

3M™ Twist 'n Fill™ Questions & Answers

Chemical Related Questions

How are disinfectants like 3M™ Quat Disinfectant Cleaner No.5 different than some other disinfectants?

3M Quat Disinfectant Cleaner No.5 is an EPA approved fourth generation, one-step disinfectant and cleaner. Some disinfectants are only a disinfectant and require a precleaning step first. Additionally, 3M Quat Disinfectant Cleaner is supplied through the Twist 'n Fill dispenser, insuring correct dilution when used as directed and saving money in the long run. See the Infection Prevention Brochure for more details or Technical Bulletin on a specific product.

What is the difference between 3M Quat Disinfectant Cleaner No.5, 3M™ Neutral Quat Disinfectant Cleaner No.23, and 3M HB Quat Disinfectant Cleaner No.25?

Both No.5 and No.23 are fourth generation, hospital-grade disinfectants; No.25 is a second generation, hospital-grade disinfectant. 3M Quat Disinfectant Cleaner No.5 contains a high concentration of the quaternary ammonium salts and has a higher pH for better cleaning. 3M Neutral Quat Disinfectant Cleaner No.23 is less likely to dull floor finish and with a lower concentration of quaternary ammonium compounds, will not build up on the floors as fast. 3M HB Quat Disinfectant Cleaner is a highly diluted product (at 1:365), which reduces the number of change-outs, orders, deliveries and disposals. All three of these disinfectants comply with the OSHA Bloodborne Pathogen Standard (3M Neutral Quat Disinfectant Cleaner No.23 by June, 2003).

Why does the Twist 'n Fill system offer two glass cleaners, 3M™ Glass Cleaner No.1 and 3M™ Heavy Duty Glass Cleaner No.20?

Both glass cleaners are excellent cleaning, non-streaking products. The difference is in the concentration of the ready-to-use cleaner. Heavy Duty Glass Cleaner works better for removing heavy, greasy, grimy soil and soot. Neither of these glass cleaners contains ammonia.

What are the reasons for 3M™ Speed Stripper No.6 name and price?

3M Speed Stripper is a true quick-stripper requiring 2-5 minutes to remove multiple coats of floor finish, with one of the most pleasant, light fragrances in the industry. In addition, Speed Stripper provides for deep cleaning of the vinyl tile surface. The level of performance and the availability in a chemical management system combine to make this a truly unique product.

What is the difference between the two strippers, 3M Speed Stripper No.6 and 3M™ Speed Stripper LO No.22?

The two products are similar in performance, requiring 2-5 minutes to remove multiple coats of floor finish. 3M Speed Stripper LO No.22 is a low odor stripper specially designed for all floor stripping jobs where chemical odor can be disagreeable. Our uniqueness is especially evident in small rooms and areas with poor ventilation, such as hospital rooms and hallways where odor buildup during stripping is sometimes a problem.

Why are the dilution ratios so high on some products?

3M's unique chemical management system allows the highest dilution ratios possible to provide for maximum value, reduction of inventory and waste stream management in the use of plastics. In addition, 3M's outstanding chemical formulations allow them to have high dilution ratios.

Why doesn't 3M™ Neutral Cleaner No.3 have a pH of 7, which I thought was a neutral pH?

The term "neutral" cleaner has been used for years by the industry to indicate a cleaner that is not highly alkaline. The pH of neutral cleaner is generally accepted as being less than about 9. 3M Neutral Cleaner No.3 is neutral-acting to floor finishes and it won't dull the surface.

What does "non-butyl" or "butyl-free" mean? Why is the industry concerned?

The word "butyl" has been used in the cleaning industry for about 20 years to mean "containing Butyl Cellosolve", an excellent solvent for use in cleaning chemicals. (Another name, the actual chemical name for Butyl Cellosolve is 2-butoxyethanol.) "Butyl" cleaners have been used in both household and commercial cleaning preparations for a long time with a record of safety and effectiveness. "Non-butyl" refers to products that do not contain this solvent. Unfortunately, in the mid 80's, chemicals related to Butyl Cellosolve, were discovered to pose a serious health

hazard to the users. The chemicals, Methyl Cellosolve and Ethyl Cellosolve, have similar sounding names but are different from the commonly used "butyl". These health problems have not been associated with the use of Butyl Cellosolve. However, some manufacturers have chosen to formulate products without "butyl" presence. The CAS number 111-76-2 identifies this solvent no matter what it is called. Many customers continue to use "butyl" chemicals, others prefer to use "non-butyl" products. The Toxicology Department at 3M monitors all chemicals in use in our products for health hazards in order to ensure that the information presented on our Material Safety Data Sheets is as accurate and up-to-date as possible.

