



**PT. Kelie Chemical World**

# **ChemCleaner**

***Economic &  
Professional Result***

**New Zealand  
Technology**





## **ChemCleaner : CC18**

**ChemCleaner CC18** is a highly concentrated and powerful rust remover converter and steel passivator. It works by way of fast chemical reaction of inorganic acid. Properly treated steel surface with **ChemCleaner CC18** shall be usually optimal for corrosion resistance or subsequent painting in view of long term corrosion protection. It is water based liquid, halide free, does not contain Calcium ion and Magnesium ion.

### **Physical properties**

Appearance	: green clear liquid, slightly syrupy
Density	: 1.15 kg/liter
Solubility in water	: completely soluble
Acidity, pH	: below 6.0
Flash point	: not applicable, water base
Boiling point	: below 105° C

### **Recommended use**

**ChemCleaner CC18** is water clear liquid which can be used as is. Additional of small amount of water can be done to slightly lower the density and or reactivity to suit the requirement. Application can be by immersion the object or spraying or brushing the steel surface. **ChemCleaner CC18** is highly concentrated and economical to use.

### **Advantages**

- Reacts immediately with steel rust / corrosion
- Converts rust to become anti corrosion film on steel surfaces
- Fast reaction to rusted steels to give good result, rust free
- Provides anti corrosion film on steel surfaces
- Complete solution in water, water based
- Does not contain Halides or Sulphate
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)



## **ChemCleaner : CC18**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Persiapan Permukaan:**

1. Periksa permukaan yang berkarat dengan seksama
2. Bersihkan permukaan dengan sikat kawat bila ada karat atau kotoran atau cat yang mengelupas.
3. Cuci permukaan dengan **ChemCleaner CC45** bila terkontaminasi minyak atau gemuk. Bilas permukaan dengan air bersih.

### **Aplikasi:**

1. Dapat dikuaskan ke permukaan yang sudah dipersiapkan.
2. Dapat dicelupkan ke dalam cairan **ChemCleaner CC18**, untuk objek atau benda dengan ukuran kecil.
3. Biarkan **ChemCleaner CC18** bereaksi terhadap karat hingga terbentuk lapisan anti karat berwarna kehitaman.
4. Cucilah permukaan atau objek atau benda dengan air bersih dan dikeringkan.
5. Selanjutnya dapat di cat atau diberikan "*protective coating*" bila dibutuhkan.

**ChemCleaner CC18** dapat diencerkan dengan air bersih untuk menyesuaikan kebutuhan, kecepatan reaksi untuk menghilangkan karat.





## ChemCleaner : CC27

**ChemCleaner CC27** is a strong and effective solid dry acid cleaner for dissolving and or removing stubborn scales and deposits inside boiler, water piping system and in all types of non-potable water systems. It is formulated to easily remove deposits of calcium carbonate, calcium phosphate, copper compounds and/or iron oxides without attaching the underlying metal surfaces. The acid used in **ChemCleaner CC27** converts these deposits into water-soluble salts. Iron oxide removal is hastened by the ability of the acid to form a stable soluble complex with the iron in the deposits.

### Physical properties

Appearance	: light pink crystalline powder
Odor	: very faint sulfurous
Density	: 2.1 kg/liter
Solubility in water	: $\pm 20\%$
Acidity, pH	: below 3.0
Boiling point	: 105° C

### Recommended use

The dosage of **ChemCleaner CC27** needed to clean a system depend on the size of the system, the type of deposit presents, and the total amount (or thickness) of the deposit. Generally **ChemCleaner CC27** is use d as 10% - 15% solution in water. Heavier deposits, or those containing high amounts of iron oxides, may require a higher dosage, or additional cleaning cycles. Specific recommendations will be made by our Technical Department base on survey information and chemical analysis of the deposit. If oil and grease deposits are also detected, pre-clean the system with **ChemCleaner CC45** for optimum system performance.

