

# DIMENSION™ CORN OIL EXTRACTION AIDS

**Increased corn oil yield and improved  
corn oil quality**



- Increased corn oil yield
- Improved corn oil quality
- Reduced system deposition
- Reduced downtime

## Technology Overview

Dimension corn oil extraction aids are patented, non-polymeric, liquid products that significantly increase corn oil yield by improving the release of oil during mechanical extraction. The extraction aids not only allow for increased corn oil production but also reduce solids in the oil, resulting in a cleaner, higher-quality oil. Additionally, the extraction aids have been shown to reduce system deposition, resulting in less downtime for system cleaning and maintenance.

PRODUCT OPTIONS	SELECTION CONSIDERATIONS
Dimension COE8269	Low-dose option providing maximum corn oil production. Good choice for low residence time situations.
Dimension COE8146	High-performance options providing maximum corn oil production. Excellent choice for most extraction systems.
Dimension COE8144	
Dimension COE8143	
Dimension COE8058	Economical option when maximum corn oil production is not required or when leaving more oil in the distillers grains is desired.

Notably, the extraction aids have enabled a number of North American fuel ethanol plants to produce up to three times more corn oil than previously achieved with mechanical means alone.



## Mode of Action

Dimension corn oil extraction aids improve the release of corn oil during centrifugation by modifying the surface chemistry of solids and oil micelles in the syrup. Oil in the treated syrup is more easily released and less centrifugal energy is required to separate the oil from the syrup. This not only allows for increased corn oil production but also allows for the production of cleaner corn oil. Additionally, the treated syrup is less likely to foul the centrifuge due to the dispersive nature of the extraction aid and its effect on solids in the syrup.

## Application Technology

For optimum results, Dimension corn oil extraction aids should be applied as received and fed at a point of adequate mixing. For most applications, it is recommended that the extraction aid be fed prior to the centrifuge. When applied before the centrifuge, increased corn oil yield is typically seen within three to five minutes. The extraction aid can also be fed prior to conditioning tanks and heaters or at evaporators.

## Feed and Dosing Equipment

Automated feed and dosing equipment that is specifically designed for use with Dimension corn oil extraction aids is available from Solenis. Use of this equipment is recommended as it enables fuel ethanol plants to vary corn oil production on demand.

## Features and Benefits

Dimension corn oil extraction aids contain no APEs or VOCs and are biodegradable and generally recognized as safe (GRAS) when coproducts from the ethanol process are used in livestock feed. Kosher versions are available for all product options.

Commercial applications confirm that the extraction aids provide a number of value-added benefits, including:

- Increased corn oil yield
- Improved corn oil quality
- Reduced system deposition
- Reduced downtime

## More Information

For more information about Dimension corn oil extraction aids, please visit [solenis.com/cornoil](http://solenis.com/cornoil).