#### **DIA-Chemical Sdn Bhd**

#### COAGULANT



## DIACHLOR<sup>®</sup> SERIES SUPER COAGULANT

### WHAT IS DIACHLOR<sup>®</sup> SUPER COAGULANT?

Our super coagulant is special formulated polyaluminium chloride (PAC) having high concentration of polymerized aluminium chain.

Our super coagulant promotes sustainability with **ZERO WASTE** production.

Our super coagulant produces **HEALTHY** drinking water because it leaves very minimal (sometimes undetectable) traces of residue aluminium, which has been linked to adverse health effects.

Our super coagulant is ENVIRONMENTALLY FRIENDLY because it produces less hazardous sludge in water and wastewater treatment.

### DIACHLOR<sup>®</sup> PRODUCTS RANGE

- Polyaluminium Chloride (PAC) Type 1
- Polyaluminium Chloride (PAC) Type 3

Aluminium Chlorohydrate (ACH)

- Polyaluminium Chloride (PAC) Type 2
  - ENVIROMENTAL FRIENDLY

DENSER FLOC





PHARMA INDUSTRY





JUNE 2021 © Copyright – DIA-Chemical Sdn Bhd

# DIACHLOR<sup>®</sup> PAC TYPE 1

# SUPER COAGULANT FOR DRINKING WATER & WASTEWATER TREATMENT

#### Specifications for DIACHLOR® Polyaluminium Chloride (PAC) Type 1

Parameter	Unit	Type 1
Density (Ambient temperature)	g/ml	1.13 - 1.23
Aluminium Oxide (Al <sub>2</sub> O <sub>3</sub> )	% w/w	10, min
Basicity	% w/w	35 - 83
рН	1% w/v solution	3.5 - 5.0
Sulphate ion (SO <sub>4</sub> <sup>2-</sup> )	% w/w	3.5, max
Insoluble matter	% w/w	1
Total Iron (Fe)	% w/w	0.05
Ammoniacal Nitrogen (N)	% w/w	0.01
Arsenic (As)	mg/kg	2.4
Manganese (Mn)	mg/kg	17.9
Cadmium (Cd)	mg/kg	3.0
Chromium (Cr)	mg/kg	41.9
Mercury (Hg)	mg/kg	0.6
Nickel (Ni)	mg/kg	41.9
Lead (Pb)	mg/kg	12.0
Antimony (Sb)	mg/kg	2.4
Selenium (Se)	mg/kg	2.4



DIACHLOR<sup>®</sup> PAC Type 1



1157-03/2012

### **Key Features**

- · Readily available in liquid form and use as received
- · Remain as clear liquid and stable over time
- · Packaging available in carboys, IBC tote bin, and flexibag
- High basicity requires less alkali
- Effective in water & wastewater treatment system
- Stable & consistent quality
- Applicable in any process requires clarification
- Work in high and low temperature environments

For enquiries: E-mail: info@dia-chemical.com Contact: +603-7845 7895

Certified to: MS 1454: 2007 Certification number: PC005237

SIRIM

Manufactured by DIA-Chemical Sdn. Bhd. whose quality management system is certified to ISO 9001:2015 by SIRIM QAS International.

NSF.

Certified to NSF/ANSI/CAN 60

# DIACHLOR<sup>®</sup> PAC TYPE 2

# SUPER COAGULANT FOR DRINKING WATER & WASTEWATER TREATMENT

#### Specifications for DIACHLOR<sup>®</sup> Polyaluminium Chloride (PAC) Type 2

Parameter	Unit	Type 2
Density (Ambient temperature)	g/ml	1.18 - 1.35
Aluminium Oxide (Al <sub>2</sub> O <sub>3</sub> )	% w/w	15, min
Basicity	% w/w	35 – 83
рН	1% w/v solution	3.5 - 5.0
Sulphate ion (SO <sub>4</sub> <sup>2-</sup> )	% w/w	3.5, max
Insoluble matter	% w/w	1
Total Iron (Fe)	% w/w	0.05
Ammoniacal Nitrogen (N)	% w/w	0.01
Arsenic (As)	mg/kg	3.7
Manganese (Mn)	mg/kg	28.1
Cadmium (Cd)	mg/kg	4.7
Chromium (Cr)	mg/kg	65.6
Mercury (Hg)	mg/kg	0.9
Nickel (Ni)	mg/kg	65.6
Lead (Pb)	mg/kg	18.7
Antimony (Sb)	mg/kg	3.7
Selenium (Se)	mg/kg	3.7



DIACHLOR<sup>®</sup> PAC Type 2



1157-03/2012

Certified to

NSF/ANSI/CAN 60

### **Key Features**

- · Readily available in liquid form and use as received
- · Remain as clear liquid and stable over time
- · Packaging available in carboys, IBC tote bin, and flexibag
- · High basicity requires less alkali
- Effective in water & wastewater treatment system
- Stable & consistent quality
- Applicable in any process requires clarification
- Work in high and low temperature environments

For enquiries: E-mail: info@dia-chemical.com Contact: +603-7845 7895 SIRIM Certified to: MS 1454: 2007 Certification number: PC005237

Manufactured by DIA-Chemical Sdn. Bhd. whose quality management system is certified to ISO 9001:2015 by SIRIM QAS International.

