

Final Questions and answers

Complying with 2020 Canadian Organic Standards

Permitted Substances Lists – CAN/CGSB-32.311

Livestock production – Tables 5.2 and 5.3

5.2 Feed, feed additives and feed supplements	3
Acetic acid for acidifying drinking water	3
Hydrogen peroxide for drinking water	3
Livestock feeds – Certification	3
Lactoserum for feed	3
Substrate for probiotics	3
Amino Acids – DL methionine and lysine	4
Cobalt Sulphate	4
Fish Products	4
Palm oil.....	5
Vitamin & Mineral Premixes – Preservatives	5
Sprayed substances on dry hay	5
Propionic acid containing ammonium hydroxide.....	5
Yeast-derived Protein.....	6
5.3 Health care products and production aids	6
Colloidal silver	6
Magnesium carbonate as anti-caking agent.....	7
Ketoprofen	7
Lanolin.....	7
Medical Treatment – Fish Products	7
Vitamin B	7
Vitamins – Preservatives	7
Eggs – Ink Labels	8
Barn Sanitizers	8
Zinc oxide.....	8
Zinc sulphate	8
Phytase - Enzymes from genetically engineered bacteria.....	8

Thymol - Synthetic thyme oil	8
Bloat treatment	9
Propolis for health care.....	9
Formulants in livestock nutrition and health products.....	9

5.2 Feed, feed additives and feed supplements

Acetic acid for acidifying drinking water

Can acetic acid be used for acidifying drinking water for animals? (201) - 26 Sep 2019

Yes. Acetic acid from any source other than GE sources may be used to acidify livestock drinking water. (See 'Acids' Table 5.3).

Hydrogen peroxide for drinking water

Can hydrogen peroxide that is used to treat drinking water for humans but is not necessarily rated 'food grade' be used to treat livestock drinking water? The hydrogen peroxide annotation in PSL table 5.3 stipulates "food grade" is required. (486) - 29 June 2020

Yes, Hydrogen peroxide approved to treat drinking water for humans is considered equivalent to food grade for the purpose of treating livestock drinking water.

Livestock feeds – Certification

Can livestock feeds which contain non-agricultural ingredients be certified? (65.1)

Livestock feeds may contain necessary feed additives or supplements according to PSL Table 5.2. Refer to 6.4 in 310 for complete details on livestock feed.

Lactoserum for feed

Can non-organic lactoserum be used as feed if it is documented that organic lactoserum is not commercially available? (258)

No. Livestock feed must contain 100% organic agricultural ingredients. (9.1.3 d).

Substrate for probiotics

Q: Can probiotics be used as feed supplement if they are manufactured using a non-organic agricultural substance such as whey as the growing medium (252)

It depends. Non-organic agricultural ingredients such as whey can be used as the growth medium or substrate to manufacture probiotics that are used as a feed supplement as long as their use complies with the requirements of 32.311 5.1.2 and 6.2.1, as follows:

a) if the probiotic includes the substrates or growth media, the ingredients of the substrate or growth medium shall be listed in the appropriate PSL Tables 5.2 (Livestock feed) & 5.3 (Livestock health care), and use of non-organic agricultural substances listed in the PSL must comply with substance listing annotations;

b) if the probiotic does not include the substrates or growth media, it shall be produced on non-genetically engineered substrates or growth media, if commercially available.

This means each substrate needs to be assessed individually for compliance. For example, whey residues are not permitted in a probiotic product because whey is not listed in the required tables. Whey would need to be organic under these circumstances. Probiotic products without whey residues are permitted without a commercially available search because at present there is no milk being produced from genetically engineered animals.

Amino Acids – DL methionine and lysine

Is the use of DL methionine from processes involving genetic modification allowed? (54)

Possibly. As clarified in the Amino acid annotation in 2020 PSL Table 5.2,

a) the first choice for providing amino acids in feed shall be organic sources, such as fishmeal, insect meal, brewer's yeast, etc.

b) If supplementation with these sources does not meet the requirements to produce a balanced feed, the operator can use amino acids "derived from biological sources by biofermentation and extracted, or isolated, by hydrolysis or by physical or other non-chemical means."

c) As a last resort, and only for monogastrics (such as pigs, rabbits and chickens), "all sources of lysine and methionine," including GE forms, may be used if there are no commercially available sources of lysine or methionine "derived from biological sources by biofermentation and extracted, or isolated, by hydrolysis or by physical or other non-chemical means."