Bottle and Cap Related Questions

What can I do to prevent my employees from leaving the bottle turned on and draining out the concentrated chemical from the bottle?

Training the users to always remove the bottle from the dispenser is key, but an optional automatic shut-off accessory is available to retrofit the dispenser. When the person releases the bottle, the spring-loaded shut-off automatically turns the bottle to the off position, turning off the water and chemical.

Where do I get spray bottles and labels?

3M has authorized both Impact Products and Tolco Corporation to offer a wide range of system accessories. Call your local Distributor for these supplies. 3M Distributors should call Impact = 1-800-333-1541, or Tolco = 1-800-537-4786.

Dispenser Related Questions

What are the water supply requirements to operate the 3M™ Twist 'n Fill™ Dispenser?

4.0 gallons per minute flow rate minimum at a pressure of 25-100 PSI, with water temperature of 40-140° F.

What are "normal" water supply conditions?

5-6 gallons/minute flow at 40-50 PSI. The following locations can have lower water supply conditions and should be checked before installation:

- a) Top stories of tall office buildings
- b) Old buildings that utilized small diameter piping for water supply
- c) Rural applications that have well-supplied water

What form of back flow prevention does the 3M™ Twist 'n Fill™ Dispenser utilize?

Integral airgap.

What specific requirements govern this design?

1991 Edition, Uniform Plumbing Code - Section 102(F) Effective Opening, Section 106(A)-Section 107(F) Floor Level Rim, - Section 1003, Minimum Airgaps for Water Distribution.

What information is available on this design?

3M has a Back Flow Prevention Engineering Report designed to be presented to a local water inspector who has questions. Review of this report should answer questions dealing with airgap back flow prevention. This report is available on request.

Do local requirements exist for Airgap Back Flow Prevention that are not met by this product?

Not to the knowledge of 3M. In fact, the design requirements for Airgap Back Flow Prevention are almost identical on a global basis.

Are Airgap Back Flow Prevention Systems in use today?

Yes, most sinks and bathtubs use these same design requirements.

Are additional back flow prevention devices required with a 3M™ Twist 'n Fill™ Dispenser?

None should be needed. If concerned, contact 1-800-3MHELPS, and ask for Commercial Care Technical Service.

What is the pressure relief fitting?

The pressure relief fitting is a permanent fitting attached to the dispenser water hose and hooks up directly to a quick disconnect attached to the faucet. The pressure relief fitting has a constant bleed output which delivers 0.1-0.2 GPM (gallons per minute) flow rate to the sink drain when the dispenser is hooked up and the cold or hot water faucet valves are on.

What is the purpose for 3M's pressure relief fitting?

The 3M pressure relief fitting was designed and developed to address two issues with connecting the 3M™ Twist 'n Fill™ Dispenser to the water supply. The two issues most associated with connecting any dispensers to the water supply are:

1. Hot to cold water bleed
2. Premature failure of an upstream AVB (Atmospheric Vacuum Breaker) connected to the faucet.

What is "hot to cold water bleed"?

Hot to cold water bleed can occur when a dispenser is hooked up to the faucet water line. Because the dispenser is equipped with its own shut-off valve, the user may forget to turn the "hot and/or cold" faucet valves off. If both the hot and cold valves are left on, the hot water may eventually "bleed" into the cold water supply, contaminating other outlets with "warm" or even "hot" water. This happens because hot water is usually under more pressure than cold water (higher temperature = higher pressure).

What is an AVB?