"Your Total Solution for Water & Wastewater Treatment"

# DIACHLOR<sup>®</sup> PAC TYPE 3

# SUPER COAGULANT FOR DRINKING WATER & WASTEWATER TREATMENT

#### Specifications for DIACHLOR<sup>®</sup> Polyaluminium Chloride (PAC) Type 3

Parameter	Unit	Туре 3
Density (Ambient temperature)	g/ml	1.32 - 1.38
Aluminium Oxide (Al <sub>2</sub> O <sub>3</sub> )	% w/w	22, min
Basicity	% w/w	> 83
рН	1% w/v solution	3.5 - 5.0
Sulphate ion $(SO_4^{2-})$	% w/w	3.5, max
Insoluble matter	% w/w	1
Total Iron (Fe)	% w/w	0.05
Ammoniacal Nitrogen (N)	% w/w	0.01
Arsenic (As)	mg/kg	2.2
Manganese (Mn)	mg/kg	6.1
Cadmium (Cd)	mg/kg	0.5
Chromium (Cr)	mg/kg	4.6
Mercury (Hg)	mg/kg	0.6
Nickel (Ni)	mg/kg	3.1
Lead (Pb)	mg/kg	6.1
Antimony (Sb)	mg/kg	3.1
Selenium (Se)	mg/kg	3.1



DIACHLOR<sup>®</sup> PAC Type 3



1157-03/2012

### **Key Features**

- · Readily available in liquid form and use as received
- · Remain as clear liquid and stable over time
- · Packaging available in carboys, IBC tote bin, and flexibag
- · High basicity requires less alkali
- Effective in water & wastewater treatment system
- Stable & consistent quality
- Applicable in any process requires clarification
- Work in high and low temperature environments

For enquiries: E-mail: <u>info@dia-chemical.com</u> Contact: +603-7845 7895 Contilied to

Certified to NSF/ANSI/CAN 60



Certified to: MS 1454: 2007 Certification number: PC005237

Manufactured by DIA-Chemical Sdn. Bhd. whose quality management system is certified to ISO 9001:2015 by SIRIM QAS International.



# DIACHLOR® ACH

# SUPER COAGULANT FOR DRINKING WATER & WASTEWATER TREATMENT

#### Specifications for DIACHLOR® Aluminium Chlorohydrate (ACH)

Parameter	Unit	ACH
Density (Ambient temperature)	g/ml	1.32 - 1.38
Aluminium Oxide (Al <sub>2</sub> O <sub>3</sub> )	% w/w	23, min
Basicity	% w/w	> 83
рН	1% w/v solution	3.5 - 5.0
Sulphate ion (SO <sub>4</sub> <sup>2-</sup> )	% w/w	3.5, max
Insoluble matter	% w/w	1
Total Iron (Fe)	% w/w	0.05
Ammoniacal Nitrogen (N)	% w/w	0.01
Arsenic (As)	mg/kg	2.2
Manganese (Mn)	mg/kg	6.1
Cadmium (Cd)	mg/kg	0.5
Chromium (Cr)	mg/kg	4.6
Mercury (Hg)	mg/kg	0.6
Nickel (Ni)	mg/kg	3.1
Lead (Pb)	mg/kg	6.1
Antimony (Sb)	mg/kg	3.1
Selenium (Se)	mg/kg	3.1



#### DIACHLOR<sup>®</sup> Aluminium Chlorohydrate



1157-03/2012

### **Key Features**

- · Readily available in liquid form and use as received
- · Remain as clear liquid and stable over time
- · Packaging available in carboys, IBC tote bin, and flexibag
- · High basicity requires less alkali
- · Effective in water & wastewater treatment system
- Stable & consistent quality
- · Applicable in any process requires clarification
- · Work in high and low temperature environments

For enquiries: E-mail: <u>info@dia-chemical.com</u> Contact: +603-7845 7895

Manufactured by DIA-Chemical Sdn. Bhd. whose quality management system is certified to ISO 9001:2015 by SIRIM QAS International.

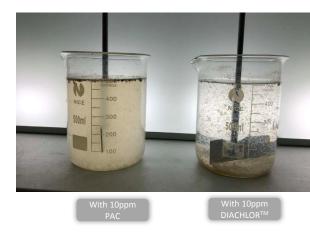


Certified to NSF/ANSI/CAN 60

# TESTIMONIAL

### DIACHLOR<sup>®</sup> SERIES SUPER COAGULANT **JAR TEST OBSERVATION**





Jar Test for Caramel Refinery Wastewater

Jar Test for Oil Refinery Wastewater

Above pictures show a comparison between conventional PAC & DIACHLOR® PAC performance towards industrial wastewater applications.

The comparisons were conducted under optimum conditions of conventional PAC and DIACHLOR<sup>®</sup> PAC with the similar grade and dosage.



- TURNKEY PROJECT FOR TREAMENT PLANTS
- EPCC FOR TREATMENT PLANTS

#### **CERTIFIED BY**

**DIA-Chemical Sdn Bhd** 

- BIOGAS BOOST 1000





CERTIFIED TO ISO 9001:2015 CERT. NO.: OMS 03673







Tel: +03 - 7845 7895 (Office) Tel: +03 - 8920 7713 (Factory) Website: www.dia-chemical.com Office: 40, Jalan Apollo U5/193, Bandar Pinggiran Subang, 40150 Shah Alam, Selangor Factory: 7, Jalan Perindustrian SIS, Taman Perindustrian SIS 228, 43700 Beranang, Selangor



**DIA-Chemical Sdn Bhd** 

DIA-Chemical Sdn Bhd Tel: +03 – 7845 7895 (Office) Tel: +03 – 8920 7713 (Factory) Website: www.dia-chemical.com Office: 40, Jalan Apollo U5/193, Bandar Pinggiran Subang, 40150 Shah Alam, Selangor Factory: 7, Jalan Perindustrian SIS, Taman Perindustrian SIS 228, 43700 Beranang, Selangor