

## CHEMICAL LABORATORY (MALAYSIA) SDN BHD (27822-K)

81-85 (2nd & 3rd Floor), Jalan SS25/2, Taman Bukit Emas, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia.

Tel: 03-7803 2229, 7803 9582, 7803 0386 Fax: 03-7803 2303

E-mail: [clhq@chemlab.com.my](mailto:clhq@chemlab.com.my) Website: [www.chemlab.com.my](http://www.chemlab.com.my)

ASSAYERS, ANALYTICAL CHEMISTS, MICROBIOLOGISTS AND INDUSTRIAL CONSULTANTS

**Executive Chairman:**

**Dato' Dr. F.W. Kam**

Ph.D., C.Chem., C.Sci., FRSC, FRACI, FIFST, FIMMM, FRSH, FCMI, FEI, FMIC, FPRIM, FPRIS, FMOSTA

**President & CEO:**

**Dato' Marcus K.F. Kam** B.E. (Hons.), M.Sc., C.Chem., FRACI, MRSC, MBA, AMICHEM.

**Executive Director:**

**Datin P.K. Wong** Dip. NIOA, FRSH, FCMI, FEI

### CERTIFICATE OF ANALYSIS

Company : M/s. DTS Hygiene Sdn. Bhd.  
No 8, Lorong Makat 3,  
Tropical Industrial Estate,  
Jalan Makat, 88450 Kolombong, Sabah

Lab No. : PJ-D/MS/1864A/21 (1)

Page : 1 of 2

Sample Description : One (1) sample of Liquid  
Sample Marking : Kleenfix KF631 Sani-Quat  
Date Sample Received : 24<sup>th</sup> September 2021  
Date Analyzed : 24<sup>th</sup> September 2021 - 29<sup>th</sup> September 2021  
Date Reported : 29<sup>th</sup> September 2021


BACTERIOLOGICAL ANALYSIS :

Challenge Test

Procedure :

- 1) Prepare inoculum of organism below at  $10^6$  cfu/ml.
  - a) *Escherichia coli* ATCC 8739
  - b) *Staphylococcus aureus* ATCC 6538
  - c) *Aspergillus niger* ATCC 16404
- 2) Prepare the sample into three (3) portions by transferring 9 ml of sample and inoculate 1 ml of each inoculum above into product respectively and shake vigorously and allow it to contact for 5 min and 10 min.
- 3) Proceed with serial dilution by transferring 1 ml from 1:10 dilution into 9 ml sterile saline up to necessary dilution.
- 4) Pipette 1 ml of each dilution into duplicate plates for both 30 min and 24 hour respectively.
- 5) Pour approximately 15-20 ml of Tryptic Soy Agar (Bacteria) and Saboraud Dextrose agar (fungal) into all plates and allow it to solidify.
- 6) Incubate all plates at 35°C for 48 hours (Bacteria) and 25°C for 120 hours (fungal), count the colonies observed after completion of incubation.
- 7) Initial count for each inoculum was also recovered.
- 8) Calculate the percentage of kill for all organisms as follows :

$$\frac{\text{Initial Count} - \text{Count of organism survive}}{\text{Initial Count}} \times 100\%$$

  
**Nur 'Afini bt. Abdul Rauf**  
 B.A.Sc.(Hons)  
 Food Technologist  
 MJMM0903

THE ABOVE ANALYSIS IS BASED SOLELY ON THE SAMPLES SUBMITTED BY THE CUSTOMER

- This report must not be used for advertising purposes.
- The certificate shall not be reproduced except in full without the written approval of the laboratory.

**JOHOR BAHRU BRANCH**

Wisma Kam, 52, Jalan Dedap 4, Taman Johor Jaya,  
81100 Johor Bahru, Johor Darul Takzim, Malaysia.  
Tel: 07-3543526 (4 Lines) Fax: 07-3543527

**SINGAPORE BRANCH**

520, Balestier Road # 06-01,  
Leong On Building, Singapore 329853.  
Tel: (65) 62536122 Fax: (65) 62504837

**THAILAND BRANCH**

282 Raintree Office Garden, B3 Building, 3rd Floor, Soi Soonvijai 4,  
Rama IX Road, Bangkok Huaykwang, Bangkok 10310 Thailand.  
Tel: (662) 719-6488-92 Fax: (662) 719-6483

**CHEMICAL LABORATORY (MALAYSIA) SDN BHD (27822-K)**

81-85 (2nd & 3rd Floor), Jalan SS25/2, Taman Bukit Emas, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia.