### Advantages

- Can be added directly to system water
- Reacts immediately with stubborn scales
- Fast reaction to dissolve and or remove scales
- Non flammable, easy to handle and to transport
- Economical in solid form
- Contains Color Indicator for control of reaction or acid strength



## **ChemCleaner : CC27**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

1. Buka kemasan **ChemCleaner CC27**
2. Tambahkan 1 kg - 1.5 kg ke dalam 10 liter air bersih untuk mendapatkan larutannya.
3. Buatlah sejumlah larutan sesuai kebutuhan.
4. Atau tambahkan ke dalam air baku untuk mendapatkan larutan.
5. Larutan akan berwarna merah jambu sebagai indikator.
6. Pompakan larutan untuk membersihkan kerak dan bersirkulasi.
7. Dapat disemprotkan atau dikuaskan.
8. Perhatikan warna larutan yang balik; perubahan warna menjadi kuning menandakan larutan sudah bereaksi dengan kerak.
9. Ulangi langkah 6, 7, dan 8 sampai warna merah jambu tidak berubah pada larutan balik.





## ChemCleaner : CC30

**ChemCleaner CC30** is a light yellow clear liquid specifically formulated for cleaning and passivating Stainless steel objects on surfaces. It cleans iron rust and re-builds anti corrosive layer on stainless steel. **ChemCleaner CC30** removes burnt of welded area on stainless steel, shine in and provide anti corrosive film. Treatment with **ChemCleaner CC30** will also brighten and give shine to Stainless steel.

### Physical properties

Appearance	: slightly yellowish clear liquid
Odor	: strong acid, pungent smell
Density	: 1.2 kg/liter
Solubility in water	: completely soluble
Acidity, pH	: below 4.0
Flash point	: not applicable, water base
Boiling point	: 115° C

### Recommended use

**ChemCleaner CC30** shall be used as is without dilution. It is specifically formulated for used on stainless steel surfaces, burnt area and objects such as food processing equipments, machineries and others. Applications can be by immersion the object or brushing or wiping the surface.

Cleaning with **ChemCleaner CC45** must be done prior to using **ChemCleaner CC30** to achieve best results.

### Advantages

- Strong formula and highly concentrated
- Safe the due to fast reaction
- Reacts immediately with iron rust
- Rejuvenates anti corrosive layer on stainless steel
- Provides shine, brightness and cleanliness
- Complete solution in water, water based
- Non flammable, easy to handle and to transport
- Refer to MSDS for safe use of this product





## **ChemCleaner : CC30**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

Permukaan atau objek / benda Stainless Steel harus bebas dari lemak, minyak, gemuk. Cucilah dengan **ChemCleaner CC45** bila diperlukan.

1. Bukalah kemasan **ChemCleaner CC30**.
2. Lakukan percobaan area kecil untuk mengetahui waktu pembersihan.
3. Kuaskan pada permukaan objek / benda yang akan dibersihkan.
4. Biarkan **ChemCleaner CC30** bereaksi dan bekerja selama kira-kira 5 - 10 menit. Waktu yang dibutuhkan untuk pembersihan tergantung dari jenis kekusaman dan jenis kontaminasi.
5. Bilaslah dengan air bersih setelah waktu pembersihan tercapai.

**ChemCleaner CC30** dapat juga digunakan untuk membersihkan Stainless Steel yang akan di-las, di-solder atau di-patri.





## ChemCleaner : CC31

**ChemCleaner CC31** is concentrated and effective liquid acid cleaner for masonry, brick, stone, concrete and cement plaster. It dissolves and or removes stubborn rust stain, other stains and dirty color. Left over cement on equipment and painted surfaces are also removed by this cleaner. The acid component in **ChemCleaner CC31** converts these stains and deposits into water-soluble salts. It is economical and easy to use without hard work.

### Physical properties

Appearance	: clear green liquid
Odor	: acid, pungent smell
Density	: 1.10 kg/liter
Solubility in water	: completely soluble
Acidity, pH	: below 6.0
Boiling point	: 105° C

### Recommended use

**ChemCleaner CC31** is a multipurpose cleaner for cleaning of building, concrete, equipment for cement works and also painted surfaces.

**ChemCleaner CC31** can be applied by immersion the object or spraying, brushing or wiping the surface and then wash with fresh water.

**ChemCleaner CC31** can be diluted with water up to 1 : 20 depending on requirement and the total amount (or thickness) of the deposit for optimum system performance.

