



*For Happier Patients*



*Information for Dental Professionals*

# TCS

An ISO 13485 Certified Company

TCS is a dental manufacturing company dedicated to providing dental laboratories with exceptional quality materials, equipment, and hands-on training courses that are accessible and reliable. At the core of our brand, we believe that one of the key components to creating successful removable appliances is through forming strong partnerships, because for TCS, manufacturing is more than just a business, it is a collectivist culture.

## 2000

FOUNDED IN CA, USA

## 3

GENERATIONS

## 70+

COUNTRIES WE SELL TO

## CONTENTS

- The TCS Experience
- Benefits of TCS Resins
- TCS Resins
- Indications and Contraindications
- Real Life Stories
- General Techniques for TCS Flexible  
Partials
- Tools for Your Practice
- FAQs

# The TCS Experience

**Win-Win Philosophy.** Your success is our success. Let us help you promote TCS with free promotional material and samples of the TCS Concentrated Dental Appliance Cleaner, because together, we can create smiles.

## Innovation.

A philosophy to continuous improvement guides us to develop better methods, tools, materials, educational programs, and creative ways to add customer value.

## Manufacturing In-House.

The majority of our products, including our resins, equipment, and denture cleaner is manufactured in-house in CA, USA.

## Quality.

A passionate commitment to quality is one of the core principles that governs TCS. We are committed to providing helpful customer service and delivering the highest quality dental products by assuring their performance, consistency, safety and value. TCS management monitors and reviews its quality through the implementation of an effective Quality Management System based on ISO 13485 standards.

## TCS Certified Laboratories.

We take pride in providing products of the highest quality. Our goal is to get the same high quality to the final product so that the patient can reap the benefits of a properly constructed appliance. It is our due diligence to ensure that we are referring laboratories that have the experience and training to offer a high quality product.



# Promo Material Free of Charge

- ◆ Order informational patient education brochures and/or posters to display in your waiting room. *Free shipping in the US.*
- ◆ Use our informational videos to embed on your website or showcase in your waiting room to familiarize patients with removable partial dentures. *View and download at: [tcsdentalinc.com](http://tcsdentalinc.com)*
- ◆ Ask about our Web Ads for your website and social media platforms.



**TO ORDER.**

(866) 426-2970

[tcsdentalinc.com](http://tcsdentalinc.com)

# Benefits of TCS Appliances

## Lightweight and Comfortable.

TCS resins have properties that allow partials to be fabricated very thin without compromising durability, making them very flexible and comfortable for everyday use.

## Aesthetic.

TCS restorations are manufactured to blend naturally with a patient's surrounding tissue and gums. A well designed and fabricated TCS appliance is unnoticeable in a patient's mouth.

## Biocompatible.

TCS restorations are biocompatible and ideal for patients that are allergic to monomers found in acrylic dentures.

## Non-invasive.

Unlike permanent tooth replacement options such as crown/bridge and implants, TCS partials are non-invasive, making them ideal for patients with a low threshold for pain and the elderly. The unique characteristics of TCS partials utilize the tissue undercuts and portions of abutment teeth for retention.

# Unbreakable™

Flexible Partials



## Shades

-  Light Pink
-  Standard Pink
-  Light/Dark Pink
-  Dark Pink
-  Natural

## Insurance Codes

D5225 Maxillary Partial Denture  
D5526 Mandibular Partial Denture

## Millions of Cases Prescribed

- Extremely resilient, high performance nylon thermoplastic.
- Guaranteed unbreakable due to its unique properties.
- Designed for exceptional memory to hold its form.
- Offers an ideal degree of flexibility.
- Stain resistant and biocompatible.
- A modern fit, lightweight and durable.



Ask your lab for TCS resins by name.





Shades

- Light Pink
- Standard Pink
- Light/Dark Pink
- Dark Pink
- Natural

Insurance Codes

D5225 Maxillary Partial Denture  
D5526 Mandibular Partial Denture

Seamless Partial for Bright Smiles

- Highly translucent, polyolefin thermoplastic.
- Aesthetically pleasing and clinically unbreakable.
- Easy chairside adjustments.
- Offers an ideal degree of flexibility.
- Stain free and biocompatible.
- A modern fit, lightweight and durable.



