

## **EXCLUDED AND PROHIBITED METHODS**

7 CFR section 205.105 requires that "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" must be produced and handled without the use of excluded methods, ionizing radiation, and sewage sludge.

Excluded methods. A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

## PROHIBITED EXCLUDED METHODS INCLUDE, BUT ARE NOT LIMITED TO:

Method and synonyms	Types
Targeted genetic modification (TagMo) syn. Synthetic gene technologies syn. Genome engineering syn. Gene editing syn. Gene targeting	Sequence-specific nucleases (SSNs) Meganucleases Zinc finger nuclease (ZFN) Mutagenesis via Oligonucleotides CRISPR-Cas system (Clustered regularly interspaced short palindromic repeats) and associated protein genes TALENs (Transcription activator-like effector nucleases) Oligonucleotide directed mutagenesis (ODM) Rapid Trait Development System
Gene Silencing	RNA-dependent DNA methylation (RdDM) Silencing via RNAi pathway RNAi pesticides
Accelerated plant breeding techniques	Reverse Breeding Genome Elimination FasTrack Fast flowering
Synthetic biology	Creating new DNA sequences Synthetic chromosomes Engineered biological functions and systems
Cloned animals and offspring	Somatic nuclear transfer
Plastid transformation	
Cisgenesis	The gene modification of a recipient plant with a natural gene from a crossable-sexually compatible-plant. The introduced gene includes its introns and is flanked by its native promoter and terminator in the normal-sense orientation.
Intragenesis	The full or partial coding of DNA sequences of genes originating from the sexually compatible gene pool of the recipient plant and arranged in sense or antisense orientation. In addition, the promoter, spacer, and terminator may originate from a sexually compatible gene pool of the recipient plant.
Agro-infiltration	
Transposons	Developed through use of in vitro nucleic acid techniques and does not include transposons developed through environmental stress such as heat, drought or cold.
Induced mutagenesis	Developed through in vitro nucleic acid techniques and does not include mutagenesis developed through exposure to UV light, chemicals, irradiation, or other stress-causing activities.

## **EXCLUDED AND PROHIBITED METHODS**

This verification needs to be completed and signed by the *original* manufacturer or producer of the input. Any subsequent processing *by a different entity* will require a separate verification form to be completed by that processor.

I have provided:		
☐ Seeds/Planting Stock ☐ Inoculant ☐ Nonsynthetic (natural) ingredient ☐ Proteinated feed	d mineral	
□Enzyme □Yeast □ Nonorganic agricultural ingredient □ Other:		
Varieties or brand name(s) of product(s):		
Description of the processing process for each product listed above:		
I affirm that (check the applicable answer for each of the statements below):		
	d mathada	
☐ Yes/True ☐ No/False ☐ N/A The above product(s) has not been <i>produced</i> using exclude		
genetic engineering, or genetically manipulated organisms or ingredients. The product(s) listed a		
derived from products or ingredients that contain genetically modified organisms (GMOs) and ha		
produced with GMO processing aids (for example enzymes or microorganisms). Substrate, feedst	ocks or	
culture media are not required to be produced without excluded methods.		
☐ Yes/True ☐ No/False ☐ N/A The above product(s) has not been produced with sewage sl	udge.	
☐ Yes/True ☐ No/False ☐ N/A The above product(s) has not been processed using ionizing	radiation.	
☐ Yes/True ☐ No/False ☐ N/A The above product(s), if a proteinated feed mineral - is not s	ourced from	
slaughter by-products.		
Name (please print)Position		
Company and/or Farm name		
Address		
City State Zip		
Phone Email		
Signature Date		