

Ingredient Definitions Committee Meeting Report
AAFCO Annual 2020 Virtual
8/6-7/2020 e-Meeting

Recommendations to the Board and Association membership:

When needed, text is presented in appendix A .

- 1) Publish as official **T3.1 Suncured Alfalfa Meal**.
- 2) Publish a new official definition: **57.169 Iron-choline citrate complex**.
- 3) Publish as official **T60.118 Ground Juniper**.
- 4) Publish a replacement of **73.046 Silicon Dioxide** as official. (CFR)
- 5) Publish as official **73.052 Sodium Aluminosilicate** as an anticaking agent.
- 6) Publish a note in **Table 73.001** (page 432 2019 rev 1 OP) in section 73, Technical Additives, for sodium silicoaluminate [Add a note in the limitations section](#) “remove this item in the 2023 OP, replaced with **73.052 Sodium aluminosilicate.**”
- 7) Publish a replacement of **T73.430 L-Lactic acid** . (page 453 of the 2020 rev 1 online OP)

Recommendations to the Board (no membership action requested)

- 1) IDC recommends the BOD implement the procedures outlined in the attached NANP workgroup report .
- 2) IDC recommends the BOD implement the procedures outlined in the attached ODI Workgroup report.
- 3) IDC Recommends the BOD accept the proposal from Moca Works to automate OP changes into ODI. (not attached)



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- 4) IDC requests the questions be asked of legal council and answers provided to the not-defined workgroup:
 - a. Is AAFCO obliged to make the list of non-defined ingredients public?
 - b. Is the list in conflict with state “sunshine” laws?

Board Action:

To be considered in October 2020

Association Action:

To be considered in January 2021

Recommendations not needing further Association review

- 1) on page 350 of the 2020 OP rev 1 Edit the paragraph:

Official Common or Usual Names and Definitions of Feed Ingredients

As Established By The Association Of American Feed Control Officials

The **bold print name** and international feed name (IFN) are both acceptable as ingredient names, unless designated otherwise in the definition.

Occasionally an item may be suggested as an ingredient in a mixed feed that is not listed in this publication. When this happens, the appropriate investigator should be contacted **to develop an ingredient definition.** ~~, a term developed, and the product defined.~~ Some ingredients, e.g. sugar, are so common there is no need to define them.

- 2) On page 414 of the 2020 OP rev 1 edit **57.166 Chromium Propionate** to match CFR and to show as in appendix A.
- 3) On page 434 of the 2020 OP rev 1 edit **71.40 Low Glucosinolate High Erucic Acid Rapeseed Meal** to show as in appendix A.
- 4) On page 433 of the 2020 OP rev 1 edit **71.77 Canola Meal** to show as in appendix A.
- 5) On page 437 of the 2020 OP rev 1 edit **Table 73.001** Edit to show as below.
there is an typo in 73.001 Diacetyl tartaric acid esters of mono and diglycerides **or of edible** fats or oils, or edible fat-forming fatty Acids 2020 rev 1 Online OP page 437



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<p>Diacetyl tartaric acid esters of mono and diglycerides or edible fats or oils, or edible fat-forming fatty acids IFN 8-07-248</p>	<p>21 CFR 582.4101</p>	<p>Emulsifying agent</p>	<p>In accordance with good manufacturing practices</p>
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Minutes IDC 8/6-7/2020

Meeting was brought to order at 1:15pm EST by chair Ten Eyck. Meeting was held via zoom webinar and live broadcast to the gallery. Committee Members and advisors had live audio, live video and a chat box to ask questions. All attendees and live broadcast viewers had access to the slido app to ask questions.

Documents supporting the agenda are posted in the BIN library / Ingredient Definitions / Investigator Recommendations -or- contact the person listed on the agenda with questions.

1) Roll call of Committee members was done in green room prior to broadcast.