### Advantages

- Safe the due to fast reaction
- No hard scrubbing or sanding is required
- Reacts immediately with stubborn stains and left over cement deposit
- Fast reaction to dissolve and or remove stains and left over cement deposit
- Non flammable, easy to handle and to transport
- Economical in concentrated form
- Rejuvenates and brightens original color of surfaces





## **ChemCleaner : CC31**

### **Petunjuk Penggunaan**

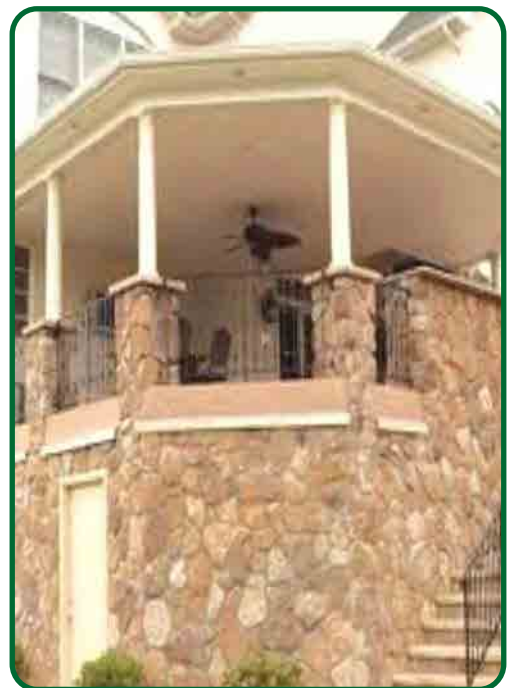
Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

**ChemCleaner CC31** dapat dicampurkan dengan air bersih dengan perbandingan 1 bagian **ChemCleaner CC31** dengan 3 bagian air bersih. Aplikasi dengan cara celup untuk objek berukuran kecil; dapat juga dengan cara semprot dan kuas.

1. Aplikasikan pada objek atau permukaan yang akan dibersihkan.
2. Terlihat gelembung-gelembung gas kecil seperti busa pada objek atau permukaan, tanda reaksi sedang berlangsung.
3. Biarkan **ChemCleaner CC31** bereaksi dan bekerja selama kira-kira 5 - 10 menit. Waktu yang dibutuhkan untuk pembersihan tergantung jenis kontaminasi dan banyaknya kontaminan.
4. Bilaslah dengan air bersih setelah waktu pembersihan tercapai

**ChemCleaner CC31** dapat juga dicampurkan dengan perbandingan 1 : 6 air bersih untuk aplikasi yang ringan.





## **ChemCleaner : CC41**

**ChemCleaner CC41** is a highly concentrated disinfectant, sanitizer and germicidal cleaning agent. It is a very effective liquid cleaner for killing micro-organisms and for removal of bad odor caused by germs and bacteria.

**ChemCleaner CC41** can also soften hard water and clean fatty or greasy objects, equipment. The ingredients are considered as generally recognized as safe (GRAS) by FDA. It is formulated using biodegradable components.

### **Physical properties**

Appearance	: water clear liquid slightly yellowish
Density	: ~ 1.0 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 8.0
Flash point	: not applicable, water base
Boiling point	: 105° C

### **Recommended use**

**ChemCleaner CC41** is very effective and safe for use in the clinical area, hospital, process equipment of food industry, restaurants, kitchen and laundry. It is also efficient for cleaning of medical instruments, veterinarian quarters, kitchen utensil, general public area/facilities. It is also recommended for general cleaning and sanitizing of various objects and surfaces.

### **Advantages**

- Economical to use and highly concentrated
- Ingredients are biodegradable and friendly to environment
- Reacts immediately when applied to the objects or surfaces
- Complete solution in water, water based
- Non toxic and safe on hand, metal, plastic, painted surfaces, ceramic tile and marble
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)



## **ChemCleaner : CC41**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

#### **JANGAN DICAMPUR DENGAN BAHAN LAIN!!**

1. **ChemCleaner CC41** adalah cairan anti mikroorganisme, bakteri dan kuman yang kuat dan berkonsentrasi tinggi.
2. Aman terhadap tangan dan kulit; hanya digunakan untuk bagian luar saja.
3. Campurkan **ChemCleaner CC41** sebanyak 4 - 5 ml kedalam 1 liter air bersih. Larutan siap untuk digunakan sebagai cairan pembersih.
4. Aplikasi dengan cara celup untuk objek berukuran kecil; dapat juga dengan disemprotkan.
5. Gunakan sebagai cairan untuk pembersih ruangan, dinding dan lantai.

