

## **RESOURCE GUIDE**

Everything You Need for Quick Safe & Easy Dechlorination



Conventional hydrant flushing • Unidirectional flushing • Dead-end flushing • Filter backwash
Hydrant flow testing • Water main installations with super-chlorinated water
Water main repairs • Reservoir draining and tank draining • Emergency reservoir overflow

## **ORIGINAL & NEUTRAL**

Introduced nearly 20 years ago, Vita-D-Chlor is the original Vitamin C-based dechlorination product. Safer and more environmentally friendly than traditional sulfite-based chemicals, Vita-D-Chlor products provide an immediate reaction and completely neutralize both chlorine and chloramines. Today, Vita-D-Chlor remains the leader in responsible dechlorination of water being discharged directly to the environment.

Vita-D-Chlor Original and Vita-D-Chlor Neutral are both NSF certified for the treatment of drinking water. NSF certification provides the regulatory assurances that many utilities require of all water treatment chemicals they use. Completely soluble and 100% organic, these two granular forms are easily dissolved in water to make a feed solution, which can be injected into the water flow with a venturi device, a metering pump or via manual application under the right circumstances.

#### **SPECIFICATIONS**

Form Quality Unit Sizes Easily dissolving fine granules NSF certified to Standard 60

2.5 kg (5.5 lb) 12 kg (26.5 lb) 25 kg (55 lb)



Works with the following liquid feed equipment:

Romac deChlorinator, metering pump, H2O Neutralizer, Bazooka liquid feed device, Mazzei Pipeline Dechlorinator, custom drip setup, Baker Chemical Injector (BCI), Five Star Multidirectional Hydrant Diffuser

#### **Vita-D-Chlor Original**

- Active ingredient Ascorbic Acid
- Perfect for dechlorination with a venturi or metering pump
- Easy to dissolve for concentrations up to 10% (1lb per gallon)
- Safe treatment of potable water by being pH neutral at concentrations of 5-10 ppm, noticeable drop in pH at concentrations above 100 ppm
- One pound is capable of neutralizing 1 ppm of chlorine in 45,000 gallons of water

#### Vita-D-Chlor Neutral

- Active ingredient Sodium Ascorbate
- Highly soluble for concentrations of up to 50% (4lbs per gallon)
- Great for treatment of high chlorine levels because it remains pH neutral (pH 7) at all concentrations
- Safest option when dechlorinating using liquid feeds
- One pound is capable of neutralizing 1 ppm of chlorine in 45,000 gallons of water

## TABLET & SLO-TAB

Vita-D-Chlor Tablets were developed shortly after the granular forms. Increasing regulations escalated the demand for environmentally safe methods of dechlorination during hydrant flushing. Creative operators began engineering devices that could be used to diffuse the water and dechlorinate it with tablets at the same time. These devices take advantage of the benefits that Vita-D-Chlor Tablets offer as compared to granular – ease of handling and a slower dissolve rate. Completely soluble and 100% organic, Vita-D-Chlor Tablets are simple to use and work well with many of the devices in the expanding market of tablet dechlorination diffusers.

Like all Vita-D-Chlor products, Vita-D-Chlor Slo-Tabs are 100% organic. They are formulated to dissolve significantly slower than the original Vita-D-Chlor Tablets. Slo-Tabs work well both for auto-flushers, where longer-lasting tablets are needed, and for higher flow applications, where slower dosing is desired. Tablets can also be used in high-volume reservoir overflow devices, protecting the environment from chlorinated water.

#### **SPECIFICATIONS**

Form Size White tablet with a citrus odor 2 5/8" diameter and 1" thick

Weight Unit Sizes

115 g (about 4 oz)

6 tablets

5 lb (approx. 20 tablets) 10 lb (approx. 40 tablets)

35 lb (approx. 140 tablets)



Suitable for use with the following equipment:

ZDe-Chlorinator NEMA devices, LPD-250, Hydro-Hitch/Aqua-D-Chlor, mats, socks, auto-flushers, Bazooka tablet feed device, Dechlor Demon, PVC tablet feeders, Tideflex DOSA

#### **Vita-D-Chlor Tablets**

- Active ingredient Ascorbic Acid
- One tablet is capable of neutralizing 1 ppm chlorine in 8,500 gallons of water
- Dissolve rate is about 2 3 grams per minute in a flow of approximately 5 gallons per minute
- Ideal for most hydrant flushing devices and applications

