@Waters.com

## Quotation

### ACQ. UPLC H-Class PLUS w/QDA/ISM Sys

## Price Details in SGD

**Please reference this quotation when purchase order is issued**

| Itm                                  | Part No.  | Description                              | Unit Price | Qty | Gross Price | Disc %  | Net Price |
|--------------------------------------|-----------|------------------------------------------|------------|-----|-------------|---------|-----------|
| ACQ. UPLC H-Class PLUS w/QDA/ISM Sys |           |                                          |            |     |             |         |           |
| With the following configuration:    |           |                                          |            |     |             |         |           |
| 1                                    | 176015101 | ACQUITY H-Class PLUS (CH-A) Core System  | 97,195.00  | 1   | 97,195.00   | -62.00% | 36,934.10 |
| 2                                    | 176015026 | ACQUITY UPLC PDA Detector                | 49,578.00  | 1   | 49,578.00   | -62.00% | 18,839.64 |
| 3                                    | 176003208 | ACQUITY QDa Detector (Performance)       | 107,128.00 | 1   | 107,128.00  | -62.00% | 40,708.64 |
| 4                                    | 176004279 | ACQUITY H-Class PLUS with QDa, Kit #1    | 1,800.00   | 1   | 1,800.00    | -62.00% | 684.00    |
| 5                                    | 700009641 | ESI PROBE ASSEMBLY 250mm                 | 636.00     | 1   | 636.00      | -62.00% | 241.68    |
| 6                                    | 176003244 | ISM & ACQUITY Splitter Kit               | 28,367.00  | 1   | 28,367.00   | -62.00% | 10,779.46 |
| 7                                    | 700002642 | ACQUITY UPLC ABSORBANCE 10MM TEST SOL.   | 954.00     | 1   | 954.00      | -62.00% | 362.52    |
| 8                                    | 176002203 | Empower 3 Per Single System SW 5 Users   | 22,644.00  | 1   | 22,644.00   | -62.00% | 8,604.72  |
| 9                                    | 667003974 | Empower 3 Personal System Suitability    | 5,042.00   | 1   | 5,042.00    | -62.00% | 1,915.96  |
| 10                                   | 741000472 | QDa SYSTEM INSTALLATION CERT             | 7,305.00   | 1   | 7,305.00    | -62.00% | 2,775.90  |
| 11                                   | 750000529 | On-Site MS/App Training -ROW (2 Days)    | 13,893.00  | 1   | 13,893.00   | -62.00% | 5,279.34  |
| 12                                   | 186008515 | Acquity QDa Fluidics Valve, Stainless St | 6,655.00   | 1   | 6,655.00    | -62.00% | 2,528.90  |
| 13                                   | JWSG01234 | Empower Workstation                      | 2,300.00   | 1   | 2,300.00    |         | 2,300.00  |
| 14                                   | JWSG01235 | PRINTER                                  | 800.00     | 1   | 800.00      |         | 800.00    |

|              |                   |                   |
|--------------|-------------------|-------------------|
| <b>Total</b> | <b>344,297.00</b> | <b>132,754.86</b> |
|--------------|-------------------|-------------------|

|                            |                   |
|----------------------------|-------------------|
| <b>Total excluding GST</b> | <b>132,754.86</b> |
|----------------------------|-------------------|

|     |        |          |
|-----|--------|----------|
| GST | 7.00 % | 9,292.84 |
|-----|--------|----------|

|              |                   |
|--------------|-------------------|
| <b>Total</b> | <b>142,047.70</b> |
|--------------|-------------------|