Ask your lab for TCS resins by name.



Shades

- Standard Pink
- Dark Pink
- Clear

Insurance Codes

D5110 Maxillary Partial Denture  
D5120 Mandibular Partial Denture  
D5225 Maxillary Partial Denture  
D5526 Mandibular Partial Denture



Ask your lab for TCS resins by name.

The Ultimate Upgrade from Acrylic Dentures

- Semi-rigid, microcrystalline polymer thermoplastic.
- Ideal for full dentures, semi-flexible partial dentures, clear clasps, frameworks, and nightguards.
- An upgrade from traditional acrylic dentures and finishes completely transparent in our Clear shade.
- No volume shrinkage for an exceptional fit.
- A modern fit, lightweight and durable.

## Indications and Contraindications

### >> Indications for Unbreakable™ & iFlex™

- Economical, aesthetic solution for missing teeth
- Patients with concerns over metal restorations
- Gingival veneers to mask exposed root surfaces
- Patients with allergies to monomer and/or nickel
- Transitional restoration during the healing period for implants
- Patients with the presence of tori
- Oral cancer patients
- Cleft palate patients

### >> Indications for metal with Unbreakable™ & iFlex™

- Need for more rigid appliance due to poor tissue support or few remaining teeth
- Free-end saddle with teeth missing from the 1st bicuspid
- Cast rest seats if soft tissue is a concern

*Note: Consider Karadent™ when more stability is required*

### >> Contraindications for Unbreakable™ & iFlex™

- Full denture
- Immediate application: due to recession, allow 8 to 10 weeks healing time when prescribing a TCS restoration as a permanent solution

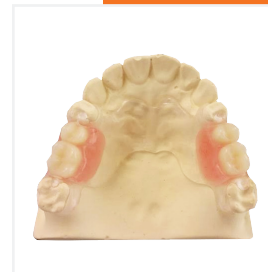
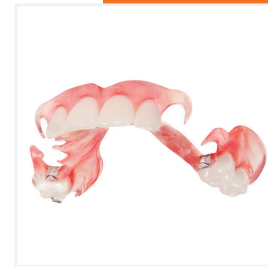
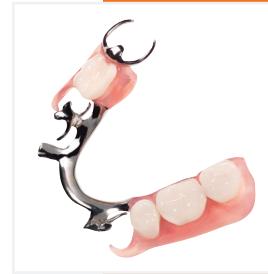
### >> Indications for Karadent™

- Full dentures, partial dentures that require a rigid material, clear frameworks, & nightguards
- Economical, aesthetic solution for missing teeth
- Patients with concerns over metal restorations
- Patients with allergies to monomer and/or nickel
- Transitional restoration during the healing period for implants
- Partials when more stability is needed due to poor tissue support or few remaining teeth
- Partials when more stability is needed for free-end saddles with teeth missing from the 1<sup>st</sup> bicuspid

### >> Contraindications for Karadent™

- Flexible partial dentures
- Patients with the presence of lingual tori

*\*Doctors should not feel limited to these indications, even the most difficult cases can be successfully fabricated with TCS materials.*





## #MyTCS

TCS loves to see our dental appliances in action.

Share your TCS Smiles with us using **#MyTCS**



## Real Life Stories



### *Tiffany's Story*

Tiffany lost most of her teeth in an automobile accident at the age of 12. After many years of wearing an uncomfortable and fragile acrylic/metal partial, she was prescribed a an Unbreakable by TCS. Tiffany was very excited to finally wear something she felt confident in. Today tiffany feels better than ever!



### *Samantha's Story*

Samantha had several mouth tumors and suffers from Ehlers Danlos Syndrome, a genetic mutation that affects the entire body. She was prescribed a combo TCS partial and is now happier than ever with her new smile!



### *Warren's Story*

Warren was a world champion of offshore and hydroplane boats when he lost his tooth in a boating accident. He has had a TCS unilateral for approx. 15 years and loves to use TCS Fresh products to keep his appliance clean and fresh.

