How to Label Hemp Seed
By Scottie Brittsan
Office of Indiana State Chemist and Seed Commissioner
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Industrial Hemp is an agricultural commodity crop defined as, a variety of the plant Cannabis sativa L. with a THC concentration by dry weight matter of not more than 0.3 percent\(^1\) Due to the recent legislative changes Hemp seeds can now be sold for agricultural purposes. The selling of Hemp seed falls under each states Seed Law and requires a seed label. In Indiana this means that Hemp labels will follow IC 15-15-1\(^2\). The seed tag, label, or placard informs purchasers about the content, the quality, and the genetic information of the labeled seed lot. The seed label allows for the consumer to make more informed choices and in doing so, demand higher quality seed. All seed sold should follow the Federal Seed Law. The Federal Seed Act (FSA) was passed in 1939 requiring accurate labeling with purity and germination standards for seeds in commerce. This act was put into place to protect both distributors and purchasers of seeds in the U.S.A. The FSA operates at both the Federal and State levels. Within each state, there are State Seed regulations. In Indiana the State Seed Rule is modelled after RUSSL. RUSSL is the Recommended Uniform State Seed Law, and it promotes uniformity between the states to make competition fairer\(^3\).

In Indiana, the FSA is regulated by the Indiana State Seed Lab in the Office of the Indiana State Chemist (OISC.) OISC regulates seed by checking the quality and that the seed label matches the seed lot. An inspector will go out and collect random seed samples to submit to the State Seed Lab for testing. Certified seed analysts check the purity, germination and noxious weed seed content of the seed. Indiana State Seed Lab follows the guidelines set by AOSA (Association of Seed Analysts.)

The following is an in-depth description of seed label components, with reference to the seed label example. This list follows the Indiana State Seed law.

1. **Product name**
   The name often includes the Kind and Brand and sometimes the variety. There are often descriptive terms used to help the consumer make decisions on which type of seed to get. For example, the name might include “CBD” or “for fiber use.” If the seed is a mix it must be stated, and most companies put it here.

2. **Lot number**
   All seed sold must have a lot number. This number can arbitrarily be determined by the company. Some companies choose unique numbers for each lot and some use the same number for multiple lots.

3. **Variety/ Kind**
   The kind of seed has to be stated on the seed tag. According to the USDA the kind should be listed separately from the descriptive terms: example; Soft Red Winter Wheat, is a description of the kind, with Wheat being the kind. The variety has to be stated or “variety not stated” can be used. The abbreviation “VNS” is not allowed in every state. The USDA does not allow the use of “VNS” in interstate shipments of seed.
4. **Pure Seed**

A lot of seed is made out of pure seed components, pure seed unit, other crop and weed seeds. All of the seed components percentages including inert matter must add up to 100%. The pure seed components are done by percentage of weight. According to AOSA Rules for Testing Seeds, a pure seed is “fifty percent of the seed still regardless if an embryo is present.”

![Image of pure seed](image1)

**Fig 1.** A purity being done on a hemp sample, all components must be separated to verify the claims.

![Image of pure hemp seed](image2)

**Fig 2.** Pure hemp seed.

5. **Other Crop seed**

There is a tolerance for other seeds being in a seed lot. A 100% pure seed sample is unlikely so there is space to claim other agricultural crop seeds. Other agricultural or turf seeds can be claimed by weight percentage found. If the other agricultural crop seed component found makes up for 5% of the sample, it must be claimed as a component on the label, and the term blend or mixture must be added, according to the state’s rules.10
Fig 3. Example of other crop seed in hemp seed. The red circles indicate other crop seed.

6. **Inert Matter**

   Inert matter is anything in the lot that is not a seed, or seeds that will not grow such as ergotized seed. Every seed lot will contain inert matter and should be added to the label by percentage of weight\(^\text{10}\).

Fig 4. Example of inert matter commonly found in hemp.

7. **Weed Seeds**

   Weed seeds just like other crops must be claimed. There is a tolerance to the number of weeds in a sample. Each state has its own tolerance and one should look into the state seed law before selling seeds into that state. This percentage is also calculated by weight.
Fig 5. Example of weed seeds in a hemp sample. Red circles indicate weed seeds.

Fig 6. Example of weed seeds separated from pure seed.

8. **Noxious Weed Seeds**
   Noxious weed seeds are a state by state list of economically hazardous weeds. The list is divided into two categories, restricted and prohibited. Any restricted weeds must be claimed on the label and how many seeds can be found per pound of seed. No prohibited seeds can be claimed because they should not be sold in the states where they are prohibited. If no noxious weeds are found, then the statement “none found” can be used.

9. **Labeler**
   The labeler is the company that provides the seed. The labeler and labeler’s address must be listed on every seed tag.
10. **Disclaimer**
   If the seed is treated than the statement “Do not use for food, feed or oil purposes” must be used\(^\text{10}\).

11. **Seed Treatments**
   If the seed is treated it must be dyed a color that makes it distinguishable from other seed. The tag must include the name of the treatment used on the seed, and an additional tag can be used stating the active ingredients and the hazards associated with the chemicals. No pesticides or seed treatments have been approved for use on hemp at the federal or state levels yet.

12. **Germination dates**
   A test date, the month and year the test to determine the germination % was completed, must be included on the label for the germination test. Some states might require a sell date, so one must look into the state’s seed law they plan on selling into.

13. **Origin**
   The origin of where the seed was grown must be put on the label for each pure seed component. If the origin is unknown, then it must be stated as such\(^\text{9}\).

14. **Germination**
   The germination rate for the seed must be included on the label for agricultural seed. The percentage has to be a whole number.

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**Fig 7. Example of a hemp seed label following the FSA**
Each seed tag or label can have a different layout but must contain the same basic information. A seed tag or label should be found on any seed sold, advertised, or transported with intent to plant in the United States\(^5\). Different states have different seed laws so labels will require different information based on the state they are sold in. For an example, some states allow brand names on labels while others do not. Even with differences the seed label will tell purchasers what type of seed they will be buying, the variety and the quality of seed with purity and germination information. If there is any concern or questions about a seed label contact your state’s seed lab.

Sources:
2. Robison Don. How to Read a Seed Label- What has to be on a Seed Label. OISC. 2017. [https://www.oisc.purdue.edu/seed/pdf/how\_to\_read\_a\_seed\_tag.pdf](https://www.oisc.purdue.edu/seed/pdf/how\_to\_read\_a\_seed\_tag.pdf)
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