**Q1:** What is the difference between the new, Trapezoid shape and the old Circle shape?

**A:** By utilizing a Trapezoid shape the abrasives are placed away from the center of the pad into the high wear areas. This also eliminates the need to rotate them as they begin to wear.

Q2: When do I use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips?

A: When working with stone or concrete floors using a rectangular vibratory machine, use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips instead of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasive Pads, which are optimized for use on vibratory equipment.

Q3: How do I apply the new 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips?

**A:** For applying any of the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond abrasives please reference the Technical Data Sheet, which contains instructions and pictures on how to apply them.

**Q4:** What is the difference between the old hexagonal abrasive features and the new square abrasive features?

**A:** The new features improve longevity and incorporate a new selfbreak-in feature allowing the pads to start cutting sooner.

**Q5:** When do I use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasive Pads Gold?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold should be used when there is apparent wear or visible damage on the floor. Such damage might be caused by pitting from action of ice-melting agents or other chemicals. Scratches can occur by abrasion from movement of pallets or other heavy items, heavy foot traffic, or any other physical wear of the floor surface.

**Q6:** How many passes should be made with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold?

A: Depending upon the condition of the floor, 3-8 passes are recommended. When the floor is smooth to the touch and wear marks are removed, or the visual appearance is acceptable, you can switch to 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Red.

**Q7:** How are 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads different from traditional diamonds used in floor grinding and polish?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads are preciselypatterned, carefully engineered structured composite abrasives. The composite abrasive features are distributed uniformly on a cushioned, flexible backing. As the composite structures wear with use, new diamonds are continuously exposed, resulting in uniform, exceptionally consistent and fast cutting action through the life of the abrasive product. Due to the unique design characteristics of the proprietary 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads, fewer steps are required when compared to traditional floor grinding and polishing abrasives.

Q8: Can I use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads dry?

A: It is not recommended due to the possible generation of excessive heat and dust. Water or a neutral cleaner should always be used with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads.

**Q9:** Can I use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads to strip and/or remove floor finish?

**A:** No. The use of traditional 3M stripping chemicals and 3M floor pad procedures is recommended.

**Q10:** On what types of surfaces can I use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads?

**A:** Every floor requires careful consideration of specific material type, floor condition and available equipment. Successful results have been obtained on hard surfaces such as terrazzo, concrete, marble, travertine and limestone. Use on combinations of different types of stone materials (e.g. marble with decorative granite inlay) should be approached with caution. Consultation with flooring supplier of Manufacturer may be necessary.

**Q11:** What if I start seeing scratches while using 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads?

A: Scratching can occur from damage to the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads resulting from floor conditions such as tile lippage and exposed edges from expansion joints and seams. If visible scratches appear, examine the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads for missing abrasive features, creasing, or other physical damage, and rework the floor as necessary. "Cropmarking" or "donut mark" swirls should be avoided by maintaining constant machine movement - don't pause the machine in one spot with the driver pad rotating.



**Q12:** Do I have to use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads in sequence starting with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold and continuing with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Red and finishing with Blue?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads should ALWAYS be used in the order: Gold -> Red -> Blue. Follow final polishing by burnishing with Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus and Scotchgard<sup>™</sup> Stone Floor Protector. Depending on the floor condition, use of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold as the first step is optional to quickly remove surface scratches and other damage before going on to the normal Red -> Blue -> Purple sequence.

**Q13:** Scotch-Brite<sup>™</sup> Sienna Diamond Floor Pad Plus and Scotch-Brite<sup>™</sup> Purple Diamond Floor Pad Plus pads produce slight milky slurry during use. Does the slurry from 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads look similar?

A: The slurry produced with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads looks similar, but the volume is typically much greater. Keeping the slurry on the floor during use of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads is critical - follow the procedures detailed in the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Technical Data Bulletin.

**Q14:** Do 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads require any break-in before use?

A: New 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads have a self break-in feature that will allow the pads to begin cutting in 1-2 passes under normal conditions. No special break-in actions need to be taken.

**Q15:** How many 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasives do I use on a floor pad?

A: On driver pads 16 inches and larger, use four 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasives. For driver pads 15 inches or smaller, use three 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasives.

**Q16:** When using 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads, electric floor machines sometimes overload and trip circuit breakers. Why is this?

