



Navigating the National List for Allowed Ingredients and Processing Aids

The National List is the reference you'll come back to every time you add a new ingredient or processing aid to an organic product. Once you know how an entry is built: the listing name, the CAS number, and the annotations that set the conditions, you can look up any substance and determine on your own whether it fits your product and your use.



What You'll Learn

- How to find and read an entry in the National List, including listing names, CAS numbers, and annotations
- The difference between §205.605 and §205.606, and which one applies to your products
- How annotations restrict the source, form, and use of a substance, and what that means for your documentation
- Which commonly used substances carry conditions worth knowing about, including flavors, yeast, enzymes, and colors
- How to spot when a commercial availability search is required before you can use a nonorganic substance

The USDA organic regulations permit certain nonorganic and synthetic substances for use in organic products. The National List of Allowed and Prohibited Substances (the National List) specifies which nonorganic and synthetic substances are permitted and the conditions governing their use.¹ This article explains how to interpret and apply the information in the National List. Each entry follows a consistent structure that can seem technical on first read, but once you understand how an entry is built, you can look up any substance, identify the exact conditions on its use, and determine whether it fits your product.

The two sections of the National List that matter most for handlers are:

- §205.605, covering nonagricultural substances, both nonsynthetic and synthetic, which are allowed for use
- §205.606, covering nonorganic agricultural products which are allowed for use

Both sections allow a substance to be used only when every restriction in its listing is met.

? LEARN MORE

The definitions of terms used in this article (including nonsynthetic, synthetic, and nonagricultural substances) can be found in [Allowed Ingredients and Processing Aids in Organic Products](#) and [Glossary of Organic Certification Terms for Handlers](#).

READING A LIST ENTRY

Say you are considering activated charcoal as a processing aid and need to know whether you can use it. Go to the [National List](#) webpage, use the search function, and type activated charcoal. You will find the entry below:²

(b) **Synthetics allowed.**

(2)	Activated charcoal	(CAS #s 7440-44-0; 64365-11-3)	— only from vegetative sources; for use only as a filtering aid.
	Listing Name	CAS Number	Annotation



WATCH OUT

Every entry is built from up to three pieces of information:

- Listing name
- CAS number
- Annotations

Learning to spot each one is all it takes to read the list.

When you search for a substance on the National List, make sure you are only searching [§205.605](#) and [§205.606](#) which pertain to processed products. The other sections pertain to the production of crops and livestock and are not applicable to the production of processed products. Our activated charcoal example appears in both §205.605 (nonorganic substances allowed in processed products) and §205.603 (synthetic substances allowed in livestock production), but only §205.605 listing is applicable to our purposes.

Listing Name

This is the generic name of the substance, in this example activated charcoal. You will often see this name in supplier catalogs alongside the brand name a company gives the product.

CAS Number

A CAS Registry Number is a unique identifier for a specific chemical substance. It lets everyone point to the exact same substance and links together the research and data on it.³ Different forms of a chemical can carry different CAS numbers, and a number is listed only when it is needed for clarity. Not all entries will include a CAS number.

In our example, two CAS numbers appear, “7440-44-0” and “64365-11-3.” Type either one into the [CAS Registry](#) and, under the heading “Other Names and Identifiers,” you will find the trade names that help you locate the substance in a supplier catalog.

Looking Up a Substance in the CAS Registry

Activated charcoal

CAS Registry Number®
64365-11-3

No image available.

CAS Name
Activated charcoal

Molecular Formula
Unspecified

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Cite this Page
Activated charcoal. CAS Common Chemistry. CAS, a division of the American Chemical Society, n.d. https://commonchemistry.cas.org/detail?cas_rn=64365-11-3 (retrieved 2026-05-11) (CAS RN: 64365-11-3). Licensed under the Attribution-Noncommercial 4.0 International License (CC BY-NC 4.0).

Other Names and Identifiers

Other Names for this Substance

- Activated charcoal
- Charcoal, activated
- Carboraffin C
- BPL 12X30
- Chemviron F 400

[View All](#)

Deleted or Replaced CAS Registry Numbers

12676-58-3, 88895-73-2, 114265-02-0, 114797-45-4, 1187670-80-9, 1215290-33-7

Annotations

Annotations are the specific requirements or restrictions placed on some substances. They are sometimes also referred to as “restrictions.” Not all substances have annotations, but for those that do, they dictate how a substance must be produced or how it may be used. When your certifier asks exactly how you use an ingredient or processing aid, it is usually because they need that detail to confirm your use meets an annotation.

In the activated charcoal entry there are two annotations. The first, “only from vegetative sources,” restricts the source of the substance. The second, “for use only as a filtering aid,” restricts how you may use it.

Annotations Come in Several Types

Annotations restrict substances in different ways. Here are common examples, each with its listing so you can see the exact language for yourself.