#### Vita-D-Chlor Slo-Tabs

- Active ingredient Ascorbic Acid
- One tablet is capable of neutralizing 1 ppm of chlorine in 7,500 gallons of water
- Dissolve rate is about 0.25 0.5 grams per minute in a flow of approximately 5 gallons per minute
- Excellent for most auto-flushing applications

Vita-D-Chlor 800.322.6646 **3** 

ZDe-Chlorinator is one of the newest brands of dechlorination equipment and the NEMA-100 is the most versatile of their devices. This multi-faceted unit offers process flexibility to the operator. The NEMA-100 is equipped with a detachable elbow on the 21/2" MNST threaded discharge end, giving the operator the ability to attach other accessories - such as a diffuser, a hose to direct the flow, or a NEMA-500 pitot. On its own, the NEMA-100 holds up to four Vita-D-Chlor Tablets, which is generally adequate for 30 minutes or more of flushing. But if longer flushing times are required, an extension tube can be attached, providing capacity for 10 additional tablets. The elbow diverter has a debris screen, which can be easily removed to allow maximum flow from the hydrant and for really high flow requirements, two NEMA-100s can be attached to a wye accessory off the pumper port. Weighing only 12 pounds, the • 21/2" MNST outlet accepts a multitude of NEMA-100 is efficient and easy to maneuver. Its versatility, ease of use and low price make the NEMA-100 the new leader in hydrant flushing devices.



#### **BENEFITS & FEATURES**

- Fast, easy set-up with simple tablet dechlorination
- Compact and light-weight at just under 12 pounds
- · Suitable for most hydrant flushings
- · Can dechlorinate lower flows around 200 apm
- Removable screen for maximum flow
- Brass 2.5" FNST swivel for fast connection to hydrant or hose
- attachments (pitot, hose, diffuser, etc)

#### **CHLORINE LEVELS**

FLUSH RATE 200-900+ apm

0-4 ppm

SET-UP TIME

1-3 minutes

WEIGHT 12 lb

#### **NEMA-100 Accessories**



**NEMA-400 Diffuser** 



4" FNST Wye for attaching two NEMA-100s off the pumper port



NEMA-500 Pitot



Tablet extension tube



Vita-D-Chlor Tablets



#### **BENEFITS & FEATURES**

- Fast, easy set-up with simple tablet dechlorination
- Durable one-piece construction
- Holds up to 4 tablets, dissolving 1 tablet at a time for maximum efficiency
- Suitable for most hydrant flushings
- Brass 2.5" FNST swivel for fast connection to hydrant or hose
- Only 10 pounds with tablets installed

#### **CHLORINE LEVELS**

<b>0-4</b> ppm		
FLUSH RATE		
200-900+ gpm		
SET-UP TIME		
1-3 minutes		
WEIGHT		

## **NEMA-200**

NFMA-200 is an all-inclusive dechlorinating diffuser that simply works. Roughly the size of a two-slice toaster and weighing just a little more than a gallon of milk, the NEMA-200's compact size and simplicity of operation are attributes that appeal to a professional. The NEMA-200 is possibly the easiest dechlorination diffuser to set up and use. Like all NEMA units, the NEMA-200 is made in the USA of high-quality aluminum, making it both extremely durable and especially light. The NEMA-200 can go from one hydrant to the next, dechlorinating the potable water with each flush, requiring minimal set-up time and causing less stress to the operator. This light-weight, reliable tool for routine hydrant flushings is priced so you can equip each truck with one, just like the other ZDe-Chlorinator products.



ZDe-Chlorinator is available with either a removable elbow or permanent diffuser.

#### **NEMA-200** Accessories



4" FNST Wye for attaching two NEMA-200s off the pumper port



Vita-D-Chlor Tablets



Tablet extension tube

## NEMA-200B

Nearly small enough to put on your tool belt, the NEMA-200B is the baby of the ZDe-Chlorinator line. Like the NEMA-200, it creates a shower-style discharge. At a mere 5 ½ pounds, this is a giant in its class. The NEMA-200B has a 2 ½" FNST swivel brass attachment for fast twist-on connection to the hydrant. Fully loaded with three Vita-D-Chlor Tablets, this little powerhouse can dechlorinate those lower flows of 150-200 gpm with 1-2 ppm chlorine for 30 minutes or more. For longer flushings, add the appropriate extension tube for an additional 10 tablet capacity.