**ChemCleaner CC41** sangat efektif untuk sterilisasi peralatan, rumah sakit, klinik, peternakan, industri makanan, dan area publik.





## ChemCleaner : CC42

**ChemCleaner CC42** is a highly concentrated cleaning agent. It is a very effective liquid cleaner for removal of grease and dirt. It is specifically formulated for cleaning industrial and heavy equipment. It is water based and non flammable. **ChemCleaner CC42** can also be used in the marine industry and cleaning the ship. The ingredients are considered as non toxic and generally recognized as safe (GRAS) by FDA. It is formulated using biodegradable components.

### Physical properties

Appearance	: green clear liquid
Density	: ~ 1.10 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 7.0
Flash point	: not applicable, water base
Boiling point	: ~ 105° C

### Recommended use

**ChemCleaner CC42** is very effective and economical for use in the heavy industries. It cleans safely heavy equipment and machineries. It is also efficient for cleaning of deck and floors on ship, vessel, heavy moving equipment. As a guidance, mix 1 part of **ChemCleaner CC42** to 1 - 8 part of water in cleaning depending on requirement.

### Advantages

- Economical to use and highly concentrated
- Ingredients are biodegradable and friendly to environment
- Reacts immediately when apply to the objects or surfaces
- Complete solution in water, water based
- Non toxic and safe on hand , metal, plastic, painted surfaces
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)



## **ChemCleaner : CC42**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya.  
Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

**ChemCleaner CC42** sangat efektif untuk membersihkan alat-alat berat, mesin-mesin, kendaraan angkutan dan instalasi kelautan seperti dek kapal.

Membersihkan dari kotoran-kotoran seperti tanah, lumpur yang menempel, minyak dan gemuk serta kotoran lainnya.

1. Campurkan **ChemCleaner CC42** dengan perbandingan 1: 10 s/d 20 bagian air bersih. Campuran/larutan siap untuk digunakan sebagai cairan pembersih.
2. Aplikasikan dengan cara semprot atau kuas terhadap peralatan dan objek yang dibersihkan.
3. Aplikasi dengan cara semprotan bertekanan tinggi akan mempermudah pembersihan.





## **ChemCleaner : CC43**

**ChemCleaner CC43** is effectively formulated for boiler treatment. Prevents scale formation, mud formation and corrosion. It reduces water hardness, maintenance and extends the working life of boiler and its internal components which contact with feed water.

**ChemCleaner CC43** contains synthetic dispersing agent and corrosion inhibitor which function effectively and economically. The ingredients are biodegradable hence it is friendlier to the environment.

### **Physical properties**

Appearance	: slightly yellowish clear liquid
Density	: ~ 1.15 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 8.0
Flash point	: not applicable, water base
Boiling point	: ~ 105° C

### **Recommended use**

**ChemCleaner CC43** is very effective for controlling scale problem in boiler. It should be introduced and mixed in the feed water tank. The usage and dosage depend on the quality of feed water. As a guidance, it should be between 20 - 50 ppm (200 ml - 500 ml in 10,000 liters of water).

### **Advantages**

- Economical to use and highly concentrated
- Ingredients are biodegradable and friendly to environment
- Effective for feed water treatment
- Soften hard water and prevent corrosion in boiler and its component
- Complete solution in water, water based
- Non toxic and safe on hand , metal, plastic, painted surfaces, ceramic tile and marble
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)





## **ChemCleaner : CC43**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

**ChemCleaner CC43** sangat efektif untuk mengatasi masalah air baku untuk boiler. Menghilangkan kesadahan air baku untuk boiler dan mencegah korosi dalam pipa-pipa boiler yang terkena air baku.

Sebaiknya lakukan pembersihan kerak dalam boiler lama dengan **ChemCleaner CC27** sebelum menggunakan **ChemCleaner CC43**.

Dapat digunakan langsung pada boiler baru yang belum berkerak.

