

# Dental Isolation and Aerosol Control



DryShield®

## Instructions For Use

DS1 Isolation System  
DryShield® Autoclavable Mouthpieces

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#### User:

DryShield® is intended to be used by a dental professional

## Section 1

# DS1 Isolation System

(pictured with mouthpiece attached)



## Product Contents



### DryShield® Isolation System:

**REF** DS-SYS- 001

Includes:

DryShield® DS1

**REF** DS-SYS-002

Portable Operator Kit

**REF** DS-SYS- 001-P

Y Connector Kit

**REF** DS-SYS- 001-Y

Cleaning Brush

**REF** DS-SYS- 001-B

DryShield® O-Ring

**REF** DS-SYS- 001-R

# DS1 Installation

1



Twist off standard HVE with attached coupler from hose.\*

2



Attach DS1 to existing hose by twisting into place.

3



Place DS1 with attached hose onto the assistant toolbar.

# Portable Operator Kit Installation\*\*

1



Attach one end of portable kit to standard HVE.

2



Attach DS1 to other end of portable kit.

# Y Connector Installation\*\*

1



Disconnect standard HVE hose from main canister.

2



Connect Y Connector hose to canister's port.

3



Attach standard HVE hose to one end of the Y Connector.

4



Attach DryShield® to the other end of the Y Connector.

\* Confirm dental air compressor and vacuum system are operating prior to using DryShield®.

\*\* Included with DryShield® Isolation System

## Section 2

# Mouthpiece Setup

## Step 1: Connect

### Connecting Mouthpiece



**1** Spray a mixture of air and water from syringe into the inner lining of the mouthpiece connector.



**2** Slide and twist lubricated mouthpiece using a rocking motion onto DS1 until it locks into place underneath.

## Step 2: Place

### Placing Mouthpiece



**1** Fold tail in towards the center of the mouthpiece.



**2** Fold tail and outside edges together towards the center of the mouthpiece with one hand while using the other hand to control the bite block and DS1.



**3** Slowly insert in the center of the mouth, lining up the bite block's anterior edge to distal of the canine (For kids, midline of the primary lateral).



**4** Release the mouthpiece, allowing the tail and outside edges to fall back into its natural position.

# Step 3: Fit

## Fitting Mouthpiece



**1** Use finger pressure to adapt the cheek retractor along the inner surface of the cheek. Adapt the transition area along the distal part of the most posterior molar. Adapt the tongue shield along the inside of the lingual surfaces of the posterior teeth into the lingual vestibule.



**2** Place bite block distal to the maxillary canine and have patient bite down onto bite block.



**3** Make sure outline of mouthpiece fits comfortably in patient's mouth.



**4** Release the mouthpiece, allowing the tail and outside edges to fall back into its natural position.



Too small



Too big

## Section 3

# The Autoclavable Mouthpiece



### Easy-to-Insert Design

Mouthpiece can be inserted in a few seconds, and removed even faster.