Cobalt Sulphate

Can cobalt sulphate produced with sulphuric acid be used as a mineral supplement and for medical reasons? (22.1)

The annotation for "Minerals, trace minerals, elements" in Table 5.2 of the PSL allows sulphated forms of minerals provided they do not contain or are produced with EDTA or EDDHA. Table 5.3 allows any source for medical use.

Fish Products

Is the use of fish products as feed supplements allowed? (22.2)

Yes. Organic fish meal can be used and non-organic fish meal is allowed if organic

fish meal is not commercially available and if all preservatives and other ingredients are listed in Table 5.2. Fish meal was added to Table 5.2 in 2020.

Operators must supply “a feed ration sufficient to meet the nutritional requirements of the livestock” (6.6.1 b). Feed supplements must not be fed in amounts greater than those required for health of the animal at its stage of production as per 6.4.4 c). This limits the amount of the fish supplement that can be fed in the ration. Feed supplements are defined in the standard as “feed that is used in conjunction with other feed to improve the nutrition balance...” (see “feed supplement” definition in Section 3 of 32.310).

Palm oil

Is palm oil or its derivatives permitted as a feed ingredient for organic dairy production? (532) 1 November 2021

Yes, like all other oils, palm oil and derivatives would be considered as energy feeds (see Table 5.2 of PSL), and as such, any palm derived products would have to be certified organic

Vitamin & Mineral Premixes – Preservatives

If all commercially available vitamin and mineral premixes contain preservatives, how can organic farmers meet the nutritional needs of their animals? (65.2)

In terms of vitamin premixes, as of 2020, all “vitamin formulants that comply with Canadian regulations are accepted. Vitamins not compliant to 5.1.2 of this standard are permitted.

Sprayed substances on dry hay

Can stored organic hay be sprayed with substances listed in Table 4.2 (Column 2) and/or 5.2 of PSL? (381)

No. Only substances listed under "Hay or silage preservation products" in Table 5.2 of 32.311 can be used with dry hay. Although salt is not specifically mentioned in this annotation, it would be allowed for hay treatment, as salt is permitted as part of livestock feed.

Propionic acid containing ammonium hydroxide

Is propionic acid containing ammonium hydroxide permitted as hay or silage preservation product under CAN/CGSB-32.311 Table 5.2? (356)

No. The allowance in the PSL 5.2 listing “Hay or silage preservation products” is for propionic acid, not for propionic products containing prohibited compounds

such as ammonium hydroxide. 1.5 b) prohibits the use of crop production aids and materials that are not listed in CAN/CGSB-32.311.

Yeast-derived Protein

Does the definition of “Micro-organisms and yeasts” in Table 5.2 of the PSL include yeast-derived protein? (120)

A yeast-derived protein is not a yeast; it is a protein. Protein for use in organic livestock rations must be organic (see “Protein feeds” PSL Table 5.2), and in compliance with 6.4.4 (32.310). Protein derived from organic yeast could be permitted depending on the method of fractionation.

Yeasts are listed on Table 5.2. Are the derivatives of yeast, namely the yeast cell wall products, also allowed? (238)

Yes. Yeast and yeast cell wall products are allowed as feed supplements. Non-organic sources, including autolysate, can be used if organic sources are not commercially available.

5.3 Health care products and production aids

Colloidal silver

Is colloidal silver allowed for use in livestock health care? (273)

It depends. Colloidal silver falls under the "Minerals, trace minerals, elements" listing in PSL Table 5.3. But due diligence is required to make sure the form of colloidal silver is acceptable. Colloidal silver produced using electrolysis is allowed. Also, colloidal silver produced by a biofermentation process is allowed as long as the genetically engineered restrictions specified in 1.4 a (32.310) are met. Colloidal silver is basically nano-sized clusters of silver atoms in an aqueous solution. Although products of nanotechnology are generally prohibited, the two forms listed above are allowed as they fall under the exception pertaining to nanotechnology provided in 1.4 b) 2) of 32.310.

Garlic

Can uncertified garlic be used as a de-wormer in organic livestock operations? (7)

This standard permits the use of uncertified garlic as a de-wormer treatment under Table 5.3 of the PSL, Botanical compounds.

Magnesium carbonate as anti-caking agent

Can magnesium carbonate be used as an anti-caking agent in salt when used for livestock? (467.2) - 17 February 2020

Yes. As magnesium carbonate may be included in feed as a source of nutrition. See Minerals, trace mineral, elements, PSL, Table 5.3.