#### **BENEFITS & FEATURES**

- Our lightest dechlorination diffuser at 5  $\frac{1}{2}$  pounds
- Fast, easy set-up with simple tablet dechlorination
- Suitable for most hydrant flushings
- Can dechlorinate lower flows around 150 gpm
- Removable screen for maximum flow
- Brass 2.5" FNST swivel for fast connection to hydrant or hose

#### **CHLORINE LEVELS**

0-4 ppm

**FLUSH RATE** 

150-750+ gpm SET-UP TIME

1-3 minutes

WEIGHT

5 ½ lb

## NEMA-200C

This little dechlorinator has 2.5" female pipe threads on both ends so it can be installed in-line, with standard piping, to a system which requires dechlorination. These devices have been exceptionally popular for handling backwash water off commercial pools and small filtration systems. Users frequently add the available extension tube to provide an additional 10 tablet capacity.



## Pelican® Case for Pitot

Since pitot units and their gauges are fragile, we offer a fitted rough Pelican case for storing and carrying your NEMA Pitot.

#### **NEMA-400 Diffuser**

This little 5 ½ pound, shower style diffuser is an accessory for the NEMA-100. Its connection fitting will also attach to any hose or hydrant with 2 ½" MNST threading. It is perfect for most any job, large or small.

#### 4" Pumper Port Wye

Utilizing this 4"
NST threaded wye,
two NEMA-100s or
NEMA-200s can be
attached to handle
the discharge from
a hydrant's pumper
port. This allows for
higher volume flows.
The set-up can also be
used for other hydrant
flushing applications.

# ZDe-Chlorinator Accessories



This aluminum, rust resistant, curbside tablet box is only 4 ¼ pounds, yet well sized at 11"x9"x6". The light, durable box is large enough to hold enough tablets for most any project. The handle on the locking door makes it easy to carry and is strong enough to attach a rope for lowering it into a manhole or securing it in the water flow.



#### **NEMA Extension Tubes**

The larger extension tube fits the NEMA-100 and NEMA-200. The narrower-base tube fits the NEMA-200B and NEMA-200C. Each tube provides an additional 10 tablet capacity, giving longer runtimes before needing to replenish tablets.

#### NEMA-500 Elbow Pitot

The NEMA-500 Elbow Pitot was designed to replace the elbow diverter that comes with the NEMA-100 device. Its gauge is calibrated in both PSI and GPM. It can also connect directly to hydrant's 2 ½" MNST thread or any other suitably threaded device.

# BUNDLE & SAVE on W

<u>Shop online</u> for our ZDe-Chlorinator kits. Each kit is anchor includes Vita-D-Chlor Tablets and a bottle of chlorine to compared to buying the components separate

Whether you are just getting started or your kits provide safe, efficient and dechlorination

# **NEMA Kits**\*

include

Vita-D-Chlor Tablets 35 lb





NEMA-200B



**NEMA-200** 



**NEMA-100** 

For other brands of equipments www.vita-d-compared Purchase online or by care

\*Kits also include a bottle

## ww.VITA-D-CHLOR.com

ored by one ZDe-Chlorinator hydrant flushing device and est strips. These kits are discounted by \$100 or more as ely. Some of the kits also include free shipping.

ou are adding to your existing program, nd environmentally responsible at a great price.

# NEMA Starter Kits\*

include



Vita-D-Chlor Tablets 2 x 5lb



NEMA-100



**NEMA-200** 



NEMA-200B

nt and their kits, check out chlor.com alling (800) 322-6646

of chlorine test strips



## **LPD-250 Steel or Aluminum**

The LPD-250 has been the most popular of all hydrant dechlorinators for years. Its fast and simple set-up saves operator time and training. With the tablet screen in place, simply add four Vita-D-Chlor Tablets to the chamber and then flush the potable water. It will be roughly fifteen minutes before more



tablets are needed. This type of equipment gets thrown around, dropped, and used in the harshest of situations. The LPD-250, available in both steel and lighter-weight aluminum, are virtually indestructible and will take years of abuse. There are no mechanical parts that require adjustment over time, and no components that can easily be damaged or broken. An optional pitot mounts to the unit for use on every flushing. The LPD-250 is the dechlorination workhorse of hydrant flushing.