# General Techniques for TCS Flexible Partial

## CONTENTS

- Impression Techniques
- Insertion
- Adjusting
- Proper Care

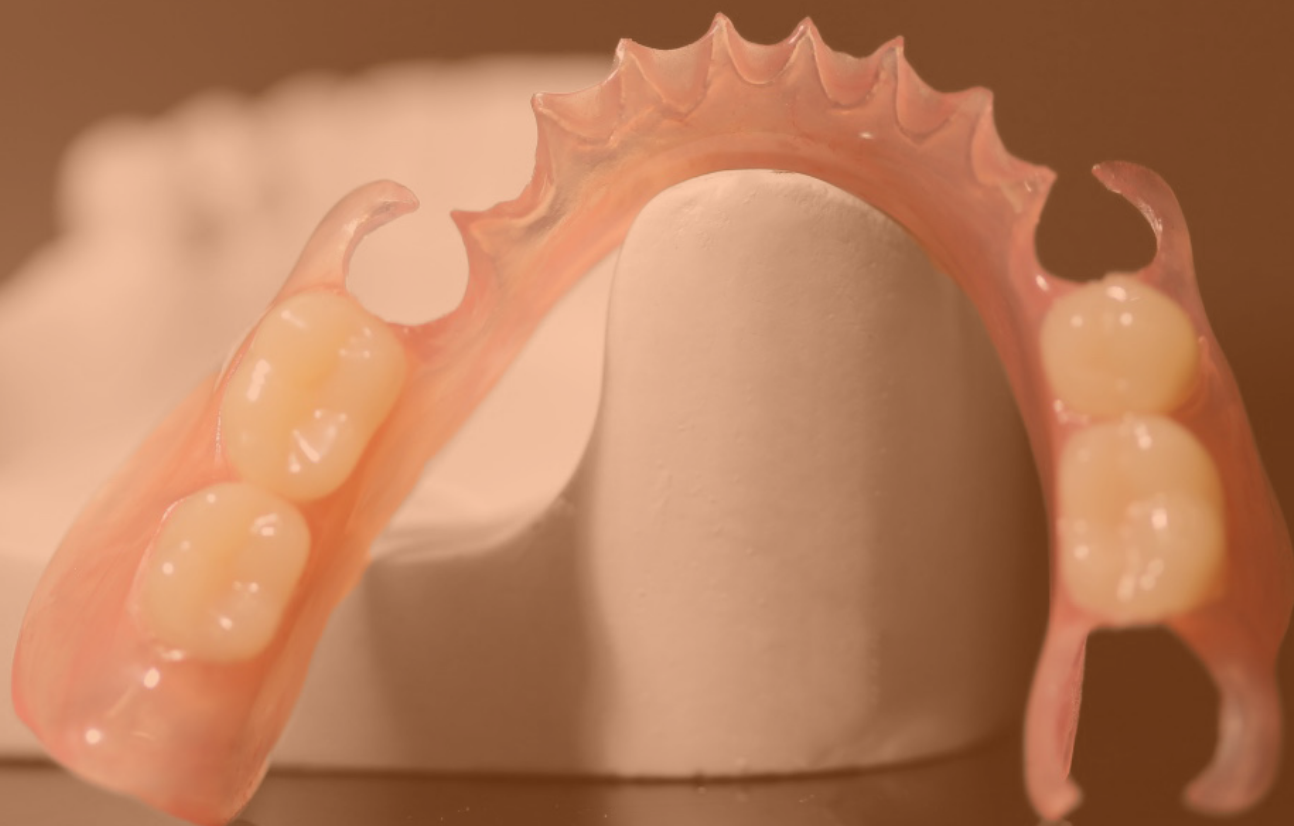
## Impression Techniques

Impressions are the first step to a successful TCS Flexible Partial Denture. There is little to no tooth preparation needed for TCS restorations but it is vital to have an accurate impression, poured model/counter model and bite registration. We recommend **alginate** or **silicone** materials for impression taking.

1. Select the trays that best fit the patient's mouth to take the impression. Prepare the impression material following the manufacturer's directions, mix and load up to the tray borders.
2. Take the impression followed by a counter-model and bite registration.