Atmospheric Vacuum Breakers, or AVB's, are back flow prevention devices very common in faucet plumbing installations, but are not designed to have "back pressure" against them for extended periods of time, (usually for 12 or more hours). If back pressure occurs, the AVB may stick closed, disabling its very intent which is to prevent back flow to the main water supply. For more details ask for a copy of the 3M Pressure Relief Fitting Report.

How does the 3M™ Twist 'n Fill™ Dispenser address these problems?

Installation of any device requires adherence to local codes, which differ across the country. A 3M™ Twist 'n Fill™ Dispenser, operated according to directions supplied with the dispenser, will address the problems detailed in the above question. These directions include this simple process:

- a) Turn off water supply.
- b) Activate rinse valve to relieve water supply line back pressure.
- c) Use quick-connect to disconnect from water-supply, allowing sink faucet to be utilized for other potable water requirements.

Does the water have to be turned on before dispensing chemicals?

Yes, otherwise only the concentrate will be dispensed.

Will cross-contamination occur when switching from one chemical to another?

The dispenser utilizes a "tornado effect" rinse design that effectively rinses the funnel and small dispense hose. Residual foam may be seen on the outside of the small dispense hose or the inside of the large dispense hose. However, the products have been formulated so this condition will not affect neither the efficacy nor the regulatory requirements of any product. In addition, the unique rinse valve allows the end-user to provide more rinsing if desired. NOTE: An additional 5 second rinse is recommended after dispensing products No.21, 51, 52, 54 and 55 due to their chemical make-up or thickening properties.

Why is a 5 second dispenser rinse required for hand soaps, acid cleaners and 3M™ TroubleShooter™ Finish Remover No.21?

Although any carryover potential is extremely small, to ensure no cross contamination to the subsequent dispense we are recommending a 5 second rinse after dispensing these products.

System Related Questions

How does this system compare to others in terms of safety?

The 3M™ Twist 'n Fill™ System addresses many aspects of your operations.

Area	Description
User	No bulk mixing, accurate dilution, ready-to-use products
Storage	Up-to-date labeling and appropriate warnings; small bottles allow for minimum concentrates to be stored.
Right-to-Know Compliance	MSDS for both concentrates and ready-to-use products; secondary labels/bottles available. All available in English and Spanish
Water Supply System	Installation and operation instructions provided for safest, overall dispensing system
Waste Water Treatment System	Accurate and automatic dilution eliminates concentrates spillage and over-use of concentrates
Environmental	<ul style="list-style-type: none"> • High dilution ratio of concentrates reduce packaging waste • Recyclable bottles • Recyclable packaging materials

Where do I get parts?

Call 1-800-626-8578 to order.

Transportation Issues

Are there any chemicals in this system that are regulated by the Department of Transportation (D.O.T.)?

Shipping chemicals in today's regulated environment is a challenge. It can generate significant additional costs for the manufacturer, distributor and ultimately the customer. At 3M we are committed to minimize this added cost wherever possible. Our new packaging for the 3M™ Twist 'n Fill™ System Chemicals will offer an excellent cost avoidance for our distributors when shipping UPS and our customers when intra-account shipping.

Product Shipping Classifications

Prod.#	Product Name	DOTG & DOTW Classification
1L	3M™ Glass Cleaner	Consumer Commodity ORM-D
2L	3M™ Heavy Duty Multi-Surface Cleaner	Consumer Commodity ORM-D
3H	3M™ Neutral Cleaner	Non Regulated
4L	3M™ Bathroom Disinfectant Cleaner	Consumer Commodity ORM-D
5H	3M™ Quat Disinfectant Cleaner	Consumer Commodity ORM-D
5L	3M™ Quat Disinfectant Cleaner	Consumer Commodity ORM-D
6H	3M™ Speed Stripper	Consumer Commodity ORM-D
7H	3M™ Food Service Degreaser	Non Regulated
7L	3M™ Food Service Degreaser	Non Regulated
8H	3M™ General Purpose Cleaner	Non Regulated
8L	3M™ General Purpose Cleaner	Non Regulated
9H	3M™ Extraction Cleaner	Non Regulated
10H	3M™ Pretreatment Cleaner	Non Regulated
11L	3M™ Bonnet Cleaner	Non Regulated
12L	3M™ Deodorizer - Country Day Scent	Non Regulated

