

EVERY FLAVOR HOUSE SAYS THEY

#### Ze.

#### TASTE BETTER,

BUT THERE HASN'T BEEN ANY

#### INNOVATION

IN POWDER FLAVOR FOR

100 YEARS.

Zoom Essence is here to change that.



MEET **ZOOM ESSENCE**.



## ZOOM ESSENCE IS A TASTE TECHNOLOGY COMPANY PIONEERING NEW TECHNOLOGY IN FLAVOR SCIENCE.

Our patented **low-temperature** innovation-**Zooming**-changes the powder flavor game for the first time in a century.



Zooming is designed for heat-sensitive flavors and naturals, delivering unmatched depth of aroma and taste.

Low-temp drying means our powder flavor particle is more concentrated with complex natural flavor, easier on the environment and lowers cost-in-use by 30%.

We don't taste better, we taste like the real thing.

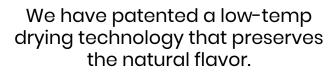
## SPRAY DRYING VS. ZOOMING ZOO

SPRAY DRYING REQUIRES

400° HEAT



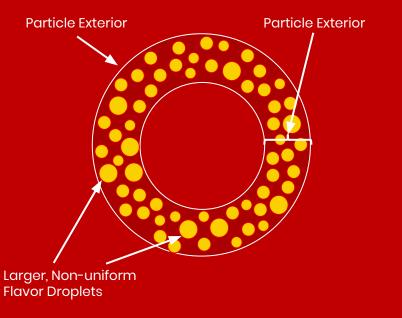






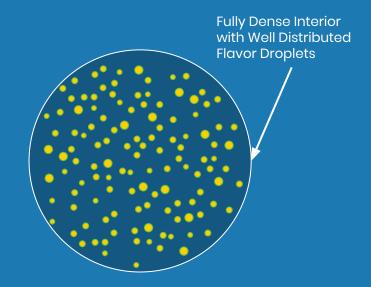
Heat kills flavor.

#### TYPICAL HIGH HEAT SPRAY **DRIED POWDER**



**VS** 

#### COOLZOOM™ POWDER



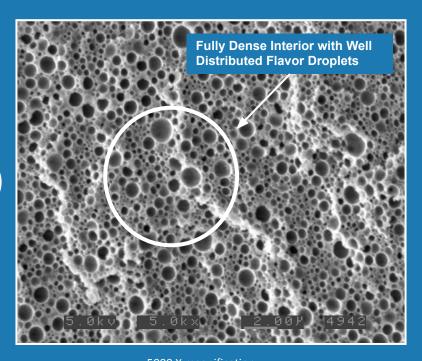
3500 X magnification

5000 X magnification

#### TYPICAL HIGH HEAT SPRAY **DRIED POWDER**

#### **Particle Exterior Thin Shell** Larger, Non-Uniform **Flavor Droplets** 2.867 4411

#### COOLZOOM™ POWDER



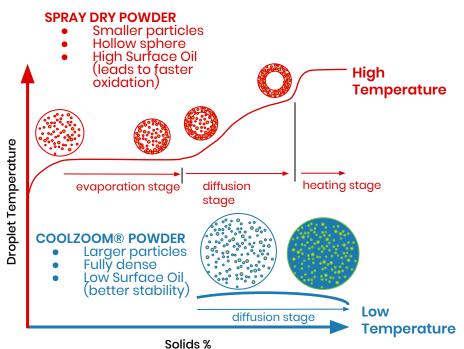
VS

3500 X magnification

5000 X magnification

## POWDER: HEAT IS THE ENEMY





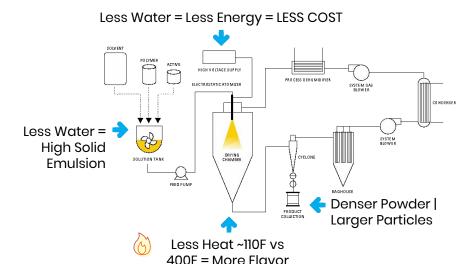
#### HIGH HEAT SPRAY DRIED **POWDER FLAVOR:**



#### ZOOM LOW-TEMPERATURE **POWDER FLAVOR:**

Average Taste Complexity	Concentrated Natural Taste Complexity
Degraded Particle	Dense, Potent Flavor Particle
Less Stable	More Stable
Low Solubility	Higher Solubility
High Usage Rates	Reduced Usage Rates