3. Disinfect the impressions. The most popular method for disinfecting is the immersion method because it ensures maximum disinfection. Pre-washing the impression by spraying it with antiseptic solution and rinsing it prior to immersion is recommended. This reduces the amount of germs and prolongs the life of the antiseptic solution.
4. Examine the impression. Be sure that all the anatomical details are visible and no air bubbles are present. If an **alginate** is taken, promptly pour it up using lab stone to avoid shrinkage.





## Prior to Insertion

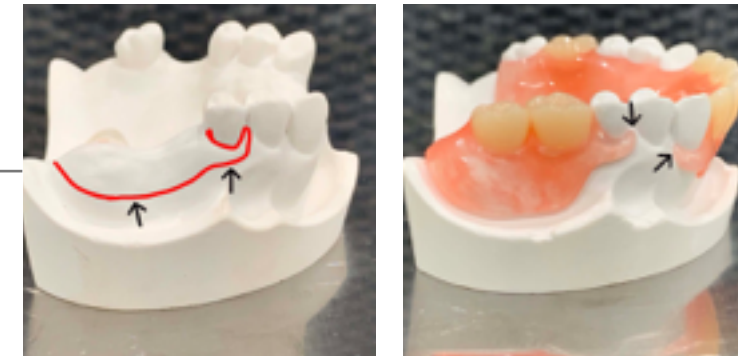
Take the partial off the model and examine closely. Use the recommended burs or a TCS Carving Knife to remove any sharp edges or irregularities.



Place the partial on the model and examine again. Check the path of insertion to determine the best way to insert the appliance into the patient's mouth. This is especially important in cases with deep undercuts.



Make sure the flange or clasp area does not exceed the height of contour of the tissue undercut. If the flange or clasp show over-extension, reduce accordingly to avoid impingements when inserting the appliance in the patient's mouth. The images below demonstrate how the clasp should look (ideally). Notice how it tapers into a point in the interproximal areas and how it does not impinge sensitive tissue undercut.



## Initial Insertion

Use the **Hot Water Treatment** prior to inserting the appliance in the patient's mouth. **Hot Water Treatment:** Bring the TCS appliance up to body temperature, by placing the appliance in hot tap water for approximately 30 seconds to 1 minute. When the appliance is at a tolerable temperature, insert into the patient's mouth. ***This step is also helpful for initial insertion after relines or repairs.***



## Adjusting

If the patient senses discomfort, it is normally due to:

- Sharp edges
- Pressure in the interproximal areas
- Poor occlusion
- Over-extended flange
- Too much pressure on the gingiva of the abutment tooth

**Note.** The degree of flexibility is directly dependent on one or both of the following:

- The thickness of the appliance.
- The length and design of the horseshoe (in cases with a horseshoe design).

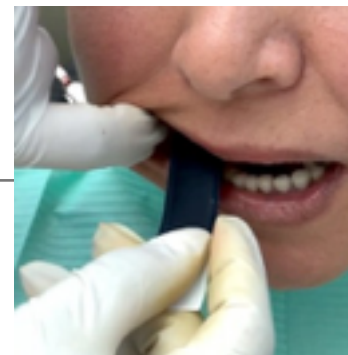
Therefore, when making adjustments, do not over reduce as this may sacrifice the integrity of the appliance and cause it to become too thin and unstable in the mouth.

**To reduce pressure in the interproximal areas,** use a Pink Zirconia Bur or a Green Mounted Stone. Typically, these burs can be used to make all the adjustments necessary, and when used properly, they will leave the surface very smooth. Be sure to use a continuous motion in one direction and reduce very little at a time.



*Use a hand piece that can be regulated to 30,000 RPM*  
**Pink Zirconia Bur = 30,000 RPM**  
**Green Mounted Stone= 30,000 RPM**

**If the patient senses discomfort while biting down,** this is an indication that the occlusion may need to be adjusted. Check occlusion with articulating paper and reduce accordingly.