A: The efficient cutting action of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads creates high friction in some cases, especially if the floor is not kept adequately wet, and especially when using 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Blue. If this occurs, a few drops of dish washing soap (Dawn® or equivalent) can reduce the surface tension at the disc/floor interface and help the machine to run more smoothly. In extreme cases, lessening the load on the discs can help. First remove any weight on the machine and then try adding one or two additional discs on the driver pad. This distributes the machine weight over more area and reduces the downward force on each disc. **Q17:** What "grade" or "grit" are 3M™ Trizact™ Diamond Abrasive TZ Pads?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads are not specified by a grade designation. The abrasive actions are classified as follows: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold - Coarse, 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Red - Medium, 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Blue - Fine. Due to the proprietary design characteristics of 3M<sup>™</sup> Trizact<sup>™</sup> Abrasives, fewer abrasive steps are required when compared to traditional floor grinding and polishing abrasives. Each of the 3M<sup>™</sup> abrasive pads will typically replace several grades of conventional diamond abrasives. For example, generally, 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Gold could be used in place of ANSI 30, 40, 60, 80, 100 grit abrasives.

Q18: How long will 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads last?

A: The new 3M<sup>™</sup> Trizact Diamond TZ Abrasive Pads last twice as long as the previous generation of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond HX Discs. 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad life depends critically on use factors such as flooring type and condition, machine pressure and speed.

Floor Substrate	Old Life > Estimated Life (finished sq ft)
Marble	$\frac{2,000 \text{ sq ft}}{2,000 \text{ sq ft}} > 4,000 \text{ sq ft}$
Terrazo	$\frac{2,000 \text{ sq ft}}{2,000 \text{ sq ft}} > 4,000 \text{ sq ft}$
Concrete	$\frac{1,000 \text{ sq ft}}{1000 \text{ sq ft}} > 2,000 \text{ sq ft}$ (highly variable)

**Q19:** How will I know when to replace 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads will continue to cut as long as the abrasive features are visible. The cloth backing may be exposed on parts of the disc as the abrasive wears down (See Photo 1).

Q20: How much pad pressure should the customer use?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Red are normally used at higher machine pressure settings. The efficient cutting action of 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads Blue causes more friction and can overload some machines at higher pressures. If this occurs, lower pressure settings should be selected - lower pressure also helps to extend disc life.

**Q21:** Will this process work on both cement-based terrazzo and synthetic/epoxy terrazzo?

**A:** Yes, 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads can be used with all types of terrazzo surfaces.

**Q22:** Will using 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads impact the life (thickness) of the stone flooring?

**A:** Although 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads abrade the floor surface - removing scratches and other shallow surface damage - the effect on the overall thickness of the floor is not significant.

**Q23:** What about other types of stone floors like granite, ceramic, porcelain and sandstone?

A: 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads can abrade all hard floor materials, for substrates not listed here please contact your local 3M sales representative or 3M Technical Service to discuss suitability.

**Q24:** What types of equipment can be used with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasive TZ Pads?

A: Low-speed swing machines and walk-behind or riding autoscrubbers are suitable. These machines should always be operated at a slow pace across the floor surface. 3M™ Trizact™ Diamond Abrasive TZ Pads should NOT be used on high-speed machines (>350 rpm).

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# **Technical Data Sheet TZ**

February 2017

### **Product Description**

3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasive Pads & Strips restore and polish stone and concrete floors. 3M<sup>™</sup> Trizact<sup>™</sup> Abrasives create a smooth, highly refined surface ready for finishing with Scotchgard<sup>™</sup> Stone Floor Protector and final burnishing with 3M<sup>™</sup> Tan Burnish Pad 3400.

### **Special Features**

- Micro-replicated composite diamond abrasive structures consistently and rapidly smooth and level stone floor surfaces
- Self break-in feature that allows for quick cutting
- Flexible backing and attachment system
- Used with water or neutral cleaner

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3M<sup>™</sup> Trizact<sup>™</sup> Diamond Abrasives are intended for wet floor maintenance processes only. **DO NOT use this product in any dry application**.