Tel: 03-7803 2229, 7803 9582, 7803 0386 Fax: 03-7803 2303

E-mail: [clhq@chemlab.com.my](mailto:clhq@chemlab.com.my) Website: [www.chemlab.com.my](http://www.chemlab.com.my)

ASSAYERS, ANALYTICAL CHEMISTS, MICROBIOLOGISTS AND INDUSTRIAL CONSULTANTS

Executive Chairman:

**Dato' Dr. F.W. Kam**

Ph.D., C.Chem., C.Sci., FRSC, FRACI, FIFST, FIMMM, FRSH, FCMI, FEI, FMIC, FPRIM, FPRIS, FMOSTA

President & CEO:

**Dato' Marcus K.F. Kam** B.E. (Hons.), M.Sc., C.Chem., FRACI, MRSC, MBA, AMIChemE.

Executive Director:

**Datin P.K. Wong** Dip. NIOA, FRSH, FCMI, FEI

**CERTIFICATE OF ANALYSIS**

Company : M/s. DTS Hygiene Sdn. Bhd.  
No 8, Lorong Makat 3,  
Tropical Industrial Estate,  
Jalan Makat, 88450 Kolombong, Sabah

Lab No. : PJ-D/MS/1864A/21 (1)

Page : 2 of 2

Sample Marking : Kleenfix KF631 Sani-Quat  
Date Sample Received : 24<sup>th</sup> September 2021  
Date Analyzed : 24<sup>th</sup> September 2021 - 29<sup>th</sup> September 2021  
Date Reported : 29<sup>th</sup> September 2021


MICROBIOLOGICAL ANALYSIS:

Challenge Test

RESULTS :

Organism Tested	Initial Count, cfu/ml (A)	Contact Time	Organism Survive, cfu/ml (Sample B)	Percentage of kill, (A) – (Sample B) x 100% (A)
a) <i>Escherichia coli</i> ATCC 8739	3.2 x 10 <sup>7</sup>	5 min	0	>99.999%
		10 min	0	>99.999%
b) <i>Staphylococcus aureus</i> ATCC 6538	2.6 x 10 <sup>7</sup>	5 min	0	>99.999%
		10 min	0	>99.999%
c) <i>Aspergillus niger</i> ATCC 16404	6.0 x 10 <sup>6</sup>	5 min	0	>99.999%
		10 min	0	>99.999%

Test Method : In-House Method based on United States Pharmacopoeia 28

  
**Nur 'Afini bt. Abdul Rauf**  
 B.A.Sc.(Hons)  
 Food Technologist  
 MJMM0903

THE ABOVE ANALYSIS IS BASED SOLELY ON THE SAMPLES SUBMITTED BY THE CUSTOMER

- This report must not be used for advertising purposes.
- The certificate shall not be reproduced except in full without the written approval of the laboratory.

**JOHOR BAHRU BRANCH**

Wisma Kam, 52, Jalan Dedap 4, Taman Johor Jaya,  
81100 Johor Bahru, Johor Darul Takzim, Malaysia.  
Tel: 07-3543526 (4 Lines) Fax: 07-3543527

**SINGAPORE BRANCH**

520, Balestier Road # 06-01,  
Leong On Building, Singapore 329853.  
Tel: (65) 62536122 Fax: (65) 62504837

**THAILAND BRANCH**

282 Raintree Office Garden, B3 Building, 3rd Floor, Soi Soonvijai 4,  
Rama IX Road, Bangkok/ Huaykwang, Bangkok 10310 Thailand.  
Tel: (662) 719-6488-92 Fax: (662) 719-6483