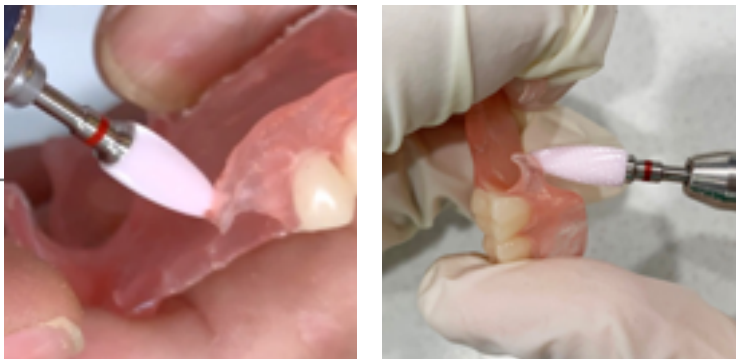


**If the patient senses discomfort in the sublingual or buccal fold area,** check for over-extended flanges or clasps and reduce accordingly. This may be noticeable prior to initial insertion when examining the appliance on the model.



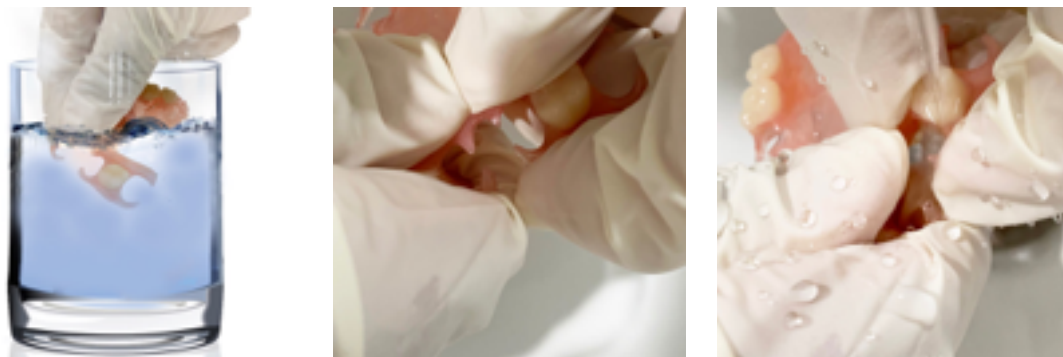
**Use little pressure while adjusting with the Pink Zirconia Bur. To avoid melting or burning the material use a continuous motion in one direction only.**

If you notice discomfort near the gingiva of the abutment tooth, the partial may be engaging delicate tissue undercut. Relieve undercut by very slightly grinding the lower lingual side of the clasp until appliance can be inserted without discomfort to the patient. This is a very delicate adjustment as over grinding this area may result in food traps.



#### Adjustments to the Clasp:

Because the clasp is used for retention, its design and thickness are very important. Before opting to relieve the clasp with a bur, use the **Hot Water Treatment** by submerging the section in hot water for approximately 30 seconds. Bend the clasp gently inward (to tighten) outward (to loosen) while holding it under cold water. This will relax the elastic memory of the material without sacrificing the original design of the partial.



Lastly, if there is a need to smoothen areas that have been adjusted, use the Brown Rubber Point followed by the Mini Fuzz Buff (optional). These tools work in conjunction to leave the surface extra smooth.



*Use a hand piece that can be regulated to 30,000 RPM*

*Brown Rubber Point= 25,000 – 30,000*

*Mini Fuzz Buff = 25,000 (do not press too hard, especially when using the buff for the first time)*

If a quick re-polish is needed, use a Mini Rag Buff with the Green Hi-Shine Polishing Paste (for Unbreakable™ and Karadent™) or the iShine Polishing Paste (for iFlex™) to achieve a shiny touch-up. This is only effective if the surface has been smoothed out with the Brown Rubber Point and/or the Mini Fuzz Buff.



*Use a hand piece that can be regulated to 30,000 RPM*  
*Mini Rag Buff = 25,000 RPM*



**Try Fresh.** Each TCS case includes a 1-week supply sample packet of TCS Concentrated Dental Appliance Cleaner, patient instructions and a delivery bag.