**Joanna Ang**  
Account Manager

**Julius Hiu**  
Sales Manager, Singapore

**Quotation**

**ACQ. UPLC H-Class PLUS w/QDA/ISM Sys**

**Price Details in SGD**

**Please reference this quotation when purchase order is issued**

**Terms of Payment**

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30 Days - document date

**Shipping Information**

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DDP

## Quotation

### ACQ. UPLC H-Class PLUS w/QDA/ISM Sys

## Optional Products

**Please reference this quotation when purchase order is issued**

| Itn | Part No.  | Description                                | Unit Price | Qty | Gross Price | Disc %  | Net Price |
|-----|-----------|--------------------------------------------|------------|-----|-------------|---------|-----------|
| 15  | 740005806 | TAP ACQUITY H-Class PLUS QSM (1PM)         | 4,300.00   | 1   | 4,300.00    | -62.00% | 1,634.00  |
| 16  | 740005825 | TAW ACQUITY H-Class PLUS SM-FTN<br>(1PM)   | 6,000.00   | 1   | 6,000.00    | -62.00% | 2,280.00  |
| 17  | 740005821 | TAP ACQUITY H-Class PLUS SM-FTN<br>(1PM)   | 5,700.00   | 1   | 5,700.00    | -62.00% | 2,166.00  |
| 18  | 740003444 | TAW ACQUITY UPLC Column Manager<br>(0PM)   | 1,600.00   | 1   | 1,600.00    | -62.00% | 608.00    |
| 19  | 740003443 | TAP ACQUITY UPLC Column Manager<br>(0PM)   | 1,300.00   | 1   | 1,300.00    | -62.00% | 494.00    |
| 20  | 740001665 | TAW ACQUITY PDA DETECTOR (1PM)             | 3,300.00   | 1   | 3,300.00    | -62.00% | 1,254.00  |
| 21  | 740001660 | TAP ACQUITY PDA DETECTOR (1PM)             | 3,100.00   | 1   | 3,100.00    | -62.00% | 1,178.00  |
| 22  | 740005034 | TAW ACQUITY QDa Detector(1PM)              | 10,300.00  | 1   | 10,300.00   | -62.00% | 3,914.00  |
| 23  | 740005032 | TAP ACQUITY QDa Detector (1PM)             | 9,900.00   | 1   | 9,900.00    | -62.00% | 3,762.00  |
| 24  | 740005037 | TAW ACQUITY Isocratic Solvent Mgr<br>(1PM) | 3,400.00   | 1   | 3,400.00    | -62.00% | 1,292.00  |
| 25  | 740005037 | TAW ACQUITY Isocratic Solvent Mgr<br>(1PM) | 3,400.00   | 1   | 3,400.00    | -62.00% | 1,292.00  |
| 26  | 740005810 | TAW ACQUITY H-Class PLUS QSM (1PM)         | 4,500.00   | 1   | 4,500.00    | -62.00% | 1,710.00  |

## Quotation

### ACQ. UPLC H-Class PLUS w/QDA/ISM Sys

## Detail Product Descriptions

| Itm | Part No. | Description |
|-----|----------|-------------|
|-----|----------|-------------|

|          |                  |                                                |
|----------|------------------|------------------------------------------------|
| <b>1</b> | <b>176015101</b> | <b>ACQUITY H-Class PLUS (CH-A) Core System</b> |
|----------|------------------|------------------------------------------------|

The ACQUITY UPLC H-Class PLUS Core System includes integrated solvent, sample and single column heater (CH-A) configured for quaternary solvent delivery (QSM) and sample introduction via a direct inject sample manager (SM-FTN-H). The system's Active Pre-Heater (APH) features a new 2-piece, captive ferrule design. The system may be configured for a broad range of applications supported by UPLC optical detectors, mass spectrometers and mass detectors, with a choice of instrument control and data management software.

