10B Timber Lane, Marlboro, NJ 07746 • (732) 780-5300 • FAX: (732) 294-0001 • www.tandcplastics.com

Polypropylene pH Cartridge System - MADE IN USA -

Wastewater Neutralization at the Source

Untreated acidic wastewater can be highly corrosive, causing expensive damage to a building's plumbing system and nearby municipal sewer infrastructure.

Adjust pH under the sink

To safely treat acidic wastewater, Town & Country Plastics, Inc.'s pH Cartridge System removes solids and neutralizes low pH levels using a simple cartridge installed directly under the sink. Get immediate results and sustain them with easy installation and maintenance.

T & C Cartridge Treatment Systems with non-toxic T & C pH Media effectively neutralize acidic wastewater at the source to meet sanitary sewer regulations. These are alternative means for neutralization than traditional systems, pH Media is five times more efficient than limestone beads and 43 times more efficient than marble chips. These systems perform similarly to <u>proper</u> limestone chips (correct size & content); yet, take up less space to install.

Durable design, easy installation and maintenance

Constructed from durable, chemically-resistant, 100% polypropylene (PP), the T & C pH Cartridge System's flow-through design is engineered for both new and retrofit applications. Manage your wastewater needs without having to install costly acid-resistant plumbing.

The pH Cartridge System is safe, non-toxic, easy to install, easy to maintain, protects plumbing infrastructure, economical and environmentally friendly. (However, caution and safety measures should be used in removing debris and old Media, when doing maintenance on these chemical pH treatment cartridges.)

T & C pH Cartridge System Specification Sheet

The T & C pH Cartridge Treatment System is designed to remove solids and to treat acidic wastewater in point-source applications under a sink. The T & C pH Cartridge System connects directly to the drain of a sink and provides effective treatment and detention time to limit effluent discharges of low pH into the sewer system.

T & C pH Media must be used with the pH Cartridge System to ensure treatment specifications and compliance. pH Media is non-toxic, non-hazardous, and safe to handle and store without special storage devices or regulations.

The T & C Cartridge System is constructed from 100% durable polypropylene (PP) and is resistant to acid, caustic and solvent chemicals. Town & Country Plastics, Inc. provides each pH Cartridge System with a bucket, siphon pump and hose, supporting pipe bracket assembly and one prescribed fill of pH Media.

Each T & C pH Cartridge System is designed for under sink installation and must be installed as per the manufacturer's installation procedures.

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Overview

T & C units are manufactured in the USA (New Jersey)! Competitor products are manufactured outside the USA. T & C is the leading manufacturer in the USA of neutralization / dilution tanks, sumps, traps, cartridges and systems with over 100,000 successful installations. Our equipment and systems are approved by virtually every government authority (local and national) in the USA. These pH Cartridge System units are designed as a different way to treat acid wastes, than our commonly used individual neutralization / dilution tanks.

T & C pH Media

T & C pH Media is a proprietary mix of solid alkali non-resin materials. Model # SLS-50. consumed throughout the neutralization process and is added to the process as required. It permits better control over effluent pH and eliminates the need for special storage or handling required by traditional hazardous neutralizing chemicals. Town & Country Plastics, Inc. can recommend any neutralization / dilution equipment and systems to meet client needs.

For acid neutralization applications, pH Media replaces the regular use of marble or lime beads and / or limestone chips. PH Media is a simple treatment that ensures wastewater neutralization and by-law regulations compliance. T & C does also offer proper limestone chips for regular neutralization / dilution tanks and sumps. In addition, T & C offers individual dilution traps for larger, centralized pH treatment systems.

T & C pH Cartridge System Overview

The T & C pH Cartridge System treats acidic wastewater and removes solids. Installed directly under the sink, it is ideal for commercial, industrial and institutional applications, neutralizing acidic wastewater to within by-law regulations, prior to discharge into municipal sewer systems. The T & C pH Cartridge System is compatible with every size sink, easy to install and / or retrofit in most commercial, institutional and industrial applications.

The T & C pH Cartridge System features an engineered flow-through design to maximize efficiency and minimize maintenance. By using the all-natural and safe T & C pH Media, this System permits better control over effluent pH. The Media eliminates the need for special storage or handling required by conventional neutralizing chemicals, and ensures optimal neutralization treatment within the space-saving unit.

The T & C pH Cartridge System reduces the cost of all new construction projects by eliminating the need for expensive acid waste piping after each unit. For retrofit projects, the T & C pH Cartridge Systems fit directly underneath sinks, instead on neutralization / dilution tanks, prior to discharge into the sanitary waste and sewer system.

Applications

The T & C pH Cartridge System may be used in numerous pH adjustment applications including:

- Laboratory sinks
- School laboratory benches
- Hospital laboratories

- Maintenance sinks
- Industry rinse sinks
- Photographic sinks / processors

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Design and Operation

Engineering is the key difference between traditional neutralization systems and the T & C pH Cartridge System. The system is constructed from durable polypropylene (PP), which is resistant to all chemical wastes. Each T & C pH Cartridge System includes everything for field set-up and servicing — a bucket, siphon pump and hose, supporting pipe bracket and one prescribed fill of T & C pH Media.

The T & C pH Cartridge System design has four (4) main components (see Figure 1 below) and is sized for standard sink drain times in North America. It is designed for wastewater neutralization with T & C pH Media, solids removal, and easy maintenance.

The T & C pH Cartridge System attaches easily to the underside of a sink using our simple, swivel, adjustable threaded tailpiece with hand tightening lock nut. Wastewater from the sink flows down through the Manifold area and Internal Skeleton into Chamber 2 (Solids Collection Chamber). Solids settle to the bottom of Chamber 2 and the wastewater then flows up through the perforated plate and into Chamber 1 (Treatment Chamber) containing T & C pH Media. Neutralization of the acidic wastewater occurs upon contact with T & C pH Media in Chamber 1. The treated wastewater then exits the unit through the upper Manifold outlet, into the sanitary waste drain line.

The T & C pH Cartridge System uses all four (4) main components to adjust pH. **Note**: Any modifications to the unit will alter the ability of the System to effectively neutralize wastewater.

Design Considerations

- 1. The T & C Cartridge System removes solids and treats acidic wastewater only.
- 2. The T & C Cartridge System is primarily designed for under the sink installations.
- 3. The T & C Cartridge System cannot intercept fats, oils or grease from the wastewater.