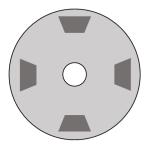
## Applications

Use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads & Strips to prepare stone surfaces prior to finishing with Scotchgard<sup>™</sup> Stone Floor Protector and/or burnishing with 3M<sup>™</sup> Tan Burnish Pad 3400. Suitable for stone floors such as marble, terrazzo, limestone, travertine and concrete. DO NOT USE 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips - GOLD on marble floors.

- Designed for use with autoscrubbers and low speed floor machines, including square vibratory machines
- 3M™ Trizact™ Diamond TZ Pads should be applied to a 3M floor pad, such as the 3M™ Red Buffer Pad 5100
- Use four of the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads arranged in the 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock positions when using with an autoscrubber or low-speed floor rotary machine with a diameter of 16 inches or more. When using pads that have a diameter of 15 inches or smaller use three pads arranged at the 12 o'clock, 4 o'clock and 8 o'clock positions. See graphic below for an example.

#### Pads 16 inch or larger

Pads 15 inch or smaller





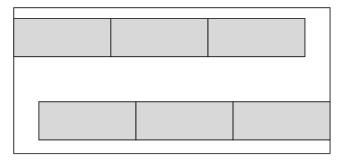
### **Application for Vibratory**

**Equipment:** For use on a square machine and other vibratory machines that utilize rectangular pads, place the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips along

Quick Links Technical Library Safety Data Sheets (SDS) Videos

Some of these links lead to web-based resources that are not product-specific.

the top and left side of the pad. Leave 1-2 inches (2.5-4.5 cm) of clearance on the top edge. Align the next strip, side-by-side with the previous, leaving the same 1-2 inches of clearance on the top. For pads 14 in. by 20 in. two strips will fit on each side. For 14 in. by 28 in. pads place a third strip side-by-side to the previous two. Repeat for the other side. See picture below for an example.



### **General Use Directions**

**ATTENTION:** 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads & Strips - Gold, Red and Blue listed below are starting guidelines for "average" floors. The exact number of passes needed will depend on the floor condition (e.g. rough trowel, deep staining) and desired aesthetic result (e.g. an exposed aggregate look). For heavily damaged floors, where there is visible, apparent wear or damage from scratching or pitting, start with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads Gold. Otherwise, start with 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads Red (skip steps 3 and 5 below). Only the user knows and controls the factors affecting the performance and safe use of these products. As such, it is the responsibility of the user (and not 3M) to determine whether these products are suitable for the user's application.

- 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads are designed for use with a low-speed (swing) machine or an autoscrubber while 3M<sup>™</sup> Trizact<sup>™</sup> Diamond Strips are designed for use on vibratory machines.
- Use 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads and Strips with water or neutral cleaner. **Do not use dry**. The hook backing of the disc is used to hold the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads and Strips onto a floor pad, such as the 3M<sup>™</sup> Red Buffer Pad 5100.



## General Use Directions (continued)

- 3. Attach four of the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads Gold (gold printing) to the 3M<sup>™</sup> Red Buffer Pad 5100 in the 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock positions, with the wide side placed nearest to the outside of the pad. For specific instructions on application to vibratory equipment, please see the special section labeled: "Application for Vibratory Equipment". Then resume the instructions as normal.
- 4. Prepare new 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads for use by making preliminary passes to expose the abrasive or by rubbing the abrasive surface with sand paper or other suitable abrasive; pads are conditioned for use when slurry appears on floor.
- 5. Make 6 passes with the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pads Gold with squeegee up and solution on; last pass should be with squeegee down. Wet vac and mop or autoscrub with 3M<sup>™</sup> Red Buffer Pad 5100 between the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad Gold, TZ Pad Red and TZ Pad Blue steps and before burnishing to remove any residual abrasive or debris that might cause scratches.
- **NOTE:** Dispose of waste and slurries generated from wet polishing in accordance with all applicable local and government regulations.
- 6. Attach 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad Red (red printing) to a 3M<sup>™</sup> Red Buffer Pad 5100 in the 12:00, 3:00, 6:00 and 9:00 positions.
- 7. Make 6 passes with the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad Red with squeegee up and solution on; last pass should be with squeegee down. Wet vac and mop or autoscrub with 3M<sup>™</sup> Red Buffer Pad 5100 before proceeding to step 8.
- 8. Attach 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad Blue (blue printing) to a 3M<sup>™</sup> Red Buffer Pad 5100 in the 12:00, 3:00, 6:00 and 9:00 positions.
- Make 6 passes with the 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad Blue with squeegee up and solution on; last pass should be with squeegee down. Wet vac and mop or autoscrub with 3M<sup>™</sup> Red Buffer Pad 5100 before proceeding to step 10.
- 10. Once floor is dry, dust with 3M<sup>™</sup> Easy Trap Sweep and Dust Sheets.
- 11. 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Pad should be washed and air dried after use. **DO NOT put the discs back into the package unless they are COMPLETELY dried.**