\*USA only



## Proper Care

TCS appliances are very easy to care for when using TCS Fresh products. In order to keep them looking and feeling like new, please have your patients follow these simple recommendations for daily cleaning:



1. Continue to brush natural teeth and gums as directed.
2. Rinse the appliance under warm running water for approximately 10-30 seconds to remove any food particles.
3. Gently brush the appliance with a soft bristle brush using water only. Rinse again.
4. Pour 1 packet of TCS Concentrated Dental Appliance Cleaner into 1 cup of lukewarm water to create solution. Solution lasts 7 days.
5. Place the appliance in the cleansing solution for at least 15 minutes daily. Rinse the appliance thoroughly prior to re-insertion into mouth. When possible, keep appliance in water or the cleansing solution when not being worn.
6. Extremely soiled appliances may require overnight soaking in denture cleaner.

**IMPORTANT.** Do not use bleach, toothpaste, or similar cleaning products, these may discolor or scratch the surface of the appliance causing micro-tears where bacteria can form in.



*For Happier Patients*





A clean appliance is vital to your patients' health and to the appearance and longevity of the appliance. TCS Concentrated Dental Appliance Cleaner is a safe solution for quick and effective results. Effectively cleans all types of removable dental appliances.

- Non-chlorinated solution (which means, it won't discolor, damage, or have an unpleasant tastes and/or odor).
- Removes stains that brushing alone can leave behind.  
E.g. Stains caused by tobacco, coffee, tea, blueberries, etc.
- Helps prevent iron stains as well as plaque, tartar, calcium and calculus.



Flexible Partials



Full Dentures

Metal Combo  
PartialSportsguards  
SnoreguardsAligners  
Nightguards

Retainers

## TCS Fresh Products

Visit our website for discounted dental professional pricing and/or order free promotional material: [www.tcsfresh.com](http://www.tcsfresh.com)



### TCS Concentrated Dental Appliance Cleaner.

Professional strength cleanser. Deep cleans, removes stains and odors. Ideal for most types of removable dental appliances.

**4505-02**      **24 pcs**  
6 month supply



### TCS Dental Appliance Cleaner.

TCS Dental Appliance Cleaner sample packets. Box of 75 packets (1-week supply ea.).

**4505FR-SMP**      **75 pcs**

Ideal for  
Dental  
Offices



### TCS Dental Appliance Brush.

Resilient soft bristle brush to thoroughly clean dental appliances without scratching the surface.

**4506FR-01**

FREE  
DISPLAY WITH ORDER  
OF 9+ BOXES



### Join Our Affiliate Program! It's FREE!

- Earn commission on every order you bring in
- Receive exclusive offers and discounts

To join visit:  
[www.tcsfresh.com](http://www.tcsfresh.com)



## Get the most out of your Chairside Adjustments Tools

### Tools for Your Practice

Visit our website for discounted dental professional pricing and/or order free promotional material: **[www.tcsfresh.com](http://www.tcsfresh.com)**. *More products available online.*

#### Pink Zirconia Fine Bur.

Ideal to make minor chairside adjustments leaving a smooth surface.

5035Z	ea
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#### Green Mounted Stones.

Ideal for minor chairside adjustments.

4501-01	100/box
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#### Brown Rubber Points.

Ideal to eliminate scratches and smoothen the surface.

Small	4513-01	12 pcs
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Large	4514-01	12 pcs
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#### Mini Fuzz Buff.

Use after the Brown Rubber Wheels to further smoothen the partial prior to polishing.

4222-01	12 pcs
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#### TCS Carving Knife.

Excellent for removing extended fibers.

Knife	4201-01	ea
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Blades	4202-01	12 pcs
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#### Mini Rag Buff.

Recommended to dentists for polishing touch-ups after minor adjustments on TCS appliances. Use with polishing paste.

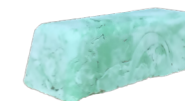
4221-01	12 pcs
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#### Green Hi-Shine Polishing Paste.

Use to polish Karadent™ and Unbreakable™ partials. Apply with the Mini Rag Buff.

4209-02	1 lb
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#### iShine Polishing Paste.

Use to polish iFlex™ partials. Apply with the Mini Rag Buff.

4220-01	10.75 oz
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#### Sample Models.