#### **CHLORINE LEVELS**

0-10 ppm

FLUSH RATE

200-1,250 gpm

**SET-UP TIME** 

1-3 minutes

**ALUMINUM WEIGHT** 

17 lb

STEEL WEIGHT

28 lb

#### **BENEFITS & FEATURES**

- · Simple, low cost
- Diffuses discharge water
- Utilizes tablets for simplified operations
- Tablets are contained within the device
- Traps debris in the discharge
- Accepts pitot for flow measurement
- 2 ½" FNST connects directly to hydrant or hose extension
- · No pre-flush solution mixing
- No connections to an external chemical source are required

### LPD-250 Kits

LPD Aluminum or LPD Steel

+

the following:



Vita-D-Chlor Tablets 35 lb



LPD Screen



**Chlorine Test Strips** 

## Romac deChlorinator

The deChlorinator doses Vita-D-Chlor more accurately than any tablet unit and saves money by using the granular Vita-D-Chlor. The combination leads to lower cost after just three 55 pound pails of Vita-D-Chor. The deChlorinator can correctly dechlorinate chlorine levels up to and beyond 100 ppm. Easy to handle and solid by design, you can expect years of trouble-free operation.



The pail can be refilled with more Vita-D-Chlor feed solution to keep the flushing going. A needle valve allows you to adjust the feed to minimize over dechlorination and maximize efficiency. The deChlorinator comes with connections and tubing, as well as chlorine test strips and a sample of Vita-D-Chlor. The whole package conveniently packs into the pail used for your feed solution. The deChlorinator is clearly a great value in dechlorination devices.

#### **BENEFITS & FEATURES**

- Dechlorinates full range of chlorine levels
- Utilizes NSF granular material for lowest-cost operations
- Durable construction, compact design
- Connects directly to hydrant or hose extension

#### CHLORINE LEVELS

## Romac deChlorinator Kit



## **NEMA Wye**

Dechlorinate high-volume flows via the pumper port by making use of a wye attachment and two ZDe-Chlorinator NEMA-100 or NEMA-200 units. Connect the 4" wye to the pumper port and attach each 2 ½" NEMA unit to the wye. For maximum flow with the NEMA-100, remove the rock screen from the elbow prior to attaching. This wye can also be used with two Romac deChlorinators for accurate dechlorination during lengthy flows.



## **Big Blue Box**

What we fondly call 'The Big Blue Box' is a popular diffuser that connects to a truck mount. Plans are in the works for an accessory that holds three tablet columns, each capable of holding ten Vita-D-Chlor Tablets, allowing you to dechlorinate while connected to the pumper port. Contact us for more information and availability.



## **Hydro-Hitch with Aqua-D-Chlor**

The Hydro-Hitch with Aqua-D-Chlor is a hitch-mounted unit that allows for dechlorination with Vita-D-Chlor Tablets. The unit has both a 5" Storz coupling and a 2.5" FNST coupling. An adjustable inner sleeve makes it possible to regulate the flow of water over the tablets, thereby increasing or decreasing their dissolve rate.



## 3 Pocket Tablet Mat

During long flows, this 18" 3-pocket tablet mat is best used by alternating it with a second mat. A single mat holds 3 Vita-D-Chlor Tablets, enough for most flows up to 500 gpm.



## **6 Pocket Tablet Strip**

The 6-pocket tablet strip measures 6" x 39" and is ideal for laying in the flow stream.



## **24 Pocket Tablet Mat**

Measuring at 36" x 44", the 24-pocket mat is excellent for laying over a grate, drain, or manhole.



## **Snap Bag**

This 32" long snap bag is handy for lowering into a vault or catch basin and is capable of holding 30 Vita-D-Chlor Tablets.



## 24" Coarse Sock

Simple and inexpensive, this sock easily holds about a dozen tablets.



The fine mesh version of the sock drastically slows the tablet dissolve rate, as compared to the coarse mesh.



Free Chlorine test strips combine a variety of detection ranges with a patented free chlorine indicator. They are perfect for determining whether or not you have the correct amount of sanitizer present, and for determining the amount of Vita-D-Chlor needed to dechlorinate potable and mildly chlorinated water.