1. Untuk kesadahan air baku  $\leq 20$  ppm, campurkan **ChemCleaner CC43** sebanyak 200 - 300 ml kedalam 1000 liter air baku.
2. Untuk kesadahan air baku  $> 20$  ppm, campurkan 300 - 500 ml **ChemCleaner CC43** kedalam 1000 liter air baku.
3. Periksa dan jaga agar kesadahan tetap hilang dan kebasan tetap tinggi dengan menambahkan **ChemCleaner CC43** secukupnya.





## ChemCleaner : CC44

**ChemCleaner CC44** is a highly concentrated food grade cleaning agent. It is very effective liquid cleaner for removal of fatty materials, left over charred food and general kitchen equipment. It is water based and non flammable.

**ChemCleaner CC44** can also remove and clean dirt of food processing. The ingredients are considered as non toxic and generally recognized as safe (GRAS) by FDA. It is formulated using biodegradable components.

### Physical properties

Appearance	: slightly pink clear liquid
Density	: ~ 1.05 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 7.0
Flash point	: not applicable, water base
Boiling point	: ~ 105° C

### Recommended use

**ChemCleaner CC44** is very effective and safe for use in the food processing industries and kitchen. It cleans safely equipment of food industry, restaurant and kitchen. It is also efficient for cleaning of walls and floors in food processing factory, restaurant, kitchen and abattoir. As a guidance, mix 1 part of **ChemCleaner CC44** to 1 - 8 part of water in cleaning depending on requirement.

### Advantages

- Economical to use and highly concentrated
- Ingredients are biodegradable and friendly to environment
- Reacts immediately when apply to the objects or surfaces
- Complete solution in water, water based
- Non toxic and safe on hand, metal, plastic, painted surfaces, ceramic tile and marble
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)



## **ChemCleaner : CC44**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya. Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

**ChemCleaner CC44** mengandung bahan aktif yang aman untuk makanan.

**ChemCleaner CC44** sangat efektif untuk membersihkan peralatan dan mesin-mesin yang digunakan pada proses pembuatan makanan.

Menghilangkan kerak-kerak akibat bahan makanan yang hangus, lemak dan kotoran lain yang menempel.

1. Campurkan **ChemCleaner CC44** dengan air bersih sebanyak 1 : 4 s/d 8 bagian air bersih. Cairan siap untuk digunakan sebagai pembersih.
2. Aplikasikan dengan semprotan ringan, atau dengan kuas pada objek yang akan dibersihkan.
3. Biarkan campuran **ChemCleaner CC44** bereaksi dan bekerja selama beberapa menit.
4. Bilaslah objek dengan air bersih.
5. Apabila diperlukan, ulangin langkah 1, 2, 3 dan 4 untuk mendapatkan hasil yang memuaskan.





## ChemCleaner: CC45

**ChemCleaner CC45** is formulated for heavy duty cleaning such as heavy duty degreaser. It is preferred by cleaning professionals for removing heavy deposits of greasy grime, smoke, soot stains, ink marks, lead paint, dust cleanup and as all purpose cleaner. It does not contain acids or corrosive chlorides. A **ChemCleaner CC45** washing of surfaces prior to painting helps insure a good clean “bite” and adhesion for the finish coats of paint.

**ChemCleaner CC45** is also preferred by professional painter to clean and remove chalked paint from walls, woodwork and floors. Removes mildew and mildew stains when mixed with bleach. Cleans and prepares surfaces for repainting.

### Physical properties

Appearance	: light yellow clear liquid
Odor	: lemon smell
Density	: ~ 1.03 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 8.0
Flash point	: not applicable, water base
Boiling point	: ~ 105° C

### Recommended use

**ChemCleaner CC45** is light green clear liquid which can be used as is. Additional of small amount of water can be done to lower the reactivity to suit the requirement. It can be used on various surfaces such as metal, concrete, wood, plastics and objects such as food processing equipments, machineries and others. Applications can be by immersion the object or spraying or brushing or wiping the surface.

### Advantages

- Economical to use and highly concentrated
- Sufficiently alkaline to saponify grease and oils
- Reacts immediately with grease, oils, paints and other surface contaminants
- Complete solution in water, water based
- Does not contain Chlorides
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)



## **ChemCleaner : CC45**

### **Petunjuk Penggunaan**

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya.

Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### **Cara Penggunaan:**

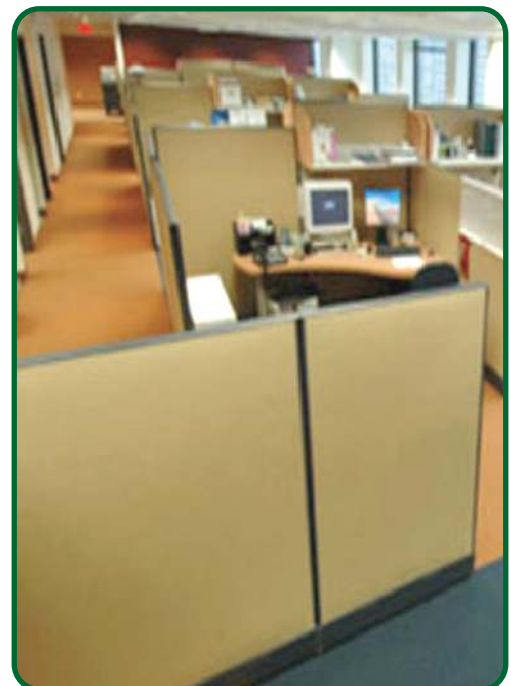
**ChemCleaner CC45** adalah pembersih multiguna, yang superior dengan formulasi khusus anti korosi dan aman terhadap tangan.

Menghilangkan dan membersihkan noda-noda tinta, lemak, minyak, gemuk dan kotoran lainnya yang menempel. Sangat efektif membersihkan permukaan metal, semen/beton, kayu, plastic, bahan fabric.

Cocok untuk digunakan pada mesin-mesin industri, peralatan kantor, kursi sofa dan karpet.

**ChemCleaner CC45** dapat digunakan langsung atau dicampur dengan air bersih maximum sebanyak 1 : 4 bagian air bersih. Cairan siap untuk digunakan sebagai pembersih.

1. Aplikasikan dengan semprotan ringan, atau dengan kuas pada objek yang akan dibersihkan.
2. Aplikasikan dengan mencelupkan objek ukuran kecil yang akan dibersihkan.
3. Biarkan campuran **ChemCleaner CC45** bereaksi dan bekerja selama beberapa menit.
4. Bilaslah objek dengan air bersih bila diperlukan.





## **ChemCleaner : CC46**

**ChemCleaner CC46** is specifically formulated for economical treatment of closed circulating cooling water. Prevents scale formation and corrosion in closed cooling water system. It reduces water hardness, maintenance and extends the working life of closed cooling water system and its internal components which contact with water.

**ChemCleaner CC46** contains synthetic dispersing agent and corrosion inhibitor. It also eliminates scale formation in air conditioning equipment/system. The ingredients are biodegradable hence it is friendlier to the environment.

### **Physical properties**

Appearance	: slightly yellowish clear liquid
Density	: ~ 1.09 kg/liter
Solubility in water	: completely soluble
Alkalinity, pH	: above 8.0
Flash point	: not applicable, water base
Boiling point	: ~ 105° C

### **Recommended use**

**ChemCleaner CC46** is very effective for controlling scale problem in air conditioning system and closed circulating cooling water system. As a guidance, it should be added between 1 - 5 liter in 1,000 liters of water.

### **Advantages**

- Economical to use and highly concentrated
- Ingredients are biodegradable and friendly to environment
- Improve heat exchange hence reduce maintenance
- Softens hard water and prevent corrosion in cooling water equipment and its component
- Complete solution in water, water based
- Non toxic and safe on hand, metal, plastic, painted surfaces, ceramic tile and marble
- Non flammable, easy to handle and to transport
- Environmentally safe to use (refer to MSDS)





## ChemCleaner : CC46

### Petunjuk Penggunaan

Hanya boleh digunakan oleh orang-orang professional yang mengerti dibidangnya.

Gunakan pakaian proteksi keselamatan pribadi seperti sarung tangan tahan asam/bahan kimia, kacamata keselamatan dan sepatu boot.

### Cara Penggunaan:

**ChemCleaner CC46** diformulasikan khusus untuk mencegah timbulnya kerak, lumut dan korosi pada system pendingin sirkulasi tertutup atau Chiller. Aman terhadap tangan dan kulit. Sangat efektif mencegah timbulnya kerak dan korosi permukaan metal, aman digunakan pada semen/beton, kayu dan plastic.

