

# Going for the "Green"

## COLTENE Introduces the Next Generation Pulp Vitality Testing Spray

COLTENE INC, the market leader in pulp vitality testing spray, is pleased to introduce CanalPro® Endo-Ice Green to the North American market. CanalPro® Endo-Ice Green is the first low global warming refrigerant spray with a Global Warming Potential (GWP) of <1. With a significantly shorter atmospheric lifetime than counterparts currently on the market, CanalPro® Endo-Ice Green will offer dentists the most environmentally-friendly, effective pulp vitality testing spray available to date.

### Why COLTENE introduced Endo-Ice Green

According to NASA, ninety-seven percent of climate scientists agree that climate-warming trends over the past century are very likely due to human activities since the mid-20th century. Carbon dioxide affects the transfer of infrared energy through the atmosphere.

Global warming potential (GWP) is a measure which enables comparisons of the global warming effects of different gases. It compares the amount of heat trapped by a certain mass of gas to the amount of heat trapped by a certain mass of carbon dioxide over a specific period of time. Carbon dioxide was chosen by the Intergovernmental Panel on Climate Change (IPCC) as the reference gas and its GWP is taken as 1. The higher the GWP value, the more that particular gas warms the Earth compared to carbon dioxide. GWP values for ozone depleting substances can range, for example, from 2 up to about 14,000. The GWPs of commonly used HFCs can range from <1 to about 12,500.

The California Air Resources Board (CARB) adopted a regulation in 2018 that prohibits the use of hydrofluorocarbons (HFCs) chemicals that are between 1,000 and 3,000 times more potent than carbon dioxide. HFCs are a type of short-lived climate pollution that can become mixed throughout the atmosphere and linger for an average of 14 years.

COLTENE decided to take action and make the investment in developing and using a more climate-friendly alternative. Endo-Ice Green is a hydrofluoroolefin. It was developed as a "fourth generation" refrigerant to replace HFCs in many applications. It delivers zero ozone-depletion potential (ODP=0), a very low

global-warming potential (GWP < 1), even lower than CO<sub>2</sub>, and it is classified by ANSI/ASHRAE as class A2L refrigerant (lower flammability and lower toxicity). The increasing concerns about global warming and the related possible undesirable climate effects have led to an increasing agreement in developed countries for the reduction of greenhouse gas emissions.

Board Certified Endodontists were asked to test Endo-Ice and Endo-Ice "Green" side-by-side in the clinic. They were able to register the same response for vitality testing and were unable to detect any difference in the performance of the two products. COLTENE's goal to create an efficient, environmentally-friendly pulp vitality diagnosis spray has been realized.

### History of Endo-Ice

Decades ago, COLTENE introduced Endo-Ice. Endo-Ice launched commercially in 1988. Prior to this, most dentists used ice sticks or carbon dioxide. Ice melts rapidly, causing potential false positives as the cold water from the melting ice comes into contact with adjacent teeth. Carbon dioxide snow is expensive and cumbersome to use clinically.

Today, the most popular method of performing cold testing is with a refrigerant spray. Endo-Ice refrigerant spray is a much better tool since it is very cold, very cost-effective and goes almost instantly from liquid to gas phase, minimizing the chances of false positive responses. It is an indispensable tool in the dental armamentarium to achieve predictable endodontic outcomes.



60023526 CanalPro Endo-Ice Green (Low Global Warming)

60022994 Endo-Ice Replacement Straws (100 pack)

**Coltène/Whaledent Inc.**   
235 Ascot Parkway  
Cuyahoga Falls, OH 44223 / USA  
Tel. USA & Canada + 1 800 221 3046  
+ 1 330 916 8800  
Fax +1 330 645 8704  
info.us@coltene.com

 **COLTENE**

coltene.com

SDS Available @coltene.com