### Suction

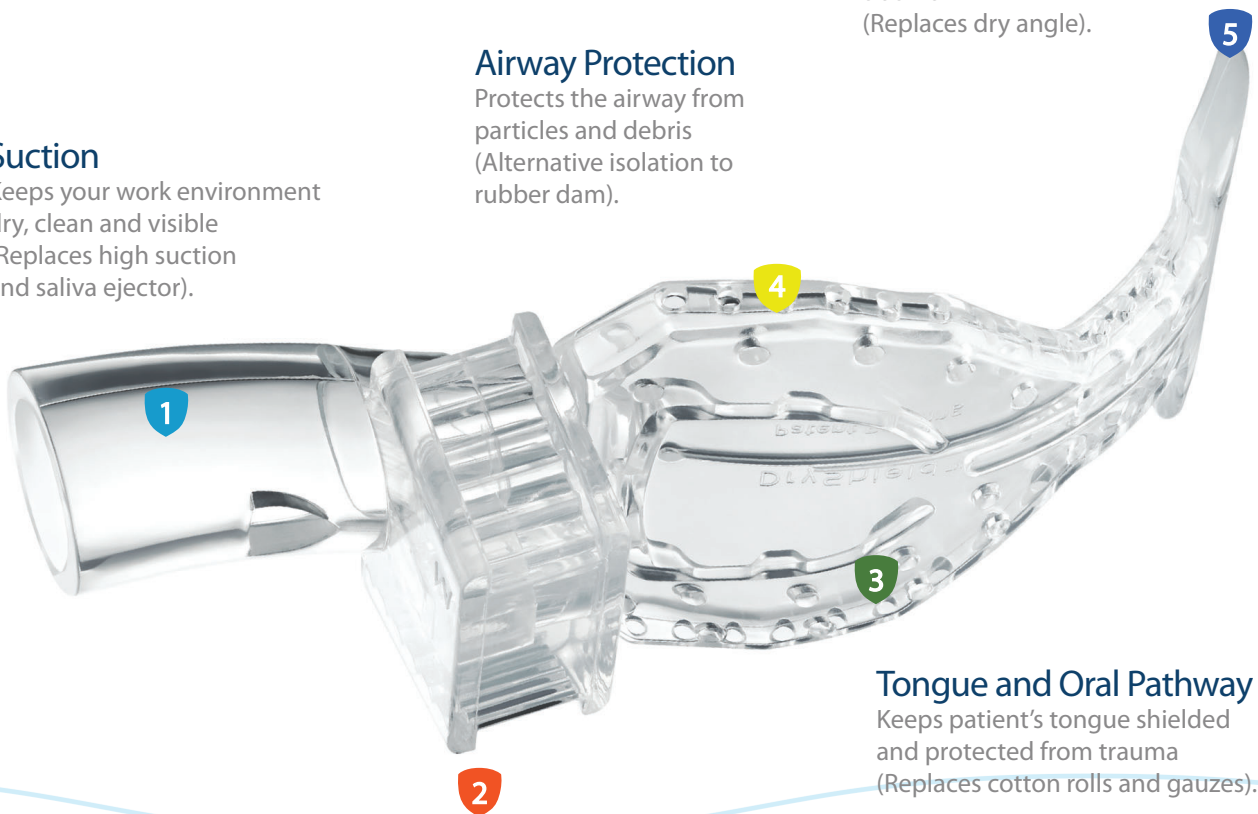
Keeps your work environment dry, clean and visible (Replaces high suction and saliva ejector).

### Airway Protection

Protects the airway from particles and debris (Alternative isolation to rubber dam).

### Cheek Retractor

Keeps patient's cheek retracted to improve visibility and protect it from trauma (Replaces dry angle).



### Tongue and Oral Pathway Shield

Keeps patient's tongue shielded and protected from trauma (Replaces cotton rolls and gauzes).

### Interchangeable Bite Block

Improves access and maximizes patient comfort to accommodate every mouth size.

# Interchangeable Bite Block

## Attaching Bite Block



1  
Line angle of bite block strap with the angle of strap region on mouthpiece.



2  
Slide bite block onto mouthpiece, ensuring that the plug is locked in place and the strap lies flush with the mouthpiece.\*

## Detaching Bite Block



1  
Pull bite block from the plug until bite block is detached from it.



2  
Slide bite block strap from mouthpiece.

\*While most patients will fit the same size bite block as mouthpiece, DryShield® bite blocks are interchangeable so you can accommodate all patients. For example, for a patient with limited opening, go down a bite block size.

## Mouthpiece Sizes

Size	Age Consideration
Pedo	7–8 years of age and younger
Small	8–9 years of age to young teens
Medium	Teens to adults
Large	Adults

Mouthpieces are sold separately and are available in 4 different sizes:

- Mouthpiece Pedo 4-pack  
REF DS-MPP- 002
- Mouthpiece Small 4-pack  
REF DS-MPS- 003
- Mouthpiece Medium 4-pack  
REF DS-MPM- 004
- Mouthpiece Large 4-pack  
REF DS-MPL- 005

# Cleaning, Sterilization and Maintenance

## Things You Should Know

The DryShield® DS1 is made from a high heat-tolerant material, and the DryShield® mouthpiece is made of an autoclavable silicone material. All DryShield® components are completely autoclavable. DryShield® recommends following standard infection control protocols for sterilization.

## DryShield® DS1

- After completion of dental procedure, DryShield® recommends running the DryShield® DS1 with a non-corrosive, pH neutral enzymatic cleaning solution and performing a surface disinfection with a disinfectant wipe between each patient. Users have the option to sterilize the DryShield® DS1.
- Maintenance of the lever o-ring is done through visual inspection. Replace o-ring when lever function decreases.

## DryShield® Autoclavable Mouthpiece

- After completion of each dental procedure, detach mouthpiece from bite block and place both in ultrasonic cleaner for 15 minutes.
- Next, clean the separated mouthpiece and bite block of debris by thoroughly scrubbing with soap and water or a detergent solution.
- Clean the inside of the mouthpiece through access at the slit opening and at the suction connector region using a long-handled brush and thorough scrubbing.
- Then, rinse under running water, air dry and place in autoclave pouch to be sterilized.
- The DryShield® Mouthpiece **MUST BE** sterilized between each use. Sterilize in a steam autoclave machine at minimum 121 °C (250 °F) for a minimum of 30 minutes. Allow a minimum of 30 minutes in drying cycle.