#### ZOOMING PATENTED PROCESS





### CLEAN GREEN TECH GRANTS











## ZOOMING BENEFITS OF ZOOMING

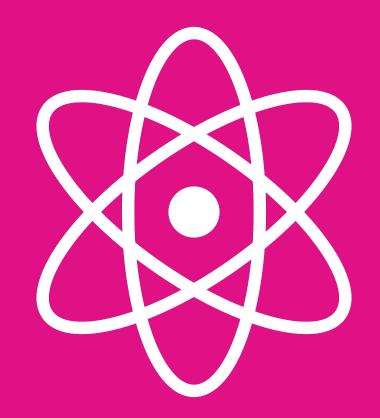
## IMMEDIATE DISPERSION



**Incredible Dispersibility** 

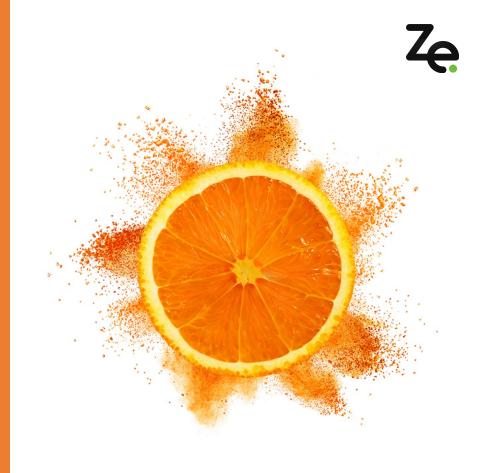
Larger more dense particles vs. spray drying

#### IMPROVED STABILITY



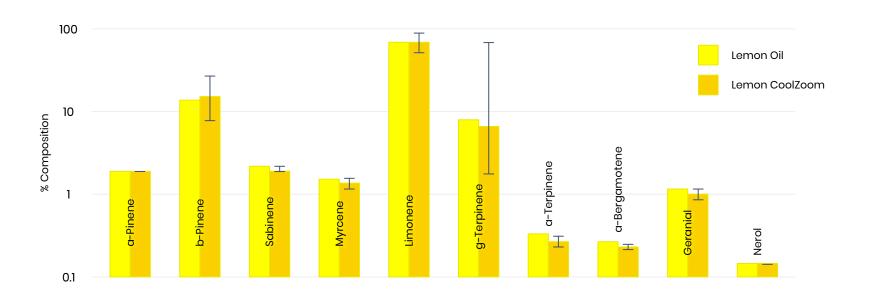
Enhanced Stability
Better encapsulation

# POWDER FORM



#### ZOOMING® DELIVERS NATURE'S FINGERPRINT







> ANY INNOVATION < IN FLAVOR FOR IOO YEARS.

TASTE THE FUTURE.

**ZOOM ESSENCE** 





# >SCIENCE MET TASTE

ZoomEssence is literally the story of when 21st century science met the taste experience. A flavor expert and former Global President of Flavors at IFF, Bob Corbett, and a physicist, Chuck Beetz met. Chuck was trying to keep paint from drying before hitting a wall. Bob was trying to make things taste better. It's hard to imagine where those two ideas come together but they did.

The science of creating flavors hadn't changed in 100 years. Spray drying was the tried and true method for drying flavor into powder form. It used high-heat to evaporate the liquid and leave the flavor. The only problem was, it evaporated some of the essential oils as well. The heat evaporated the flavor and left particles filled with air bubbles instead of the base flavor compounds.

Chuck's paint method was using different actuators and physics to create a spray that would stay a liquid till it hit the surface. Bob asked Chuck if he could reverse engineer the process to create a method for drying liquid that didn't require high temperatures,

because heat is the enemy of flavor. Chuck being a physicist who loves a challenge, did just that. The rest is Zoom history.

Voila, the duo had invented a better flavor form. They could preserve the robust flavor and aroma profile of the actual ingredient better than any powder flavor on the market, and in some cases better than liquid flavor. After some experimentation, they realized that the cool zoom technology actually delivered a completely innovative flavor experience across applications. When looking at the efficiency and effectiveness of flavoring a product, ZoomEssence, a powder flavor, out performs any other flavor on the market, liquid included.

Now ZoomEssence has grown to a full-on, science-meets-flavor business that utilizes low-temperature tech to create tastes never before possible in powder flavors, powder flavors that perform as well as or better than liquid, and slurry innovations. As ZoomEssence's technology evolves so will the taste experience as we know it.

ZoomEssence

is a taste technology company pioneering new technology in flavor science.

Our patented **low-temperature** innovation-**Zooming**-changes the flavor game for the first time in a century.