The following items are included as part of the ACQUITY UPLC H-Class PLUS Core System:

- # ACQUITY UPLC H-Class Quaternary Solvent Manager (QSM) PLUS
- # ACQUITY UPLC H-Class Sample Manager # Flow-Through-Needle-H (SM-FTN-H) PLUS
- # Column Heater with Active Pre-Heating (CH-A)
- # ACQUITY UPLC Solvent Tray Module
- # ACQUITY UPLC H-Class System Start Up Kit
- # Leak Sensors
- # ACQUITY UPLC BEH C18 Column, 2.1 x 50 mm, 1.7  $\mu$ m
- # ACQUITY UPLC Start-up Solution
- # Information Set
- # Vials
- # ACQUITY UPLC Systems Driver Pack DP2018R1

|          |                  |                                  |
|----------|------------------|----------------------------------|
| <b>2</b> | <b>176015026</b> | <b>ACQUITY UPLC PDA Detector</b> |
|----------|------------------|----------------------------------|

The ACQUITY UPLC Photodiode Array (PDA) Detector is specifically designed to complement the ACQUITY UPLC H-Class System. With noise specifications as low as 10  $\mu$ AU, the ACQUITY UPLC PDA offers sensitivity that is unmatched by any photodiode array detector on the market.

Further, enhanced software control provides flexibility for simultaneous 2D and 3D operation in either Empower or MassLynx software.

Detector wavelength range is 190-500 nm, with 1.2 nm spectral resolution. Detector response is linear (d5% at 2.0 AU) across the 2.0 AU dynamic range. Detector supports full three-dimensional spectral analysis or multi-wavelength operation (up to eight (8) wavelengths) under Empower Software control.

Lamp optimization software guarantees low noise performance in the visible wavelength range and compensates for lamp degradation over time to ensure consistent response. The combination of lamp optimization software and an automatic second order filter enables operation in the linear wavelength range without requiring a lamp change. The lamp is warranted for 2000 hours.

Results management features supported in Empower software include Spectrum Index Review, Spectral Contrast Peak Purity, Multi-Component Peak Purity, and Spectral Library Matching.

The 10mm analytical light-guided flow cell delivers sensitivity and resolution to ACQUITY UPLC applications. Low dispersion performance is achieved with a 500 nL internal volume and 62.5  $\mu$ m PEEK interconnect

## Quotation

### ACQ. UPLC H-Class PLUS w/QDa/ISM Sys

## Detail Product Descriptions

| Itm | Part No. | Description |
|-----|----------|-------------|
|-----|----------|-------------|

inlet/outlet tubing.

|          |                  |                                           |
|----------|------------------|-------------------------------------------|
| <b>3</b> | <b>176003208</b> | <b>ACQUITY QDa Detector (Performance)</b> |
|----------|------------------|-------------------------------------------|

The ACQUITY QDa Detector is a mass detector designed as a synergistic element of a chromatographic separations system. Confirm compound identity with qualitative mass spectral data, complementing quantitative optical data. Quantify compounds with no UV response or at levels not accessible by optical detection.

Compact for minimized lab space requirements. Integrated flow path for reduced dispersion. Adjustment-free atmospheric pressure ionisation (API) electrospray (ES) interface for reliability. Compatible with HPLC, UPLC, SFC and UPC2 flow rates of 50 µl/min # 2 ml/min. Disposable sample orifice for minimized maintenance and maximized repeatability. Positive and negative ion switching capability for enhanced compound coverage. Tool-free maintenance.

Dual off-axis ion guides for elimination of neutral noise with increased sensitivity and robustness. Automated mass calibration and resolution verification for consistent data quality. Automatically-optimized single ion recording (SIR) and full scan (FS) analysis in m/z range 30-1250 for enhanced data acquisition. Orthogonal, in-vacuum Dynolite photomultiplier detector for stability, elimination of neutral noise and longevity.

Clean, differentially pumped, automated vacuum system comprising air-cooled split flow turbomolecular drag pump (TMP) and rotary vane vacuum backing pump. Fail-safe operation for unattended analysis. Autosensing 100-240 V ac ((50/60 Hz). Performance option features extended linear dynamic range and lowered limit of detection.