The sterilization parameters for the DryShield Mouthpiece are found below.

Cycle Type	Parameter	Minimum Set Point
Gravity 250° F (121°C)	Exposure Temperature	250° F (121°C)
	Exposure Time	30 minutes
	Dry Time	30 minutes

DryShield® Autoclavable mouthpieces are autoclavable up to 50 times.



# Sterilization Guide

1



**Detach bite block from mouthpiece.**

2



**Scrub both for 1 minute with a small brush (e.g. toothbrush) using soap and water, including inside the neck and slit of mouthpiece. Invert under water and check for removal of all debris.**

3



**Place mouthpiece and bite block in an enzymatic cleaning solution and ultrasonic bath for 15 minutes.**

4



**Rinse under running water for 1 minute scrubbing any debris and ultrasonic solution residue with a soft brush, then lay on a cloth to dry.**

5



**Place bite block and mouthpiece into autoclave bag and seal.**






6



**Use a Gravity type Sterilizer (Steam) at 250°F (121°C) for 30 minutes, followed by a 30 minute drying cycle.**

When the mouthpiece begins to take on a perceptible tint, it is an indicator that it is time for disposal and replenishment.







# Precautions

-  **CAUTION:** Do not use DryShield® until you have reviewed the user guide, watch the training videos, and/or have received our phone training on how to install into the operatory room, how to select and place the mouthpiece size correctly, and how to clean and sterilize it.
-  **CAUTION:** It is recommended to flush the mouthpiece with water from time to time for dental procedures involving high evacuation of blood to avoid decrease in suction power.
-  **CAUTION:** Do not autoclave the DS1 at temperatures above 121 C as it may damage it.
-  **CAUTION:** Do not overextend the bite block strap or at the mouthpiece slit opening as it may tear or break it.
-  **CAUTION:** Do not step, crimp, or fold the suction hose in any way as that could cause loss of suction power.

# Autoclavable Mouthpiece


## Warnings



-  **WARNING:** Do not use the mouthpiece if package seal is broken, open or damaged.
-  **WARNING:** Do not cold sterilize the mouthpiece. All DryShield® mouthpieces MUST be cleaned and autoclaved following the instructions for use after each patient use.
-  **WARNING:** Do not use surface disinfectants on the mouthpiece. All Autoclavable DryShield® mouthpieces MUST be cleaned and autoclaved after each use.
-  **WARNING:** Do not attach the bite block to the mouthpiece when autoclaving. Bite block and mouthpiece are to be detached and placed into the same sterilization bag during autoclaving process.
-  **WARNING:** Do not use if there is a tear, fracture, or breakage in the mouthpiece or DS1.
-  **WARNING:** When using DryShield® during sedation dentistry, patient monitoring and following established guidelines and procedures by the dentist and anesthesiologist are required.

# Troubleshooting

## We're Here to Help

-  **I want to also have the standard HVE available for my patients.**  
There are two options: 1) Use Y connector kit installation 2) Connect standard HVE hose to extra standard HVE port.
-  **Can I connect DryShield® to my extra standard HVE port?**  
You may connect DryShield® if your canister has an extra standard HVE port.
-  **I want to use my standard HVE, but what if my canister doesn't have an extra standard HVE port?**  
Installing the Y Connector Kit will allow you to use DryShield® along with the standard HVE.
-  **What if my patient has a sensitive gag reflex?**  
Encourage your patient to breathe through their nose, not the mouth—as they would when taking an impression.
-  **The suction feels weak.**  
Clear any debris blockage in the hose, waste filter, and traps. For best results, regularly inspect DryShield® components and purge the lines with an enzymatic cleaning solution.
-  **I'm having difficulty putting the mouthpiece on the DS1.**  
Spray a mixture of air and water on the inner lining of the mouthpiece. Slide the mouthpiece onto the DS1 with a rocking motion until it locks into place. Please refer to page 4.
-  **I'm having difficulty placing the mouthpiece into my patient's mouth.**  
Spray a mixture of air and water on the back surface of the mouthpiece for lubrication. Then refer to placement technique on page 4.
-  **What is the sterilization protocol for DryShield® Autoclavable mouthpiece?**  
Please refer to pages 8-9 or the Sterilization Guide provided.
-  **How do I know it's time to replace my DryShield® Autoclavable mouthpiece?**  
As a rule of thumb, when the mouthpiece begins to take on a perceptible tint, it is an indicator that it may be time for disposal and replenishment.
-  **Can I re-use single-use mouthpieces in any way?**  
No, do not re-use single-use mouthpieces. Re-use can result in cross infection and transmission of infectious pathogens.



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