- **Specific CAS number:** L-malic acid must match CAS # 97-67-6.⁴
- **Limited product type:** Pullulan may be used only in tablets and capsules for dietary supplements labeled as “made with organic.”⁵
- **Required source:** Tartaric acid is allowed only when made from grape wine.⁶
- **Single permitted use:** Ammonium bicarbonate is allowed for use only as a leavening agent.⁷
- **Product-category limit:** Taurine is for use only in pet food.⁸
- **Commercial-availability condition:** Collagen gel may be used only as a casing, and a nonorganic version can be used only when organic is not commercially available.⁹

“The thing that is most important that I realized is if you don’t understand something, ask. Do not just think, ‘oh, I know what they’re talking about’ ... So always ask.”

Debby Byrne
General Manager
Cedar Grove Cheese

Annotations on Commonly Used Substances

Below are common nonorganic substances and the annotations you must meet and document to use them. For the exact wording, always go to the listing itself.¹

- **Animal enzymes:** Common in dairy processing. Your documentation must show your source is one of the animal sources or enzymes named in the listing.¹⁰
- **Enzymes:** You must document that your source is from edible plants, nonpathogenic fungi, or nonpathogenic bacteria, not animals.¹¹
- **Yeast:** In products labeled organic, yeast must be organic when its end use is human food, unless organic yeast is not commercially available. It cannot be grown on petrochemical or sulfite waste substrates, and smoked yeast requires a documented nonsynthetic smoke flavoring process.¹²
- **Colors derived from agricultural products:** Natural color sources must be listed and must not be produced using synthetic solvents, carrier systems, or artificial preservatives, and many colors carry their own conditions. Beet juice extract color, for example, must not be produced from sugarbeets, which are often genetically modified.¹³
- **Flavors:** Nonsynthetic flavors may be used when organic flavors are not commercially available. All flavors must come from organic or nonsynthetic sources and must not be made using synthetic solvents, carrier systems, or artificial preservatives.¹⁴

Using a Nonorganic Natural Flavor in an Organic Product

To use a nonorganic natural flavor as an ingredient in an organic product, you must:



Search commercial availability to see if there is an organic option for your flavor



Identify a possible supplier



Collect documentation from the supplier that confirms that their form of the flavor is derived from organic or nonsynthetic sources only and confirms that their form of the flavor is not produced using synthetic solvents and carrier systems or any artificial preservative



Submit the nonorganic flavor and all supporting documentation to your certifier for review prior to using it in the production of an organic product



HANDLER TIP

For nonorganic flavors, your certifier will likely have a template, often called a Natural Flavor Declaration/ Affidavit, that your supplier fills out to confirm the flavor comes from organic or nonsynthetic sources. Certifiers usually have a template for documenting a commercial-availability search too.

Commercial Availability Requirement

Some annotations carry a commercial availability condition. You saw it above in flavors, yeast, and collagen gel, and it applies to every nonorganic agricultural product in [§205.606](#) used in a product that falls into the “organic” product composition category. When you encounter one of these entries, you must search for an organic version first and document that search before sourcing the nonorganic substance.¹⁵ Reading the list is how you spot which substances carry this condition.



LEARN MORE

For how to perform and document that search, see [Commercial Availability Requirement for Nonorganic Ingredients and Processing Aids](#).

CHANGES TO THE NATIONAL LIST

From time to time the National Organic Program updates the substances on the National List. To stay current with updates, subscribe to the [Organic Insider](#) newsletter, which also flags chances to comment on proposed changes.¹⁶ Your certifier will also point out relevant changes when they review your ingredients and processing aids at your annual renewal.

Changes to the National List run through the [National Organic Standards Board](#) (NOSB), a fifteen-member volunteer board representing the organic community.¹⁷ The board reviews substances and recommends changes, gathering public input at meetings that are free and open to anyone. Any individual or organization, including you, your certifier, or a trade group, may petition to add, remove, or amend a listing, and the board weighs petitions against the criteria in the Organic Foods Production Act.^{18,19} Every entry on the list is also reviewed on a five-year cycle to confirm it still belongs, based on the latest data and research.²⁰

CONCLUSION

The National List is a short document once you know how to read it. Find the entry, check the CAS number if one is listed, read the annotations, and confirm your intended use meets every condition. That's the whole exercise. Where it gets more involved is when an annotation requires a documented commercial availability search or when a substance's allowed source is narrow. The list changes from time to time. Make a habit of re-checking entries at your annual renewal so that you are never caught off guard by updates.

ACTION ITEMS

- Look up each of your substances in the National List.
- Read every listing's name, CAS number, and annotations.
- Confirm your intended use meets each substance's annotation.
- Flag any listing that requires a commercial-availability search.
- Subscribe to the [Organic Insider](#) for list updates.



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DIG DEEPER

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United States Department of Agriculture
Agricultural Marketing Service
National Organic Program