13L	3M™ Deodorizer - Fresh Scent	Non Regulated
14L	3M™ Deodorizer - Mountain Spice	Non Regulated
15L	3M™ Non-Acid Disinfectant Bathroom Cleaner	Consumer Commodity ORM-D
16L	3M™ Sanitizer	Consumer Commodity ORM-D
18L	3M™ Phenolic Disinfectant Cleaner	Consumer Commodity ORM-D
18H	3M™ Phenolic Disinfectant Cleaner	Consumer Commodity ORM-D
19L	3M™ Non-Acid Bathroom Cleaner	Non Regulated
20L	3M™ Heavy Duty Glass Cleaner	Consumer Commodity ORM-D
21L	3M™ TroubleShooter™ Finish Remover	Consumer Commodity ORM-D
22H	3M™ Floor Stripper LO	Consumer Commodity ORM-D
23H	3M™ Neutral Quat Disinfectant Cleaner	Consumer Commodity ORM-D
23L	3M™ Neutral Quat Disinfectant Cleaner	Consumer Commodity ORM-D
24H	3M™ 3-in-1 Floor Cleaner	Non Regulated
25H	3M™ HB Quat Disinfectant Cleaner	Consumer Commodity ORM-D
25L	3M™ HB Quat Disinfectant Cleaner	Consumer Commodity ORM-D
26L	3M™ Industrial Degreaser	Consumer Commodity ORM-D
26H	3M™ Industrial Degreaser	Consumer Commodity ORM-D
51L	3M™ Bathroom & Shower Cleaner	Consumer Commodity ORM-D
52L	3M™ Tile, Grout & Bowl Cleaner	Fully Regulated
54L	3M™ Pink Hand Soap	Non Regulated
55L	3M™ Pearlized Hand Soap	Non Regulated
72L	3M™ Heavy Duty Aircraft Cleaner	Non Regulated

Recycling Packaging

What is a Twist 'n Fill dispenser bottle made of? Is it recyclable?

The bottle is made from high-density polyethylene (HDPE) and is fully recyclable. The cap is made of the same material but contains a rubber o-ring. The cap must be removed and discarded and the bottle rinsed before recycling. 3M does not offer recycling services, but such services are readily available in most areas.

How do I remove the tamper resistant cap for bottle rinsing/disposal?

Use a utility knife to make a cut below each of the six posts (three per side) that secure the cap to the bottle. Once all six cuts are made, use a flathead screwdriver to pry the cap off.

Can the cap be re-used?

No. Removing the cap damages the seal.

Restroom Systems -General Questions

What acid is found in 3M™ Bathroom Disinfectant Cleaner No.4?

Malic Acid is used in 3M Disinfectant Bathroom Cleaner. It is a relatively mild acid that is found naturally in apples and many other fruits.

3M Bathroom Disinfectant Cleaner No.4 lists quaternary ammonium chlorides as a raw material but no disinfectant claims have been made. Why?

A cleaner may possess a raw material that has been registered by the EPA as a disinfectant, but until the specific

cleaner formulation has full EPA testing and approval, such cleaner cannot make a "disinfectant" claim. As of June, 2003, we have been approved to claim this product as a disinfectant cleaner, and labeling will change in the future.

Can I use 3M Bathroom Disinfectant Cleaner No.4, 3M™ Bathroom & Shower Cleaner No.51 or 3M™ Tile, Grout & Bowl Cleaner No.52 on marble?

No. The regular use of acidic cleaners on marble is not recommended because they will dull or etch the surface. Use a non-acid product such as 3M™ Non-Acid Bathroom Cleaner No.19 or 3M™ Non-Acid Disinfectant Bathroom Cleaner No.15.

What is the difference between hydrochloric acid (HCL) and other acids? Why did we choose HCL?

Acid cleaners can be categorized as containing mild acids and strong acids. Mild acid cleaners use acids such as citric acid or malic acid. These products are useful for cleaning light soap scum and scale and to prevent build-up. Typically they are strong enough to tackle existing, heavier build-up of soap scum and lime scale. 3M™ Bathroom Disinfectant Cleaner No.4 in the 3M™ Twist 'n Fill™ Dispenser System, is a mild acid cleaner which has been successfully used for many years. Strong acid products typically contain phosphoric acid or hydrochloric acid. At higher acid concentrations, these products are generally used for "projects" - the once or twice a year thorough cleaning or occasional removal of heavy deposit build-up.