22/22 voting members, *Quorum was present in both sessions*

Richard Ten Eyck, Erin Bubb, Mika Alewynse, Ken Bowers, Stan Cook, Dave Dressler, James Embry, Maggie Faba, Ashlee-Rose Ferguson, Jacob Fleig, Brett Groves, Darrell Johnson, Ali Kashani, Dave Phillips, Tom Phillips, Nathan Price, Kelli Younker, Charlotte Conway, Jennifer Kormos -proxy for Laura Scott in session 1, Kent Kitade, George Ferguson, Dan King, Mark LeBlanc, Shannon Jordre, Laura Scott missed session 1 attended session 2

Missing: -none-

1) Edits on page 350 – Richard Ten Eyck (5 min)

on page 350 of the 2020 OP rev 1 Edit the paragraph:

Official Common or Usual Names and Definitions of Feed Ingredients

As Established By The Association Of American Feed Control Officials

The **bold print name** and international feed name (IFN) are both acceptable as ingredient names, unless designated otherwise in the definition.

Occasionally an item may be suggested as an ingredient in a mixed feed that is not listed in this publication. When this happens, the appropriate investigator should be contacted **to develop an ingredient definition.** ~~a term developed, and the product defined.~~ Some ingredients, e.g. sugar, are so common there is no need to define them.

Motion to edit by Jacob Fleig, second by Nathan Price, passed 22/0 some discussion that additional work may need to be done to the last sentence in light of the new common food feed term. AFIA volunteered to help with future revisions.

- 2) **T3.1 Suncured Alfalfa Meal** ([move to official](#))—Erin Bubb (10 min) *Motion to publish as official by Erin Bubb second by Tom Phillips. Motion passed 17/0 with 3 abstains. Lots of discussion for and against.*
- 3) **57.166 Chromium Propionate** [revise official definition](#) to match CFR. “(3) In feed for horses at a level not to exceed an intake of 4 mg of chromium from chromium propionate per horse per day.” --Jennifer Kormos (10 min) *Motion to edit the definition was made by Jennifer Kormos second by Mika Alewynse passed 22/0 This is an edit of the official definition.*
- 4) **57.169 Iron-choline citrate complex** made by reacting approximately equimolecular quantities of ferric hydroxide, choline, and citric acid may be safely used as a source of iron in animal feed. Minimum iron (Fe) must be specified. 21 CFR 573.580 [new official definition](#) (CFR) – Jennifer Kormos (10 min) *Motion to publish a new official definition by Jennifer Kormos seconded by Mika Alewynse motion passed 22/0. Definition taken from the CFR with a minimum iron specification added. Adoption date needs to be corrected upon entry to the OP. Vitamin complexes question came up, these questions should go to definitions@aafco.org.*
- 5) **T60.118 Ground Juniper** ([move to official](#)) – Erin Bubb (5 Minutes) *Motion to move T60.118 to official and publish in the OP made by Erin Bubb seconded by Nathan Price. motion passed 22/0*
- 6) **71.40 Low Glucosinolate High Erucic Acid Rapeseed Meal**, [edit definition](#)- Falina Hutchinson (10 min) *Cleaning up to match formats in canola meal. Some discussion of the units used if they are appropriate to a meal. Motion to edit 71.40 made by Falina Hutchinson and seconded by George Ferguson. passed 21/0 with one abstain, Some questions and discussion about specification units of natural contaminants (micromoles) occurred. Should this be looked at again? Need to look at analytical method. No specifications were changed so definition will stay at Official.*
- 7) **71.77 Canola Meal**, [edit current official definition](#), leave official- Falina Hutchinson (5 min) *Motion to edit 71.77 made by Falina Hutchinson and seconded by Jacob Fleig. Motion passed 22/0 Action was supported by the*

canola industry. Typo's were corrected and a revised document loaded after the meeting.

