

## PRODUCT REGULATORY SUMMARY

# ENZOSE<sup>®</sup> 42 DE Corn Syrup

MANUFACTURER: Ingredion Incorporated

DATE: 04/09/2021

### INCI

Corn Syrup

### COMPOSITION

100% Corn Syrup (CAS No. 8029-43-4)

### ALLERGENS

ENZOSE<sup>®</sup> 42 DE Corn Syrup is not produced using nor expected to contain any of the 26 fragrance allergens listed in Annex III of Regulation (EC) No 1223/2009. Additionally, ENZOSE<sup>®</sup> 42 DE Corn Syrup is not produced using nor expected to contain any of the common allergens listed below.

- Cereals containing gluten and products thereof
- Crustaceans and products thereof
- Eggs and products thereof
- Fish and products thereof
- Peanuts and products thereof
- Soybeans and products thereof
- Milk and products thereof
- Tree nuts (walnuts, pecans, etc.) and products thereof
- Celery and products thereof
- Mustard and products thereof
- Sesame seeds and products thereof
- Lupin and products thereof
- Mollusks and products thereof
- Monosodium glutamate
- Wheat
- Artificial colors

ENZOSE<sup>®</sup> 42 DE Corn Syrup may contain <10 ppm of sulfites.

## **ANIMAL CONTENT**

The origin and source or the raw materials used in the production of ENZOSE® 42 DE Corn Syrup are entirely botanical or manufactured. This product does not contain any raw materials produced from or derived from animal origin. The manufacturing process does not use any ingredient or animal origin nor is the product expected to come into contact with animal products during storage and transportation.

Therefore, we consider ENZOSE® 42 DE Corn Syrup to be free of Bovine Spongiform Encephalopathy (BSE) and Transmissible Spongiform Encephalopathy (TSE).

## **ANIMAL TESTING**

Barentz North America LLC does not perform, contract, or participate in animal testing with any of our products. Additionally, ENZOSE® 42 DE Corn Syrup has not been tested on animals by the manufacturer of this product.

## **COUNTRY OF ORIGIN**

ENZOSE® 42 DE Corn Syrup is manufactured in Canada at the below address.

Ingredion Inc.  
4040 James Street  
Cardinal, Ontario. K0E 1E0 Canada

## **CARCINOGENS, MUTAGENS, TOXIC FOR REPRODUCTION (CMR)**

ENZOSE® 42 DE Corn Syrup is not expected to contain any carcinogens, mutagens, or toxic for reproduction (CMR) substances outlined within Annex II of Council Directive 76/769/EEC.

## **FEEDSTOCK ORIGIN**

ENZOSE® 42 DE Corn Syrup is manufactured using plant material. The product is derived from corn (maize).

## **FDA STATUS**

Barentz North America LLC is registered with the United States FDA and is therefore subject to unannounced FDA compliance inspections. Additionally, the manufacturer of ENZOSE® 42 DE Corn Syrup, Ingredion, is also registered with the FDA.

## **FOOD GRADE**

ENZOSE® 42 DE Corn Syrup is Generally Recognized as Safe (GRAS) per 21 CFR §184.1865. This product is manufactured using Good Manufacturing Practices and is safe for its intended use in foods.

## GLUTEN

ENZOSE® 42 DE Corn Syrup does not contain nor is it expected to come into contact with gluten or products containing gluten.

## GLOBAL INVENTORY

To the best of our knowledge, ENZOSE® 42 DE Corn Syrup, with CAS number 8029-43-4, is either exempt from or can be found as a positive listing on the chemical inventories listed below.

- Australia— Australian Inventory of Chemical Substances (AICS)
- Canada—Domestic Substances List (DSL)
- China—Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)
- New Zealand— New Zealand Inventory (NZIoC)
- The Philippines— Philippine Inventory of Chemicals and Chemical Substances (PICCS)
- South Korea— Korean Existing Chemicals List (KECI)
- South Korea— K-REACH registration exemption substances list
- Taiwan— Taiwan Chemical Substance Inventory (TCSI)
- United States— Toxic Substances Control Act Inventory (TSCA)

## GENETICALLY MODIFIED ORGANISMS (GMO)

ENZOSE® 42 DE Corn Syrup may be manufactured using corn which has been genetically modified. However, we support the following position of the Corn Refiners Association, Inc., regarding the potential use of transgenic corn varieties.

