

“Founded in 1984,  
**CHEMSAIN Laboratories**  
provide a wide range of  
**chemical and microbiological**  
testing services nationwide ”

**CHEMSAIN Laboratories has been awarded the:**

- **SAMM/ISO G25 - ISO/IEC 17025** certification since 1994.

- Malaysian Institute of Chemistry **Laboratory Excellence Gold and Platinum Awards** for a continuous period exceeding 20 years since 1986.



CHEMSAIN Laboratories have participated in numerous proficiency programs organised by the Malaysian Department of Chemistry and the National Association of Testing Authorities, Australia (NATA) in a continuous effort to obtain accreditations and certifications which ensure the **HIGHEST STANDARD OF QUALITY with RELIABLE, ACCURATE and CONSISTENT DELIVERY** of results by its laboratories.



**CHEMSAIN KONSULTANT SDN BHD**

### CHEMSAIN LABORATORY LOCATIONS:

#### **KUCHING (HQ)**

No 47, Wisma Ko-Perkasa,  
Jalan Simpang Tiga, Kuching.  
Tel: (+6082) 422736  
Fax: (+6082) 415506  
Email: [laboratory@chemsain.com](mailto:laboratory@chemsain.com)

#### **MIRI**

Lot 1942&1943, Block 5, Jalan  
Maigold,  
Desa Senadin Industrial Area, Miri.  
Tel: (+6085) 652102  
Fax: (+6088) 657102  
Email: [laboratory.miri@chemsain.com](mailto:laboratory.miri@chemsain.com)

#### **KOTA KINABALU**

Lot 7, Lorong Suria,  
Tmn Perindustrian Suria, Kota  
Kinabalu.  
Tel: (+6088) 381277/ 381278  
Fax: (+6088) 381280  
Email: [kk@chemsain.com](mailto:kk@chemsain.com)

#### **BUKIT JELUTONG**

No. 29, Jalan Astaka U8/84A,  
i-Parc Bukit Jelutong U8,  
Shah Alam.  
Tel: (+603)-7-7343473  
Fax: (+603)-5-6370385  
Email: [bukit.jelutong@chemsain.com](mailto:bukit.jelutong@chemsain.com)

#### **BINTULU**

Sublot No. 153, Lot 7668  
Block 31, Kemena Land District,  
97000 Bintulu.  
Tel: (+6086) 337668  
Fax: (+6086) 337730  
Email: [bintulu@chemsain.com](mailto:bintulu@chemsain.com)

#### **KEMAMAN**

Ground & 1st floor,  
K9690 Taman Chukai Utama,  
Jalan Kubang Kurus,  
Kemaman.  
Tel: (+609) 8581396  
Fax: (+609) 8581167  
Email: [kemaman@chemsain.com](mailto:kemaman@chemsain.com)

#### **LABUAN**

Lot 31, Block D,  
Lazenda Warehouse Phase 3,  
Jalan Ranche-ranche,  
WP Labuan.  
Tel: (+6087) 424277  
Fax: (+6087) 425277  
Email: [labuan@chemsain.com](mailto:labuan@chemsain.com)



## **ENVIRONMENTAL LABORATORY SERVICES**



**CONTACT CHEMSAIN  
NOW!**

**+6082-422736**

[laboratory@chemsain.com](mailto:laboratory@chemsain.com)