To maximize productivity and performance while maintaining employee, client and visitor safety, 3M™ Restroom Cleaning System products use hydrochloric acid as their primary performance active. 3M has chosen to use hydrochloric acid as the basis of its new cleaners for the following reasons:

1. In testing conducted at 3M, the new HCL products perform better than phosphoric acid products on soap scum and scale -- even at lower concentrations. This means the work gets done faster and worker exposure to the product is reduced.
2. Precautions and PPE (Personal Protective Equipment) requirements can be the same for both phosphoric and hydrochloric acid products -- both for personal protection and for protection of non-work area surroundings such as carpet.
3. HCL products do not contribute phosphates to waste water, which are harmful to the environment.

What is scale?

Hard water mineral deposits or scale are typically buildups of calcium or magnesium salts such as calcium carbonate. Dissolved mineral salts are present in tap water and over time these mineral salts will build-up on surfaces that are frequently wet and allowed to air dry. Sink basins, around faucets, drinking fountains, toilet bowls and urinals are common surfaces where mineral deposits can build-up. How rapidly mineral deposits form is directly dependent on water hardness. Water hardness is a measure of calcium and magnesium salts dissolved in tap water expressed as equivalent calcium carbonate content in units of grains-per-gallon (gpg) or parts-per-million (ppm). According to the Water Quality Association of the United States, hard water is classified between 7 and 10.5 gpg (120 to 180 ppm). Very hard water is classified as above 10.5 gpg (180 ppm). Soils that are very hard and difficult to remove are most likely hard water mineral deposits. Acid cleaners are an effective means to dissolve mineral deposits for easy removal.

What is soap scum?

Soap scum generally consists of dried "soap" or surfactants combined with oils or other soils. Soap scum is usually physically softer and easier to remove than mineral deposits. In showers and around sinks are the most commonplace surfaces where soap scum will form. Determining soap scum is accomplished by applying water to the dried soil deposit and if it softens then it is likely soap scum. Soap scum can typically be removed using a mild daily cleaner and a cloth or hand pad.

Which of our products is best for soap scum removal?

Both 3M™ Bathroom Disinfectant Cleaner No.4 and 3M™ Bathroom & Shower Cleaner No.51 are excellent for removing soap scum. Choose No.4 when water hardness is not indicated, No.51 when the water is hard.

What is mildew?

Mildew is simply another name for tiny fungi. Surfaces that are difficult to clean such as porous grout or corners and crevices are some of the common places where mildew may be present. Mildew in restrooms is usually identifiable as darkened spots that penetrate a surface and are not easily removed.

How should mildew be cleaned?

Agitation is important in cleaning mold and a brush must be used to get into grout areas effectively. 3M™ Bathroom Disinfectant Cleaner No.4, 3M™ Non-Acid Disinfectant Bathroom Cleaner No.15, 3M™ Non-Acid Bathroom Cleaner No.19 and 3M™ Bathroom & Shower Cleaner No.51 are effective cleaners for mold and for particularly bad areas, 3M™ Tile, Grout & Bowl Cleaner No.52 can be used. There is no benefit to "killing" the mold with a disinfectant prior to cleaning. Stains from mildew growth can remain even after the fungi have been killed. (For persistent stains - contact your local tile and grout supplier for product and procedure recommendations). Daily cleaning helps to control mildew from growing.

Is it ok to clean fixtures and brightwork with the acid cleaners? Will they damage or dull these surfaces?

The use of 3M acid cleaners from the 3M™ Twist 'n Fill™ System on brightwork is acceptable, but it is critical to rinse the surface following the application. Brightwork surfaces can be dulled if not thoroughly rinsed. Be sure to follow directions on the product label for agitation and rinsing, and never use these cleaners on marble.

Is there a dwell time required for any of the acid products?

Dwell time is not necessary but it is important to keep the surface wet while cleaning. On horizontal surfaces, longer dwell times will allow the chemical to do more work and less scrubbing will be required.

