Guidance

Decision Tree for Classification of Agricultural and Nonagricultural Materials for Organic Livestock Production or Handling

Start with a substance

1. Is the substance a mineral or bacterial culture as included in the definition of nonagricultural substance at section 205.2 of the USDA organic regulations?

   Yes

   No

2. Is the substance a microorganism (e.g., yeast, bacteria, fungi) or enzyme?

   Yes

   No

3. Is the substance a crop or livestock product or derived from crops or livestock?*

   Yes

   No

4. Has the substance been processed to the extent that its chemical structure has been changed?

   Yes

   No

5. Is the chemical change a result of naturally occurring biological processes such as fermentation or use of enzymes; or a result of mechanical/physical/biological process described under section 205.270(a)?

   Yes

   No

Agricultural

Nonagricultural

* In the absence of standards for organic aquatic animal production, products derived from aquatic animals (e.g., fish and crab meal) may be considered non-agricultural when used as livestock feed additives.
Definitions (bolded terms in 7 CFR 205.2)

Agricultural inputs. All substances or materials used in the production or handling of organic agricultural products.

Agricultural product. Any agricultural commodity or product, whether raw or processed, including any commodity or product derived from livestock, that is marketed in the United States for human or livestock consumption.

Allowed synthetic. A substance that is included on the National List of synthetic substances allowed for use in organic production or handling.

Chemical change. A process (i.e. chemical reaction) whereby a substance is transformed into one or more other distinct substances.

Enzyme. A protein that catalyzes a chemical reaction.

Extract. To separate, withdraw, or obtain one or more constituents of an organism, substance, or mixture by use of solvents (dissolution), acid-base extraction, or mechanical or physical methods.

Formulate. To combine different materials according to a recipe or formula.

Generic. The common and familiar non-proprietary name.

Manufacture. To make a substance from raw materials.

Natural source. Naturally occurring mineral or biological matter.

Naturally occurring biological process. A process that occurs due to the action of biological organisms or subcomponents of biological organisms, such as enzymes. Examples of naturally occurring biological processes include, but are not limited to, fermentation, composting, manure production, anaerobic digestion, and enzymatic hydrolysis.

Nonagricultural substance. A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. For the purposes of this part, a nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate, or fraction.

Nonsynthetic (natural). A substance that is derived from mineral, plant, or animal matter and does not undergo a synthetic process as defined in section 6502(21) of the Act (7 U.S.C. 6502(21)). For the purposes of this part, nonsynthetic is used as a synonym for natural as the term is used in the Act.

Processing. Cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, extracting, slaughtering, cutting, fermenting, distilling, eviscerating, preserving, dehydrating,
freezing, chilling, or otherwise manufacturing and includes the packaging, canning, jarring, or otherwise enclosing food in a container.

**Processing aid.** (1) Substance that is added to a food during the processing of such food but is removed in some manner from the food before it is packaged in its finished form;

(2) a substance that is added to a food during processing, is converted into constituents normally present in the food, and does not significantly increase the amount of the constituents naturally found in the food; and

(3) a substance that is added to a food for its technical or functional effect in the processing but is present in the finished food at insignificant levels and does not have any technical or functional effect in that food.

**Substance.** A generic type of material, such as an element, molecular species, or chemical compound, that possesses a distinct identity (e.g. having a separate Chemical Abstracts Service (CAS) number, Codex International Numbering System (INS) number, or FDA or other agency standard of identity).

**Synthetic.** A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

**Table 1. Classification examples of materials used for organic handling or processing.**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentonite</td>
<td>Nonagricultural</td>
<td>Substance is a mineral (not from a plant or animal source)</td>
</tr>
<tr>
<td>Colors derived from</td>
<td>Agricultural</td>
<td>Substances are derived from plants or animals and that have not been chemically changed</td>
</tr>
<tr>
<td>agricultural products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td>Nonagricultural</td>
<td>Substance is derived from a mineral.</td>
</tr>
<tr>
<td>Enzymes</td>
<td>Nonagricultural</td>
<td>Substance is an enzyme (i.e., isolated protein) derived from plant or animal material.</td>
</tr>
<tr>
<td>Lecithin – deoiled</td>
<td>Agricultural</td>
<td>Substance is derived from plant material and not chemically changed.</td>
</tr>
<tr>
<td>Kelp</td>
<td>Agricultural</td>
<td>Substance is a plant that may be dried, but is not further processed.</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>Nonagricultural</td>
<td>Substance is a mineral.</td>
</tr>
<tr>
<td>Yeast</td>
<td>Nonagricultural</td>
<td>Substance is a microorganism. If yeast can meet the USDA/NOP organic production, handling, processing and labeling standards, it may be eligible to be certified under the NOP regulations.</td>
</tr>
<tr>
<td>Wine</td>
<td>Agricultural</td>
<td>Substance is the product of a microorganism and produced from agricultural media.</td>
</tr>
</tbody>
</table>
Table 2. Classification examples of materials used for organic livestock feed.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probiotics (microorganisms)</td>
<td>Nonagricultural</td>
<td>Substance is a microorganism.</td>
</tr>
<tr>
<td>Molasses</td>
<td>Agricultural</td>
<td>Substance is derived from a plant and is not chemically changed during processing. Must be certified organic when used for livestock feed.</td>
</tr>
<tr>
<td>Yeast</td>
<td>Nonagricultural</td>
<td>Substance is a microorganism. If yeast can meet the USDA/NOP organic production, handling, processing and labeling standards, it may be eligible to be certified under the USDA organic regulations.</td>
</tr>
</tbody>
</table>