- 8) **73.046 Silicon Dioxide** , [replace official definition](#) (CFR)- Dave Edwards (10 min)
Motion to replace 73.046 with new CFR language made by Mika Alewynse was seconded by Mark LeBlanc. motion passed 22/0. Recommendation should go to board and membership.
- 9) **73.052 Sodium Aluminosilicate** as an anticaking agent. [Add to the OP as Official \(CFR\)](#). This is the same definition IDC approved in March 2020. Returned to IDC by the BOD for clarity on implementation timing. -- Richard Ten Eyck (10min) Motion to publish 73.052 as Official was made by Mika Alewynse and seconded by Erin Bubb. motion passed 22/0. Discussion was held surrounding the use of the term "complete feed". Complete feed is the feed fed to the animal. CVM uses this often interchangeably with "finished feed". Terminology may need to be cleaned up, or perhaps a new term defined. Consideration should be taken up later on the terms.
- 10) **Table 73.001** (page 440 2019 rev 1 OP) in section 73, Technical Additives, for sodium silicoaluminate [Add a note in the limitations section "remove this item in the 2023 OP, replaced with 73.052 Sodium aluminosilicate."](#) - Richard Ten Eyck (5Min) Motion to edit and publish table 73.001 to include a note in the limitations of sodium silicoaluminate was made by Mika Alewynse and seconded by Tom Phillips. Recommendation should go to board and membership. Motion was amended (Ferguson/Groves) to change the year to 2023. Main Motion passed 22/0. George Ferguson proposed that a system to sunset discontinued common or usual names in the OP be established.
- 11) **Table 73.001** Edit (page 432 2019 rev 1 OP) – Richard Ten Eyck (5 Min)
there is an typo in 73.001 Diacetyl tartaric acid esters of mono and diglycerides **or of edible** fats or oils, or edible fat-forming fatty Acids 2020 rev 1 Online OP page 437

Diacetyl tartaric acid esters of mono and diglycerides or edible fats or oils, or edible fat-forming fatty acids IFN 8-07-248	21 CFR 582.4101	Emulsifying agent	In accordance with good manufacturing practices
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*Motion to make the edit was made by Jacob Fleig and seconded by Brett Groves.
Motion passed 22/0.*

- 12) **T73.430 L-Lactic acid** (motion: [replace the tentative definition](#) with this one) – Richard Ten Eyck (5 min) page 453 of the 2020 rev 1 online OP

T73.430 (A) L-Lactic acid is a sequestrant with a minimum content of 97% L-lactic acid **on a dry matter basis** and a maximum of 0.5% D-isomer for use in dry cat food products (less than 20% moisture). It is intended for use as a dental plaque and tartar control agent for adult maintenance cat food at levels not to exceed 1.2% on a dry matter basis.

Motion to make the replace T73.430 was made by Erin Bubb and seconded Mika Alewynse. Motion passed 22/0.

To fill time Falina Hutchinson gave the Hemp update and will repeat it tomorrow. Hemp and it's derivatives still do not have any definitions or food additive petitions filed. There is more hemp information on the AAFCO home page.

https://www.aaftco.org/Portals/0/SiteContent/Announcements/Guidelines_on_Hemp_in_Animal_Food_July_2020.pdf

Session one of the meeting concluded and the committee recessed for the day. Tomorrow's session will be included in the same set of minutes.

8/7/2020 Session 2 : Brought to Order 1:15 EST All committee members present.

- 13)*Hemp Update – Falina Hutchinson, MT (5 min) expecting submission soon, there are not currently any feeding clearances for Hemp.

- 14)*IDC to discuss draft workgroup charge: Omaha Workshop – Meagan Davis (10 Minutes)

The Board of Directors has asked IDC to plan and execute a workshop at the Omaha AAFCO Annual meeting in August 2021 on Developing Ingredient Definition submission requests. Volunteers Include: Meagan Davis, AFIA; Dave Edwards, CVM; Betty Mcphee; Kristi Smedley; Lindsey Meyers; Erin Bubb IDC; ETC Liaison is _____

draft workgroup charge:

Design and deliver a workshop that describes the process of bringing a new ingredient to market, with a focus on the AAFCO process. The workshop should show the extent of data needed and provide discussion of ways to improve the AAFCO definition request process.

