



# FLAVOURS

Innovation in Natural Food  
Colouring and Flavouring

**OUR GLOBAL DISTRIBUTION  
AVAILABLE IN 49 COUNTRIES**

## WHY PLANT-EX?

Established in 2010 and boasting an industry experience of more than 25 years, the Plant-Ex team has developed a portfolio of ingredients which are supplied into the food and feed industries across the globe. Individual development laboratories combined with the experience of a multitude of different applications means that the organisation knows how to deliver a product that performs.

**Taste, colour and function** are critical elements in nutrition for both humans and animals. Our expertise spans the three subjects, and our factories and raw material routes are well placed to give customers and their animals the best options that nature can offer.

- |                 |   |
|-----------------|---|
| <b>Taste</b>    | Pallatability, flavour and preference       |
| <b>Colour</b>   | Appearance, differentiation and brand value |
| <b>Function</b> | Nutrition, shelf life and health            |

\*Talk to our team about legislatively compliant options with supportive studies assured to assist in the development of great products.



# WHAT IS A FLAVOUR?

A flavour is a mixture of aroma-chemical molecules that is not intended to be consumed in concentrated form but is used within a food product.

## TOP NOTES

First notes are tasted. They only last a short time.

## HEART NOTES

Main notes. They are what makes the flavour characteristic.

## BOTTOM NOTES

These notes can still be tasted after swallowing.



[WWW.PLANT-EX.COM](http://WWW.PLANT-EX.COM)  
VISIT OUR WEBSITE TO GET MORE INFORMATION

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## THE PROCESS IN SHORT

Our Flavourists combine their years of knowledge with the latest technical equipment to develop fresh and innovative new formulations.

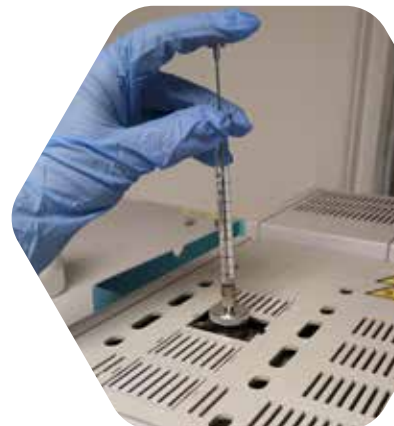
Plant-Ex has all its production in-house, including spray drying. This means that total control can be maintained both during design and production, from small to large batches.

The process that our Flavourists use when making a new flavour is called compounding. This is done by mixing aroma-chemicals at certain ratios which complement each other, resulting in the desirable taste and aroma.

## FLAVOUR CHECKLIST

- Format – Powder or liquid?
- Solubility – Oil soluble or water soluble?
- Application – What will the product be used in?
- Target cost – is there a price that needs working to?
- Legal Declaration - FTNF, Natural or Artificial
- Profile
- Kosher / Halal / Vegan

Looking for a Flavour? Please run through the above questions to help us determine the best option to recommend. The more information about your requirements that our team can receive, the closer to the target profile we are likely to reach.





## AVAILABLE FORMATS

Plant-Ex strength in Flavours lies both within the dynamic team of flavourists and their laboratory, and with our Operations team who have the necessary in-house capabilities to ensure that flavours are produced with optimum consistency. No external contracting is used, everything is made to order, and bespoke products are a possibility.

- Liquid Compounds comprising of water-soluble or oil-soluble liquids.
- Washes are the water-soluble part coming from solvent extractions of oily extracts.
- Emulsions containing fine particle suspensions of oil derived flavours in an aqueous solution.
- Spray-dried powders consist of a carrier that encapsulates compounds for stability and shelf life.

Our strength is our understanding of the creation process, production and use of the products in different applications.



# FLAVOUR CLASSIFICATIONS

## **FTNF (from the named food)**

FTNF flavours are extracts or distillates that are 100% derived from the named source material without additional flavourings added. An FTNF flavour can be declared as “X Extract”, or “Strawberry Extract”

## **95/5**

In a 95/5 flavouring, at least 95% of the flavour components must originate from the named source material, with 5% originating from other natural sources/flavourings and used for the purpose of rounding off or standardising to ensure a consistent flavour profile.

A 95/5 natural flavouring can be declared as “Natural X Flavouring” for example, “Natural Strawberry Flavouring”

## **WONF (with other natural flavourings)**

< 95% of the flavour is derived from the named source, with the rest being made up from other natural flavouring substances or preparations. A WONF flavour is declared as “Natural X Flavouring with other natural flavouring”

## **NATURAL FLAVOUR**

Extracts and/or naturally occurring chemicals obtained by a natural process only can be used. It will be declared as ‘Natural Flavouring’.

## **ARTIFICIAL FLAVOUR**

Extracts and/or all food safe chemically defined substance can be used. It is declared as ‘Flavouring’.



# FLAVOUR DEVELOPMENT LAB

Plant-Ex can match or create a custom flavour for your application. Our flavour

laboratory can help to:

- Match an existing flavour or create a customised flavour
- Remove unwanted ingredients, e.g. palm, preservatives
- Switch from artificial to natural
- Create industry-specific portfolios across a wide range of food industry applications

NPD support includes:

- Flavour matching reports
- New product development
- Formulation and processing advice
- Stability
- Applications testing



# FLAVOUR MATCHING

Matching a flavour is often required where a customer needs a lower-cost alternative to existing supply or a second alternative for supply chain security.

The sample is assessed and put through GCMS to analyse it.

That gives us an indication of what the flavour consists of. It provides us with an idea of ingredients' ratios, but we still need to make few trials and base the final match on the taste. If the target flavour is old, it is not possible to identify all the components due to reactions between them, which happens over time.

Flavour match can take from 1 to 30 trials, depending on how complex it is. The flavour team taste each trial together, make comments and then make necessary changes.





# FLAVOUR CREATION

At Plant-Ex we create unique flavours as a result of a long and extensive process. Indeed, after receiving a brief, ingredients will have to be carefully selected, combined and tasted to achieve the best profile.

Our flavour team shares years of training and experience and makes sure all flavours meet the regulatory requirements, the food industry expectations and most importantly customers preferences.

We work closely with customers and communicate as often as needed, which makes us achieve desired product in the shortest and most efficient way.



# CATEGORIES OF FLAVOURS BY APPLICATION

For a detailed list of the flavours and their characteristics, please visit the Flavours list Xls file in the shared drive or contact us at [sales@plant-ex.com](mailto:sales@plant-ex.com)



**Beverages**



**Dairy**



**Savoury**



**Sweet Goods**



**Diverse**

With more than 5000 formulations in-house, Diverse and a team of Flavourists bursting with creativity, the profiles that we can supply are too many to list. Please talk to the team and let them guide you in your choice.



# BEVERAGES

Alcohol  
Drinks



Soft  
Drinks



Carbonated  
Soft Drinks



Hot  
Drinks



Powdered  
Soft Drinks



# DAIRY

Most of our dairy flavours are Vegan.



Ice-Creams



Yoghurts



Dairy  
Drinks



Cheeses



Desserts



Dairy-Free





# SAVOURY



# SWEET GOODS



# DIVERSE



Pharmaceutical



Hookah



Tobacco





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