Are respirators required for use of any of the acid products?

No, but if a person is uncomfortable with the odors associated with the acid products, they can use a fit-tested respirator rated for acid gases (3M™ 5000 Series Acid Mask, number and size are 5103 - Small, 5203 - Medium, 5203 - Large). Refer to the product MSDS for further information regarding personal protective equipment.

What will occur if a customer forgets to rinse a surface when using an acid product?

All acids can etch metal surfaces given enough dwell time.

Should we avoid tracking acid cleaners out of the restroom during the cleaning operation?

Yes. Acid cleaners can have a bad effect on some types of flooring, particularly carpet. Put a mat or appropriate sorbent material outside the restroom to keep the cleaning materials off the floor. Also, be sure to clean shoes and boots with water at the end of the job; both for your shoes and the floor outside.

What are the best scrubbing tools for cleaning restroom surfaces?

A 3-dimensional surface like grout requires a 3-dimensional tool like a brush. Flat, 2-dimensional surfaces are cleaned best with a pad or wipe. Aggressiveness of the brush or pad will be dependent on the surface to be cleaned and extent of the soiling.

Restroom Systems - 3M™ Bathroom & Shower Cleaner Questions**Can the 3M™ Bathroom & Shower Cleaner No.51 be used if there is no floor drain in the restroom?**

Yes, but be careful to limit the amount of chemical dispensed since it will all have to be picked up with a mop or wet vac. A restroom without a floor drain indicates use of a mop and bucket.

Does cleaning equipment need to be rinsed following use of the bathroom and shower cleaner?

Yes. In particular, wet vacs should be emptied and rinsed thoroughly following use.

Can the 3M™ Bathroom & Shower Cleaner No.51 be used as a daily bowl cleaner vs. 3M™ Bathroom Disinfectant Cleaner No.4?

Yes, followed by rinsing.

Will we be able to get the restroom or shower clean in the first application of product?

It depends upon the extent of the soiling. Generally, an area that has become extremely soiled has taken some time to get to that point and it is unlikely that a single application of product will return it to "new" condition. In this type of project cleaning, it is better to use a lower strength cleaner two or three times rather than strongest cleaner right

off the bat. Also, consider using a more aggressive scrubbing tool rather than a more aggressive cleaner. Remember, all grout is not light-colored.

Restroom Systems - Bowl Cleaner Questions

Can the 3M™ Tile, Grout & Bowl Cleaner No.52 be sprayed or foamed?

No. As a thickened product, Tile, Grout & Bowl Cleaner No.52 is intended to be applied to surfaces with a mop, pad or sponge; not sprayed.

How does cling affect performance?

On a vertical surface, cling (or viscosity) is important because it keeps the product on the surface to be cleaned for a longer period of time. However, thickening agents can reduce the performance of acid cleaners so a balance must be struck between cleaning power and thickening. 3M has optimized product performance with increased viscosity.

How do we address the off-gassing issue of 3M™ Tile, Grout & Bowl Cleaner No.52 in the 3M™ Twist 'n Fill™ Dispenser?

To maximize productivity and performance while maintaining employee, client and visitor safety, 3M™ Restroom Cleaning System products use hydrochloric acid as their primary performance active.

Some users of hydrochloric acid products may experience eye and nose irritation during normal use. The level of irritation will depend primarily on the ventilation provided during product use as well as personal sensitivity of the user.

Because of this potential for eye and nose irritation, 3M conducted an air monitoring study of the 3M Restroom Cleaning Systems products in actual use scenarios such as spray/wipe application and foam application followed by hose rinse-down. The test results indicate airborne HCL levels very low during these typical use scenarios -- well below the OSHA health guidelines.

Restroom Systems - Hand Soaps Questions

Do bulk hand soap dispensers have to be emptied and cleaned before filling with either of the 3M™ Twist 'n Fill™ hand soaps?

Yes. Bulk dispensers should be emptied and rinsed with water before the hand soaps are used. This operation can generally be carried out while the dispenser is in place. After the first fill with Twist 'n Fill hand soap, there is no special soap dispenser cleaning required.