Motion to accept the charge was made by Jacob Fleig and seconded by Brett Groves. Motion passed 22/0 Discussion covered combining content with the GRAS notice workshop being held at midyear. The GRAS notice workshop is envisioned to work best in an in-person meeting. Meagan is gathering help for content development and presenters.

15)*Not-Defined workgroup update. ([in BIN](#)) Working on an index of common foods. – Kent Kitade (10 min) Building an index of common foods. Additions to the index are envisioned to come through IDC, be visible in some manner in ODI but not appear in the OP. Lots of details up in the air. Kent needs regulators to join the workgroup.

16)*NANP workgroup report -- Mike Kropf (10 min)

- a. [Recommendations to be forwarded](#) to BOD are in the document. Motion made by Brett Boswell and seconded by Mark LeBlanc to forward the recommendations to the board for implementation. Motion passed 22/0.

17)ODI Workgroup report. Where to show changes to ODI? -- Jacob Fleig (15 min)

Recommendations document was shared. Motion to advance it to the BOD with recommendation to implement. *Motion to send the recommendation to the BOD was made by Nathan Price and seconded by Dave Phillips. Motion passed 22/0*

Recommendation to the BOD to accept proposal from Moca Works to automate OP changes into ODI. *Motion to send the recommendation to the BOD was made by Jacob Fleig and seconded by Erin Bubb. Motion passed 22/0*

18)Animal Products Edits– Stan Cook, (20 minutes)

Panel discussion on changes to pet food ingredient definitions. Stan introduced the concept of potential changes to some animal protein product definitions to better reflect pet food ingredients. Please contact Stan if you would like to contribute to the work. Volunteers from the chat: Jean Hofve, Chris Cowell, David Meeker, Betty McPhee, (CFIA) Laura Scott, Tim Law.

19)ICG Verification workgroup report. Time to change directions? – Richard

Ten Eyck / Kristi Smedley (10 min) ****Only touched Briefly. Workgroup is changing gears from building a verification system to providing educational content on the current pathways. Do in next IDC meeting.**

20)MSBC Workgroup Report. [Time for national coordination?](#) – Tom Phillips (10 Min) ** Did not get to. Do in next IDC meeting.

21)90.27 (NEW Table) Pet food parenthetical [Vitamin common name table](#) (workgroup update with possible action item) --- Tom Phillips (10 min) ** Did not get to, do in next IDC meeting.

22)FROM PFC (draft): *Vitamin common names for pet food should be addressed by IDC independent of the PFLM project. Information from the qualitative consumer research should be provided to the IDC. Work of the IDC common vitamin name workgroup should be quantitatively consumer panel tested preferably at the same time as the PFLM changes.* ** Did not get to, do in next IDC meeting.

Announcements

23)GRAS Notice Training ~~Baltimore 8/5/2020~~- status update. This will be moved to the midyear 2021 meeting. —Dave Edwards (0 minutes)

24)AAFCO Investigator Training - ~~Baltimore 8/4/2020~~ status update. This will be done virtually. - Charlotte Conway (0 minutes).

25)Next Meetings: e-meeting October 1 2020 11:30 EST-- Richard Ten Eyck (0 min)

Meeting Adjourned 3:00 PM EST

Minutes accepted 10/1/2020 not voting: Mika Alewynse, Stan Cook, George Ferguson, Mark LeBlanc, Dave Phillips, Tom Phillips,

Appendix A, IDC meeting 8/6-7/2020

Recommendation to BOD and membership (details):

3.1 Suncured Alfalfa Meal, or Pellets, or Ground Alfalfa Hay is the aerial portion of the alfalfa plant, reasonably free of other crop plants, weeds, and mold, which has been dried by solar means, stored as bales or stacks, and finely or coarsely ground. If it is chopped instead of ground, it must be designated as “Suncured Chopped Alfalfa” or “Chopped Alfalfa Hay.” If the ingredient is further dehydrated by thermal means after being ground, it must be designated as “Dehydrated Suncured Alfalfa Meal, or Pellets.” (Proposed 2020, adopted 2021)