MS ISO/IEC 17025

## WATER

### CHEMICAL ANALYSIS

Drinking water, Marine water, Estuarine water, Sea water, Rubber Mills, Palm Oil Mills Effluent, Sewage, Leachates, Produce/Formation water.		
Acidity	Temperature	
Alkalinity	Dissolved Oxygen	
Free Carbon dioxide	pH	
Hardness	Conductivity	
Biochemical Oxygen Demand (BOD)	Salinity	
Chemical Oxygen Demand (COD)	Turbidity	
Total Organic Carbon (TOC)	Colour (Hazen unit & ADMI)	
ANIONS	CATIONS	METALS
Chloride	Potassium	Ag, Cd, Cr, Cu, Fe, Mn, Ni, Pb, Zn, Na, K, Ca, & Mg
Nitrate	Magnesium	
Nitrite	Sodium	
Bromide	Calcium	
Fluoride	Ammonia	
Sulfate Phosphite	Chromium: Total, Hexavalent & Trivalent	Ba, Mo, V, Si, & Al
Chlorine: Free Residual, Combined Residual & Total Residual (DPD)		Sn, As, Se, Hg, & B
Oil & grease	Phenol Cyanide Sulphide	
Formaldehyde		
Benzene, Toluene, Ethyl Benzene & OPM (BTEX)	Anionic Surfactant (MBAS)	
Hydrocarbon/mineral oil	Ammoniacal Nitrogen	
Total petroleum hydrocarbon (TPH)	Total Nitrogen (kjeldahl)	

### MICROBIOLOGICAL ANALYSIS

Total Coliform Count
Fecal Coliform Count
<i>E.coli</i> Count
Legionellae Testing: Total Legionellae
<i>Legionella pneumophila</i> Serogroup 1
<i>Legionella pneumophila</i> Serogroup 2
<i>Legionella spp.</i> (unidentified)

### WATER TREATMENT CHEMICALS

#### SODIUM SILICOFLUORIDE

Sodium Silicofluoride	Chromium (as Cr)
Moisture	Mercury (as Hg)
Insoluble Matter	Nickel (as Ni)
Passing 250µm Sieve	Lead (as Pb)
Arsenic (as As)	Selenium (as Se)
Cadmium (as Cd)	Antimony (as Sb)

#### ALUMINIUM SULPHATE HYDRATED LIME

Water soluble aluminium compound (Al <sub>2</sub> O <sub>3</sub> )	Available lime
Basicity (as Al <sub>2</sub> O <sub>3</sub> )	
Determination of Iron (as Fe <sub>2</sub> O <sub>3</sub> )	

### OTHERS

Wood pellet
Caustic Soda
Ammonium hydroxide
Packaging materials

### INDUSTRIAL HYGIENE (AREA & PERSONAL EXPOSURE)

Total Particulate	NMAM 0500	Methanol	NMAM 2000
Respirable Particulate	NMAM 0600	Formaldehyde	NMAM 2541
Chloroform	NMAM 1003	Hydrazine	NMAM 3503
Trichloroethylene	NMAM 1022	Paraquat	NMAM 5003
Isopropyl alcohol	NMAM 1400	Hydrogen Cyanide	NMAM 6010
Ethanol	NMAM 1400	Ammonia (as NH <sub>3</sub> )	NMAM 6015
n-Hexane	NMAM 1500	Lead	NMAM 7082
Benzene	NMAM 1501	Metals	NMAM 7303
Toluene	NMAM 1501	Alkaline Dust	NMAM 7401
Ethylbenzene	NMAM 1501	Chromium, Hexavalent (as Cr <sub>2</sub> O <sub>7</sub> )	NMAM 7600
Xylenes	NMAM 1501	Metals	OSHA 121
		Aluminium (as Aluminium Oxide)	OSHA ID 198sg

### SOIL, SLUDGE, SEDIMENT & SOLID WASTE

Hexane Extractable Matter (Oil & Grease)	Mercury	Total petroleum hydrocarbon
Aluminium (as Al)	pH	Total cyanide
Cadmium (as Cd)	Organic carbon	Hydrocarbon
Copper (as Cu)	Chromium (as Cr)	Arsenic (As)
Polycyclic aromatic hydrocarbon	Iron (as Fe) Lead (as Pb)	Sodium (as Na) Zinc (as Zn)

**Toxicity Characteristic Leaching Procedure (TCLP) for Waste (solid, semi solid, liquid)**