Encerkan **ChemCleaner CC46** dengan air bersih atau media pendingin, 1 : 4 dan campuran siap untuk dipakai.

1. Untuk Sistem Pendingin Sirkulasi Tertutup, tambahkan campuran di atas sebanyak 5 liter kedalam 1000 liter air pendingin selama 1 minggu pertama. Selanjutnya 1 liter kedalam 1000 liter air pendingin per bulan.
2. Untuk radiator mesin/automotif, tambahkan **ChemCleaner CC46** sebanyak 50 ml kedalam 10 liter air pendingin. Buatlah campuran ini untuk menggantinya setiap 500 km atau 250 jam kerja.





FORMULIR HASIL PEMERIKSAAN  
LABORATORIUM DIAGNOSTIK KLINIK dan VAKSINASI  
PT. BIO FARMA ( Persero )



Jl. Pasteur 28 Bandung 40161 Phone ( 022 ) 2033755 Ext. 311; (022) 2032205; Fax. ( 022 ) 2032205

No. Reg. Reg. No.	-	Tanggal Date	25 MEI 2011
Nama Pelanggan Customer Name	PT. KELIE CHEMICAL WORLD	Pengirim Sender	-
Umur / JK Age / Sex	-	Dokter Doctor	-
Alamat Address	RUKAN GADING BUKIT INDAH-JAKARTA	Alamat Address	-
No. Tlp. / Fax Phone / Fax	-	No. Tlp. / Fax Phone / Fax	-

**HASIL UJI Laboratorium Mikrobiologi**

PENGIRIM : PT. KELIE CHEMICAL WORLD - RUKAN GADING BUKIT INDAH F / 12 - JAKARTA

TANGGAL TERIMA : 25 MEI 2011

NAMA SAMPEL : CHEM CLEANER CC 41 PENGECERAN 1:200 , 1:300 DAN 1:350.

PEMERIKSAAN : **UJI EFEKTIFITAS CHEM CLEANER TERHADAP MIKROBA :**  
Bacillus subtilis , Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli, Enterobacter agglomerans  
dan Candida albicans.  
DENGAN WAKTU KONTAK : 1', 5' DAN 10'.

HASIL UJI : TERLAMPIR

Note / Catatan

Initials  
Name

  
: Yeni DA  
Kepala Seksi Bakteriologi

  
Bandung, 1 JUNI 2011  
Signature:   
: Mahsun Muhammadiyah, dr.  
Kepala Bagian Lab. Diagnostik Klinik



## LAMPIRAN HASIL UJI EFEKTIFITAS CHEM CLEANER CC 41

No	Nama Mikroba Waktu kontak	Pengenceran 1 : 200			Pengenceran 1 : 300			Pengenceran 1 : 350		
		1'	5'	10'	1'	5'	10'	1'	5'	10'
1	Bacillus subtilis	99,20%	99,40%	99,55%	95,80%	95,86%	96,74%	88,80%	88,86%	90,33%
2	Staphylococcus aureus	100%	100%	100%	100%	100%	100%	100%	100%	100%
3	Pseudomonas aeruginosa	100%	100%	100%	100%	100%	100%	100%	100%	100%
4	Escherichia coli	100%	100%	100%	100%	100%	100%	100%	100%	100%
5	Enterobacter agglomerans	100%	100%	100%	100%	100%	100%	100%	100%	100%
6	Candida albicans	60,52%	79,34%	90,77%	59,78%	61,62%	69,42%	43,58%	54,24%	67,89%

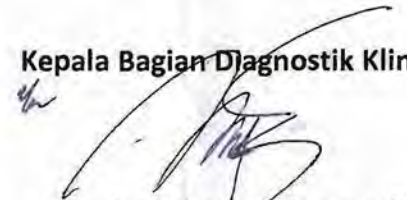
### LABORATORIUM MIKROBIOLOGI PT. BIO FARMA ( PERSERO )

Kepala Seksi Bakteriologi

  
Yeni.D.A.



Kepala Bagian Diagnostik Klinik

  
dr. Mahsun Muhammadi