*"Many beverages use high fructose corn syrup as a sweetener. While the corn used to produce this sweetener may be derived from genetically enhanced varieties, processing of highly refined food ingredients such as high fructose corn syrup removes DNA used to transfer desirable agricultural properties to corn. During HFCS production, DNA is denatured, degraded, or removed through successive processing steps including physical separation, heating, purification and filtration. We have reviewed published literature documenting this process, as well as analyses conducted using today's most sophisticated detection and quantification procedures. Both literature and current testing indicate that corn DNA cannot be detected in measurable amounts in HFCS."*

*-Corn Refiners Association, Inc.*

Like high fructose corn syrup, ENZOSE® 42 DE Corn Syrup is made by hydrolysis of the starch fraction of corn and is a highly refined food ingredient. This product goes through several physical and chemical processing stages that will denature, degrade and remove DNA. For this reason, we believe that corn DNA is not detectable in measurable amounts in ENZOSE® 42 DE Corn Syrup.

## HALAL

Current certificate available upon request.

## **HEAVY METALS & ELEMENTAL IMPURITIES**

None of the toxic elements—Cadmium, Hexavalent Chromium, Lead, or Mercury—are used as raw materials nor deliberately added during the manufacturing process of the product. With this in mind, ENZOSE® 42 DE Corn Syrup is expected to be free from the above-mentioned toxic elements. Any incidental amount would be expected to be less than 100 parts per million (ppm).

## **KOSHER**

Current certificate available upon request.

## **LOT CODE**

ENZOSE® 42 DE Corn Syrup uses a 10-digit code for product lot identification.

Digits 1-3 = Internal location code

Digit 4 = Last digit of production year

Digits 5-7= Date of manufacture (Julian date)

Digits 8-10 = Sequential number of the lot produced at the location on the date of manufacture

Example: Lot 1361007002

136 = Location Code

1 = product produced in 2021

007 = product produced January 7

002 = third lot produced on January 7, 2021

## **MELAMINE**

ENZOSE® 42 DE Corn Syrup is not a source for protein, therefore ENZOSE® 42 DE Corn Syrup should not be considered “at risk” for intentional adulteration with melamine. Melamine is not present as an ingredient, sub-ingredient, processing, or present on a production line at the manufacturing facility.

## **NANOMATERIAL**

The use of nanomaterials or nanotechnology is not utilized during the manufacture of ENZOSE® 42 DE Corn Syrup.

## NUTRITION FACTS

Per 100 grams

Total Fat (g)	<0.1*
Saturated Fat	Not a dietary source
Trans Fat	Not a dietary source
Cholesterol	Not a dietary source
Total Carbohydrates (g)	80.4
Dietary Fiber	Not a dietary source
Added Sugars	Not a dietary source
Simple Sugars** (g)	27.5
Protein (g)	<0.1*
Vitamin D	Not a dietary source
Calcium (mg)	<4*
Iron (mg)	<0.4*
Potassium (mg)	<20*
Sodium (mg)	<4*
Calories	322
*Not present at level of qualification	
**Total sugars in this product may contribute to "Added Sugars" for nutrition labeling purposes in the final consumer product.	

## PESTICIDE

The manufacturer of ENZOSE<sup>®</sup> 42 DE Corn Syrup has a pesticide residue program consisting of regular audits of the raw material, used in the production of ENZOSE<sup>®</sup> 42 DE Corn Syrup, corn. These audits ensure that corn containing detectable pesticide residue is not being processed. Based upon historical data from these audits, Ingredient's finished products do not contain detectable levels of pesticides.

## PROPOSITION 65

ENZOSE<sup>®</sup> 42 DE Corn Syrup is not expected to contain any substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under California Proposition 65, Safe Drinking Water and Toxic Enforcement Act of 1986 as of December 18, 2020.

## **PHTHALATES**

ENZOSE® 42 DE Corn Syrup and packaging used for this product is not manufactured using phthalates and does not contain phthalates, including, but not limited to, DEHP, DINP, DNOP, DIDP, DBP, and BBP.

## **SUBSTANCES OF VERY HIGH CONCERN (SVHC)**

None of the substances contained in the Candidate List of Substances of Very High Concern (SVHC) as of January 19, 2021 are intentionally used nor added in the manufacture of ENZOSE® 42 DE Corn Syrup. Because the presence of the substances in the Candidate List are not expected under normal conditions, the absence has not been checked by tests.

## **VEGAN**

Because ENZOSE® 42 DE Corn Syrup is manufactured without the use of any ingredients of animal origin, it is considered vegan friendly.

## **DISCLAIMER**

The information contained in this document is based upon data obtained from the manufacturer. This information is offered only as a guide to the handling of this specific material and conditions. The use and handling of this material may require alternate and additional considerations. No representation or warranty of any kind whatsoever is given or implied by Barentz North America LLC with respect to any information contained herein. In no event or circumstance shall Barentz North America LLC be liable for any damages, losses, liabilities or injuries of any kind whatsoever arising from any information contained herein including, without limitation, all indirect, special or consequential damages or losses which may result from the information contained herein.