An ideal marketing tool for your dental practice. *More options available online.*

Unbreakable™ - partial	4011-01
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iFlex™ - partial	4009-01
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Karadent™ - full denture	4016-01
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#### Shade Guide.

Match patients' natural gingiva to the correct TCS resin shade.

8015-02	ea
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### Dr. Adjustment Kit

Ideal for quick and easy chairside adjustments.

4014-02 (ea)
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#### Includes:

- 1 Green Point
- 1 large Rubber Point
- 1 small Rubber Point
- 1 Pink Zirconia Fine Bur
- 1 Carving Knife
- 1 sample of Green Hi-Shine
- 2 Mini Rag Buffs
- 5 Mini Fuzz Buffs

Visit our online store:  
**[www.tcsfresh.com](http://www.tcsfresh.com)**



## FAQ's

### Can I prescribe a full denture made out of Unbreakable™ or iFlex™?

No, Unbreakable™ and iFlex™ are specifically formulated for flexible partial dentures. Prescribe Karadent™ for full dentures. *View pages 9-11, "Karadent™ by tcs®" and "Indications and Contraindications for TCS Resins".*

### Are TCS thermoplastic resins FDA cleared and CE marked?

Yes.

### Are TCS partials recommended for immediate cases?

Due to recession, it is recommended to allow 8 to 10 weeks healing time when prescribing a TCS appliance as a permanent solution. This is not necessary if the appliance is being used as a temporary solution.

### How long will a TCS appliance last?

TCS appliances are designed to last a lifetime. Over time natural changes in the patient's mouth may occur, should modifications be needed, TCS appliances can usually be adjusted rather than replaced.

### Do abutment teeth need preparation?

No tooth preparation is necessary when prescribing TCS partials. The unique characteristics of these materials utilize tissue undercuts and portions of abutment teeth for retention. However, tooth preparation may be necessary for rest seats and combination cases.

### What about adding teeth and/or clasps to flexible partials?

Teeth and/or clasps can be added to TCS resins. This is a laboratory procedure.

### Can TCS partials be relined? If so, can it be done chairside?

Relining TCS resins is a laboratory procedure. In most cases where an overall reline is needed, the case is jumped into a new base.

### Do I need special tools to adjust TCS restorations?

Unbreakable™- Pink Zirconia Burs, Green Mounted Stones, and Brown Rubber Points.

iFlex™- Pink Zirconia Burs or any Carbide Bur (including burs used for acrylic), and Brown Rubber Points.

*View page 18-21, "Adjusting Techniques"*

Karadent™- Pink Zirconia Burs or any Carbide Bur (including burs used for acrylic), and Green Mounted Stones. Karadent™ can be adjusted using traditional acrylic techniques.

### Are there any special instructions I should give my patient for proper care of TCS restorations?

View page 22, "Proper Care" for optimal patient maintenance. We offer free patient educational brochures full of helpful information for your patients. Additionally, you should receive a free sample of \*TCS Concentrated Dental Appliance Cleaner (1-week sample) with every TCS appliance you receive from your lab.

\*Fabricated in the USA and Canada.

### How do I know that I received a genuine TCS restoration?

There are many imitation products that are not FDA cleared, nor have the unique characteristics of TCS. The laboratory that you choose should be trustworthy. Ask your laboratory if they use TCS brands and be sure to ask for Unbreakable™ (aka TCS), iFlex™, or Karadent™ by name on the prescription. Additionally, to ensure that you are receiving a genuine TCS product, be sure the appliance is received in a TCS branded plastic bag along with a TCS patient care pamphlet, \*TCS Concentrated Dental Appliance Cleaner sample, and that the TCS brand is indicated on the bill. \*Fabricated in the USA and Canada.

### Why didn't I receive the appliance with a sample of TCS Concentrated Dental Appliance Cleaner and/or patient care instructions?

Confirm that the laboratory actually used a TCS brand material and that the brand is indicated on the bill. Ask the laboratory for the complimentary sample of TCS Concentrated Dental Appliance Cleaner and the patient care pamphlet that is included with the raw materials. If the laboratory cannot provide the above, it is possible that the product is not a genuine TCS product or that it is a TCS product but it is being fabricated outside the USA.