## Features and Benefits

Uniform coating throughout every 3M<sup>™</sup> floor pad reduces the number of knots and clumps, which eliminates scratching of floors while providing greater consistency and extended pad life.

Pads are reversible and will not be significantly affected by water, detergents, or cleaners normally used for floor maintenance.

Exacting standards for quality mean thickness uniformity from edge to edge and pad to pad are exceptional, resulting in consistent performance without pad wobble or machine vibration. The precise center-hole placement and roundness of the pads also contributes to the smooth operation which extends pad life and may help reduce operator fatigue.

## Packaging and Marking

Each carton shall be labeled to identify the contents by product name, size, quantity and manufacturer. Each pad shall be printed with the manufacturer's name.

## **Standard Sizes**

Circular discs and other shapes are available in a variety of common sizes. Pads are nominally one inch thick.

## Pad Use and Cleaning

If 3M<sup>™</sup> Trizact<sup>™</sup> Diamond TZ Abrasive Pads & Strips cannot be rinsed immediately after use, discs can be placed temporarily in a plastic liner to prevent abrasive residue from drying onto discs before rinsing. Discs may be rinsed with a faucet or hose. A pressure spray nozzle will remove residue most effectively.

Alternatively, used discs can be allowed to air dry outside of the packaging, and then the dried abrasive residue can be scraped or tapped off into general waste. **Do not store used discs in a closed container unless they are completely dry**.

### Storage

Store indoors in original packaging and under normal facility conditions.

#### **Explanation of Signal Word Consequences**

#### DANGER

Indicates a hazardous situation which, if not avoided, will result in serious injury or death.

### /!\ WARNING

Indicates a hazardous situation which, if not avoided, could result in serious injury or death.

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To reduce the risks associated with inhalation of or exposure to contaminants:

• DO NOT use this product on any asbestos-containing material.

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To reduce the risks associated with inhalation of or exposure to contaminants:

- To reduce the risks associated with inhalation of or exposure to contaminants:
  - Do not use dry. 3M Trizact Diamond Products are intended for wet applications only.
  - Do not allow this product to be used by untrained operators.
  - Always follow standard safety practices, including wearing appropriate protective apparel and eye protection, while using this product.
- To reduce the risks associated with impact:
  - Use only in low speed wet applications, such as use with an autoscrubber.
  - Inspect both the driver pad and 3M Trizact product prior to each use. Replace if damaged, cracked, nicked, torn, or worn out.
  - Do not use an abnormally curled or cupped product.
- To reduce the risks associated with use in a hand tool application:
  - Use a tool with rotation speed under 4,000 rpm and a water spray bottle to keep the work area wet.
  - Ensure the tool is in contact with the work surface when it is started.
  - Ensure the driver pad is the same size as or larger than the 3M Trizact product attached to it.
  - Use only double-insulated tools and/or GFCI plugs and cords with any tool this product is mounted on.
  - Stop immediately if vibration or wobbling occurs during use. Determine cause and correct before continuing.
  - Ensure the driver pad shaft is fully seated in the tool collect or properly secured to the tool per the

manufacturer's recommendations. Center 3M Trizact product properly on driver pad.

- To reduce the risks associated with environmental contamination:
  - Dispose of waste and slurries generated from wet polishing in accordance with all applicable local and government regulations.

### Health and Safety

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When handling any chemical products, read the manufacturers' container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to <u>3M.com/SDS</u>, or by mail or in case of an emergency, call 1-888-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

## **Technical Information**

Technical information and data, recommendations, and other statements provided by 3M are based on information, tests, or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. The typical values shown should not be used for the purpose of specification limits. If you have questions about this Product, contact the Customer Service Department at 1-800-852-9722.

### **Product Use**

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

### Warranty

3M warrants that each 3M product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

### Limited Remedy

If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

### Limitation of Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