Ketoprofen

If ketoprofen is used therapeutically, is there a withdrawal period? (449) - 26 Sep 2019

No. Non-steroid anti-inflammatories such as ketoprofen are included in Table 5.3 of the PSL. Products listed in the PSL do not require any withdrawal times unless specified in the annotation or on the product label.

Lanolin

Is Lanolin allowed for use on dairy cows' teats? (55)

Yes. In 2020, lanolin was added to Table 5.3 “for external use only, such as udder balm (ointment).”

Medical Treatment – Fish Products

Is the use of fish oil as medical treatment (to treat bloat) prohibited? Are fish-based animal health tonics prohibited? (22.3)

Fish oil and fish-based health products are allowed as veterinary medicinal substances under 6.6.10 c. (32.310)

Vitamin B

Is it acceptable to inject meat animals with vitamin B for the purpose of improving meat colour? (33)

No. Table 5.2 lists vitamins for “enrichment or fortification.” Injection to improve the colour of meat is for cosmetic purposes, not enrichment or fortification.

Vitamins – Preservatives

Can a vitamin that contains a synthetic preservative be used in livestock feed? (81)

Yes. Vitamins, with no restrictions, are permitted for feed enrichment or fortification. See Vitamins, PSL, Table 5.2.

Eggs – Ink Labels

Can ink be used to label organic eggs? (46)

Yes. Ink that does not contain prohibited substances may be used to label eggshells.

Barn Sanitizers

Is citrus extract allowed as a cleaner or disinfectant in buildings for animal production? (68.1)

Yes. Citrus extract included under Botanical compounds in Table 5.3 (32.311) could be used as a cleaner in livestock houses. See 6.7.4 in 32.310.

What is the status of Tables 7.3 and 7.4 regarding livestock production? (68.2)

Substances on Tables 7.3 and 7.4 can be used in livestock facilities as can substances in Table 5.3, but cleaning or disinfection of livestock facilities is not confined to these lists. Any effective disinfectant can be used to clean livestock facilities in the event of a reportable disease. See 6.7.4 - 32.310.

Zinc oxide

Is zinc oxide allowed as a health remedy in organic livestock production? (279)

Yes. Table 5.3 "Health Care Products and Production Aids" lists "Minerals, Trace Minerals, Elements" and specifies that "minerals of any source are allowed for medical use". Zinc oxide would fall under this listing.

Zinc sulphate

Can zinc sulphate be used as a treatment in foot baths for livestock? (270)

Yes, as it is considered a mineral under the listing in Table 5.3 - Minerals, Trace Minerals and Elements which specifies that "minerals of any source are allowed for medical use."

Phytase - Enzymes from genetically engineered bacteria

Can enzymes such as phytase be compliant to the standard even if the enzyme is produced by genetically engineered bacteria? (380)

Yes. An exception was made for phytase in 2020 and GE forms can be used.

Thymol - Synthetic thyme oil

Can synthetic thymol (thyme oil) be used to prevent and treat hoof problems? (379)

Yes. Thymol was added to Table 5.3 in 2020. If it is derived from botanical sources, the annotation in Table 5.3 "Botanical compounds" applies. If it synthetic (i.e., not derived from botanical sources), thymol may only be used in foot baths.

Bloat treatment

Is the use of poloxalene allowed as a bloat treatment for dairy animals? (492) - 18 August 2020

No. Poloxalene cannot be used unless the requirements of 6.6.10 of CAN/CGSB-32.310 are met. This means that alternative solutions must be explored first. If these are ineffective, a veterinary pharmaceutical such as poloxalene can be used under the written authorization of a vet, but the withdrawal period for milk and meat must be 14 days or double the label requirement, whichever is longer. Note also that repeated use of poloxalene may result in an animal losing organic status for the rest of its life (see details in 6.6.10 e).

Propolis for health care

Can non-organic propolis and other bee products, except honey, be used as a livestock health care product? (496) - 18 August 2020

Yes. Non-organic propolis, pollen, royal jelly, beeswax and bee venom may be used as livestock health care products (Homeopathy and biotherapies, CAN/CGSB-32.311 Table 5.3). Honey though, if used for livestock health care, would have to be organic (Honey, CAN/CGSB-32.311 Table 5.3).

Formulants in livestock nutrition and health products

Which ingredients found in livestock boluses, or other health care products and production aids, are categorized as Formulants per Table 5.3 and are not subject to 32.310 1.4 or 1.5? (530) 1 November 2021

Any substance other than the active ingredients intentionally incorporated in a formulation of a drug authorized for sale by Health Canada is considered as a formulant in Table 5.3 of the PSL."