Integrated control & data processing with Empower 3, Empower 2 & MassLynx 4.1.

|          |                  |                                              |
|----------|------------------|----------------------------------------------|
| <b>4</b> | <b>176004279</b> | <b>ACQUITY H-Class PLUS with QDa, Kit #1</b> |
|----------|------------------|----------------------------------------------|

ACQUITY H-Class PLUS with QDa, Kit #1

This system specific kit contains the start-up kit and probes needed to start-up ACQUITY UPLC H-Class PLUS System Configuration #1 and 21G (see the ACQUITY QDa Detector with ACQUITY UPLC H-Class PLUS System Configuration Guide at the end of this document). The kit contains the following components:

205001272 Kit, H-Class # QDa System Accessories, Qty 1

205001759 Active Pre-heater 23.5" PLUS, Qty 1

|          |                  |                                 |
|----------|------------------|---------------------------------|
| <b>5</b> | <b>700009641</b> | <b>ESI PROBE ASSEMBLY 250mm</b> |
|----------|------------------|---------------------------------|

ESI Probe Assy, 250mm x 100µm

|          |                  |                                       |
|----------|------------------|---------------------------------------|
| <b>6</b> | <b>176003244</b> | <b>ISM &amp; ACQUITY Splitter Kit</b> |
|----------|------------------|---------------------------------------|

For Quoting purposes only until release Oct 2013

ISM & ACQUITY Splitter Kit used to dilute sample flowing into a mass detector at a fixed split ratio; specifically designed for ACQUITY Systems

|          |                  |                                               |
|----------|------------------|-----------------------------------------------|
| <b>7</b> | <b>700002642</b> | <b>ACQUITY UPLC ABSORBANCE 10MM TEST SOL.</b> |
|----------|------------------|-----------------------------------------------|

ACQUITY UPLC / UV Qualification Standards Kit

## Quotation

### ACQ. UPLC H-Class PLUS w/QDA/ISM Sys

## Detail Product Descriptions

| Itm       | Part No.         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>8</b>  | <b>176002203</b> | <b>Empower 3 Per Single System SW 5 Users</b><br>Empower 3 Personal Single System Software<br>Includes Empower 3 Base Software DVD, Empower 3 Bookshelf CD, Empower 3 Instrument Driver (ICS) Pack, Empower 3 Default Project CD, Personal Single System Base License (enables the base software, 5 users and 1 system license), Empower 3 License Management Read Me document, Empower 3 Release Notes, (Qty 1) 2 Port Instrument Control Card (NIC), (Qty 1) 8-Port Ethernet Network Switch, (Qty 4) Ethernet cables, 1-Year Personal Software Support Plan |
| <b>9</b>  | <b>667003974</b> | <b>Empower 3 Personal System Suitability</b><br>Empower 3 Personal System Suitability                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>10</b> | <b>741000472</b> | <b>QDa SYSTEM INSTALLATION CERT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>11</b> | <b>750000529</b> | <b>On-Site MS/App Training -ROW (2 Days)</b><br>On-Site MS/Application Training - ROW (2 Days)                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>12</b> | <b>186008515</b> | <b>Acquity QDa Fluidics Valve, Stainless St</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>13</b> | <b>JWSG01234</b> | <b>Empower Workstation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>14</b> | <b>JWSG01235</b> | <b>PRINTER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>15</b> | <b>740005806</b> | <b>TAP ACQUITY H-Class PLUS QSM (1PM)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>16</b> | <b>740005825</b> | <b>TAW ACQUITY H-Class PLUS SM-FTN (1PM)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>17</b> | <b>740005821</b> | <b>TAP ACQUITY H-Class PLUS SM-FTN (1PM)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Quotation**