### What are the insurance codes for TCS Flexible Partials?

D5225 Maxillary | D5526 Mandibular

### What are the insurance codes for TCS Full Dentures?

D5110 Maxillary | D5120 Mandibular

### What is the difference between TCS and other brands?

Differences include: natural shades, durability, functionality, resistance to stains and odors, patient comfort, and more. *View page 6, "Benefits of TCS Appliances".* Additionally, TCS resins are manufactured in the USA from the highest quality medical grade components meeting ISO 13485 standards.

## FAQ's

### Does the laboratory have to be certified to offer TCS?

No, many high-quality laboratories do not participate in our certification program. However, laboratories that do participate have gone through the application process and demonstrated mastery work with thermoplastic restorations.

### What is the difference between Unbreakable™ (aka TCS) and iFlex™?

Although Unbreakable™ and iFlex™ are very similar and are used for the same indications, there are some differences to be mentioned.

Unbreakable™ is a nylon-based material, this technology has been used for flexible partials for over 60 years, and has long-lasting proven success. It is a durable material that is guaranteed unbreakable under normal usage. Adjusting Unbreakable™ is simple, however, it takes some specialty skills. Pink Zirconia Burs, green points and brown rubber points are recommended when adjusting.

iFlex™ is a newer technology that was launched in 2012, it is a polyolefin-based material. It is durable and clinically unbreakable under normal usage. iFlex™ tends to be easier to adjust and is slightly more translucent than Unbreakable™. It is also slightly more flexible, although flexibility of both products will depend on design and thickness of the partial. iFlex™ can be adjusted with Pink Zirconia Burs and most carbide burs.

Both materials, are formulated for removable flexible partials with aesthetic, functionality, and patient comfort in mind. Deciding which material is simply a matter of preference by you and the dental technician.

### Can patients wear their appliance to sleep?

Yes, however it is best practice for patients to remove their appliance to sleep. Patients should not wear their appliance 24 hours a day without removing them for proper oral hygiene. **Note** that some designs of dental appliances are not recommended to wear while sleeping, advice your patients on appliance usage.

### How can patients remove stains from their dental appliance?

For stubborn stains, soak appliance in denture cleansing solution overnight. Brushing or using harsh abrasives will not be effective and may damage the appliance.

### Can patients use vinegar, bleach, or baking soda to clean their appliance?

These are all harsh products that should not be used to clean dental appliances. Harsh cleaning products can cause discoloration or scratch the surface of the appliance, causing micro tears where bacteria can form in.

### What temperature should patients use to soak their appliance?

Patients should soak their appliance at room temperature. Initially we recommend patients to use warm water to help dissolve their denture cleansing solution. Patients should **NOT** use boiling water as this may warp the appliance.

### Can patients use TCS Dental Appliance Cleaner on their natural teeth?

No, the TCS Dental Appliance Cleaner should not be used in the mouth.

### Can patients use more TCS Dental Appliance Cleaner than what is recommended?

Although using more TCS Dental Appliance Cleaner will not damage the appliance, our cleaner is concentrated and it is not necessary to use more than the recommended.

### Once prepared, will TCS Dental Appliance Cleaner solution really last for 7 days?

The TCS Dental Appliance Cleaner's ingredient combination is formulated to effectively clean for 7 days. This non-chlorinated solution is safe and concentrated for effective results. Simply instruct patients to rinse the appliance under running water prior to submerging it into the solution. This will maintain the solution keeping it free of food particles.

### How long can patients soak their appliance in the TCS Dental Appliance Cleaner solution?

Most appliances can be submerged in the solution whenever they are not being worn. However, soft liners and some types of guards should only be soaked for approximately 15 minutes.

### How does the TCS Dental Appliance Cleaner compare to similar product on the market?

TCS does not contain harsh chemicals nor forms of chlorine often found in similar cleansers. Additionally, TCS Dental Appliance Cleaner is a professional strength cleaner, which means that it does not contain fillers that can weaken the cleansing effectiveness.

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@tcsdentalinc  
[www.tcsdentalinc.com](http://www.tcsdentalinc.com)