SenSafe Free Chlorine Test Strips are available in bottles of 50

#### Free Chlorine 0-6 ppm

Graduated at 0, 0.05, 0.1, 0.2, 0.4, 0.6, 0.8, 1.2, 1.5, 2, 2.6, 4 & 6 ppm (mg/L)

#### Free Chlorine 0-25 ppm

Graduated at 0, 0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 20 & 25 ppm (mg/L)

#### Free Chlorine 0-120 ppm

Graduated at 0, 1, 2, 5, 10, 20, 30, 40, 80 & 120 ppm (mg/L)

#### Free Chlorine 0-750 ppm

Graduated at 0, 25, 50, 100, 200, 300, 400, 500 & 750 ppm (mg/L)

## WaterWorks® 5-Way

WaterWorks 5-Way test strips report results for free chlorine, total chlorine, pH, total alkalinity and total hardness — all on the same strip. Utilizing a dip-and-read single method, these strips accurate reliable results in less than 30 seconds.



WaterWorks 5-Way test strips are available in bottles of 50

#### SENSITIVITY:

### **Total Hardness 0–425 ppm**Graduated at 0, 25, 50, 120, 250, 425 ppm (mg/L)

Free and Total Chlorine 0-10 ppm Graduated at 0, 0.5, 1, 2, 4 & 10 ppm

#### Total Alkalinity 0—240 ppm

Graduated at 0, 40, 80, 120, 180 & 240 ppm

#### pH 6.2-8.4

Graduated at pH 6.2, 6.8, 7.2, 7.8, 8.4

## Myron L Ultrapen® PT4

#### Free Chlorine and Temperature Testing Pen

The Myron L Ultrapen PT4 free chlorine equivalent (FC<sup>E</sup>) and temperature pen is designed for accurate, fast, and simple use in diverse water quality applications. Advanced features include automatic temperature compensation in calibration mode, highly stable microprocessor-based circuitry, user-intuitive design, and waterproof housing. A true one-handed instrument, the PT4 is easy to calibrate and easy to use. To take a measurement, simply push a button then dip the PT4 in solution. Results display in seconds.

- •0 to10.0 ppm FCE
- Accuracy up to ±0.3 ppm FCE
- Temperature readout
- Automatic temperature compensation
- Waterproof, durable, fully encapsulated electronics
- Weighs less than 2 oz



## **Responsible Dechlorination**

The Clean Water Act of 1972 and the Water Quality Act of 1987 recognize the harmful effects of very low doses of chlorine to fish and wildlife. As a cheap, effective neutralizer of chlorine, sulfur-based chemicals became widely used in the treatment of water being released to the environment. But sulfur-based chemicals have adverse effects – such as depleting oxygen levels in water – which can be more detrimental to the environment than discharging of the chlorinated water itself. While sulfite chemicals are still widely used for dechlorination in treatment plants where all aspects of the process can be monitored and controlled, when it comes to field dechlorination where water is released to receiving streams and wetlands with minimal control, there is a better way....

Vita-D-Chlor is a Vitamin C-based line of dechlorination products that is safe for neutralizing chlorine in water that is being released into the environment. All of the products in the Vita-D-Chlor line are 100% organic and provide a safe, rapid and complete method of dechlorination. These products completely neutralize both chlorine and chloramines, are environmentally and operationally safe, and are ideal for field dechlorination where treatment must be safe and immediate

The granular forms of Vita-D-Chlor can be mixed into a solution and fed into the flow stream of chlorinated water. As the feed solution disperses across the flow stream, the chlorine is neutralized. Feed solutions of Vita-D-Chlor Original or Vita-D-Chlor Neutral can also be added to contained water, such as a water truck or reservoir. Just one gram of either product will neutralize 1 ppm (mg/L) of chlorine in 100 gallons of water.

While utilizing the same safe chemistry that the name Vita-D-Chlor is known for, Vita-D-Chlor Tablets fit in all the common tablet dechlorination devices. Vita-D-Chlor Tablets are most commonly used for field dechlorination. Short run dechlorination can be quickly and easily set up, making the process fast and saving valuable operator time. Vita-D-Chlor Slo-Tabs are an excellent choice for 'on demand' and 'unsupervised' water discharge requiring dechlorination, such as auto-flushers and reservoir overflows.

Whether they are placed in the water flow using mats or socks, dissolved using a device hooked up to the discharge, or engineered into a specialty application, Vita-D-Chlor products are the environmentally correct choice.