**ACQ. UPLC H-Class PLUS w/QDA/ISM Sys**

**Detail Product Descriptions**

| <b>Itm</b> | <b>Part No.</b>  | <b>Description</b>                                                                                                                                             |
|------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>18</b>  | <b>740003444</b> | <b>TAW ACQUITY UPLC Column Manager (0PM)</b><br>Total Assurance Warranty ACQUITY UPLC Column Manager (0Pm).<br>Provides two years of full coverage             |
| <b>19</b>  | <b>740003443</b> | <b>TAP ACQUITY UPLC Column Manager (0PM)</b>                                                                                                                   |
| <b>20</b>  | <b>740001665</b> | <b>TAW ACQUITY PDA DETECTOR (1PM)</b><br>Total Assurance Warranty ACQUITY PDA Detector 1 Performance Maintenance Visit.<br>Provides two years of full coverage |
| <b>21</b>  | <b>740001660</b> | <b>TAP ACQUITY PDA DETECTOR (1PM)</b>                                                                                                                          |
| <b>22</b>  | <b>740005034</b> | <b>TAW ACQUITY QDa Detector(1PM)</b>                                                                                                                           |
| <b>23</b>  | <b>740005032</b> | <b>TAP ACQUITY QDa Detector (1PM)</b>                                                                                                                          |
| <b>24</b>  | <b>740005037</b> | <b>TAW ACQUITY Isocratic Solvent Mgr (1PM)</b>                                                                                                                 |
| <b>26</b>  | <b>740005810</b> | <b>TAW ACQUITY H-Class PLUS QSM (1PM)</b>                                                                                                                      |

## Quotation

### ACQ. UPLC H-Class PLUS w/QDA/ISM Sys

## General Sales Terms and Conditions

1. General  
Waters Pacific Pte Ltd ("Seller") hereby agrees to sell the products to buy upon the terms and conditions set forth herewith. Seller shall not be bound by any standard or printed terms furnished by the Buyer in any of its documents, unless the Buyer specifically states in writing separately from such terms that it intends such terms to apply and the Seller acknowledges such notification in writing.
2. Price
  - a. Unless otherwise agreed at the time of sale, the price stated is ex-works and exclusive of Goods & Services Tax which shall be chargeable in addition upon supply of goods.
  - b. All quotations and estimates used by Seller are, unless otherwise stated, based on current costs and are subject to amendment on or after acceptance of order by Seller to meet any rise in such costs.
  - c. Any variation to prices quoted as a result of government taxes and levies will be for the Buyer's accounts.
  - d. Written quotations automatically expire 30 calendar days from the date issued and are subject to termination by notice within that period. All orders based on written quotations are subject to Seller's acceptance at its office in 1 Science Park Road #02-01 The Capricorn, Singapore Science Park II, Singapore 117528.
3. Delivery
  - a. Stock items are processed for prompt delivery. Whilst there is no minimum order value there is a minimum charge in respect of packing, handling and delivery. Details of these charges are available on request.
  - b. Notwithstanding that the Seller and the Buyer may agree to deliver the goods at some specified place the delivery of goods to a carrier for the purpose of transmission to the Buyer is deemed to be a delivery of the goods to the Buyer and risk in the goods shall pass accordingly at the moment of delivery to the carrier.
  - c. Inspection and testing and/or installation of the goods is not provided by Seller unless otherwise agreed at the time of sale.
  - d. Seller retains ownership of the goods the property in which shall not pass to Buyer and Buyer shall keep any goods delivered to it as bailee for and on behalf of Seller until Seller has received payment of the price of all the goods (whether or not the goods are delivered in instalments and some have been paid for by Buyer pursuant to these terms) and until such time the Buyer shall store the goods separately or in some other way ensure that the goods are readily identifiable as the property of Seller and at Seller's request either shall deliver up to the goods to Seller or shall permit Seller to enter Buyer's business or other premises to repossess the goods and subsequently re-sell them.
  - e. The provisions of this clause 3(d) shall survive the determination of the contract for whatever reason.
4. Payment
  - a. Payment terms are strictly Net Cash 30 days after delivery of the goods, provided Buyer's credit has been approved or specified in the quote. If the Buyer's credit had not been established with Seller, terms are payment in advance.
  - b. All payments made by Buyer shall be made without any deduction of deferment in respect of any disputes or claims whatsoever and/or in respect of any taxes imposed by or under the authority of any government or public authority.
  - c. Where Seller does not receive payment of any of its invoices within 30 days of the date thereof interest shall thereafter accrue on the sum due and owing to Seller at the rate of 2% per month calculated on a daily basis without prejudice to Seller's right to receive payment within such 30 day period.
  - d. Time for payment shall be of the essence.
5. Confidentiality/Intellectual Property
  - a. Any order received by Seller will be treated as confidential and will not be disclosed or publicised to any third party for any reason without the prior written consent of Buyer. Neither shall Seller use Buyer's name or other identify for advertising or publicity purposes without Buyer's prior written consent.
  - b. The sale of the goods by Seller to Buyer does not confer any right or license upon buyer to use, exploit or otherwise utilise any intellectual property rights subsisting in or relating to the goods of which Seller is a proprietor or to which Seller is otherwise entitled.
6. Specifications  
The characteristics and specifications of Seller's products are documented in Seller's technical literature and are approximately only Seller reserves the right to change product specifications without prior notice.
7. Cancellation  
An order accepted by Seller may be cancelled only before delivery of the goods and only with the consent of Seller upon terms that Buyer will indemnify Seller against any loss incurred.
8. Return  
In no case are products to be returned without first obtaining the consent of the Seller. Only unused products as currently manufactured which have been invoiced by the Seller within 30 days will be considered for return. Products accepted for credit are subject to a 20 per cent service charge plus all transportation charges. Products built to order or not of the original manufacturer of the Seller are not subject to return for credit under any circumstances. Products must be securely packed to reach the Seller without damaged. No returns shall be authorised after 90 days following shipment to buyer.
9. Warranty  
The Products and/or services shall be covered by the applicable Waters' standard warranty, a copy of which is supplied with the Products and/or services or upon request. NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, IS MADE WITH RESPECT TO THE PRODUCTS AND/OR SERVICES. WATERS EXPRESSLY EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. Any model or sample furnished to the Buyer is merely illustrative of the general types and quality of goods and does not represent that the Products will conform to Waters applicable standard warranty. WATERS SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR ANY OTHER INDIRECT DAMAGES RESULTING FROM ECONOMIC LOSS OR PROPERTY DAMAGE SUSTAINED BY BUYER FROM THE USE OF ITS PRODUCTS OR SERVICES.
10. Termination
  - a. It prior to the delivery of the goods (or any instalment thereof) Seller has reason to believe that Buyer is unable to pay its debts or if Buyer enters into liquidation (other than for the purpose of effecting a reconstruction or amalgamation) whether compulsory or voluntary or compounds with or conveys a meeting of its creditors or has a receiver appointed over all or any part of its assets or takes or suffers any similar action in consequence of a debt or ceases for any reason to carry on business, Seller may terminate the contract by notice in writing to Buyer.
  - b. Termination of the contract pursuant to Clause 10(a) shall not effect the accrued rights of the parties arising in any way out of such contract as of the date of termination.
11. Variation  
Neither Seller or Buyer shall be bound by any variation, waiver of or an addition to, those terms and conditions except as agreed by both parties in writing.
12. Time  
Seller will endeavour to dispatch the products on the promised delivery date but does not guarantee to do so.
13. Force Majeure  
Waters shall have no liability for failure to perform or delay in performance, in the delivery of any and all equipment manufactured or sold by Waters including instruments, supplies, components, systems, chemistry, accessories, replacement spare parts, or any and all services provided by Waters, caused by circumstances beyond its reasonable control including, but not limited to, acts of God, acts of nature, floods, fire, explosions, war or military mobilisation, United States governmental action or inaction, request of governmental authority, delays of any kind in transportation or inability to obtain material or equipment, acts of other governments, strikes or labour disturbances.
14. Law  
The contract shall be deemed to have been made in Singapore and the Parties to the contract hereby submit to the jurisdiction of Singapore courts. Singapore law shall be the proper law of the contract.