57.169 Iron-choline citrate complex made by reacting approximately equimolecular quantities of ferric hydroxide, choline, and citric acid may be safely used as a source of iron in animal feed. Minimum iron (Fe) must be specified. 21 CFR 573.580 (CFR) (adopted 2021 rev 1)

60.118 Ground Juniper is a roughage consisting of the entire aerial portion of the juniper plant (trunk, bark, branches, leaves, and berries), obtained only from *Juniperus pinchotii* and/or *Juniperus ashei*. Any plant part below ground level is excluded to avoid contamination with soil and/or rocks. It is ground to pass a screen no larger than 5/8 inches (15.875 mm). The ingredient must be guaranteed for crude protein and acid detergent fiber. Ground juniper is to be fed as a dietary roughage for cattle, sheep, or goats in accordance with good feeding practices. (Proposed 2020, adopted 2021)

(replace existing official definition with and leave Official): **73.046 Silicon dioxide** The food additive silicon dioxide may be safely used in animal feed in accordance with the following conditions:

- (a) The food additive is manufactured by vapor phase hydrolysis or by other means whereby the particle size is such as to accomplish the intended effect.
- (b) It is used or intended for use as an anticaking agent, antifoaming agent, carrier, and/or grinding aid in animal feed, including ingredients, intermediate premixes, premixes, supplements, concentrates, and complete feed.
- (c) To ensure safe use of the additive, silicon dioxide is to be used in an amount not to exceed that reasonably required to accomplish its intended effect, and silicon dioxide from all sources cannot exceed 2 percent by weight of the complete feed.
- (d) To ensure safe use of the additive, the label and labeling of the additive and ingredients, intermediate premixes, premixes, supplements, concentrates, and complete

feed containing the additive shall meet the requirements of the Federal Food, Drug, and Cosmetic Act, including 21 CFR 501.

(e) To ensure safe use of the additive, in addition to the other information required by the Federal Food, Drug, and Cosmetic Act, the label and labeling of the additive and ingredients, intermediate premixes, premixes, supplements, and concentrates containing the additive shall have:

- (1) A statement of the concentration of the additive.
- (2) A statement that silicon dioxide from all sources cannot exceed 2 percent by weight of the complete feed.

21 CFR 573.940 (Proposed 1964, Adopted 1965, Amended 2008, Adopted 2010, Amended 2018, Amended 2019 rev. 1, **Amended 2021**)

73.052 Sodium aluminosilicate is hydrated sodium aluminum silicate having $\text{Na}_2\text{O}:\text{Al}_2\text{O}_3:\text{SiO}_2$ in molar ratios of approximately 1:1:13, respectively. It can be naturally occurring or synthetic. It consists of 66.0 to 76.0% silicon dioxide; 9.0 to 13.0% aluminum oxide; and 4.0 to 7.0% sodium oxide, on a dry basis. It is used as an anticaking agent not to exceed 2% in finished feed.

21 CFR 582.2727.

Publish a note in table 73.001 (page 432)

Name	FDA Regulation	Classification	Limitations
Sodium silico aluminat IFN 8-08-101	21 CFR 582 2727	Anti-caking agent	Not to exceed 2% in finished feed. <u>Remove this item in the 2023 OP, replaced with 73.052 Sodium aluminosilicate.</u>

T73.430 (A) L-Lactic acid is a sequestrant with a minimum content of 97% L-lactic acid **on a dry matter basis and a maximum of 0.5% D-isomer** for use in dry cat food products (less than 20% moisture). It is intended for use as a dental plaque and tartar control agent for adult maintenance cat food at levels not to exceed 1.2% on a dry matter basis.



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Recommendations to BOD (details)

1) NANP workgroup report to IDC (accepted) sent to BOD:
INGREDIENT DEFINITIONS Committee
NANP Sub-Committee

Purpose

Collaborative approach between AAFCO and National Animal Nutrition Program (NANP) to ensure accurate links to AAFCO ingredient definition numbers are used in the NANP feed composition database (<https://animalnutrition.org/feed-composition-database>) as definition numbers are added or changed.

1. The Board charge to IDC is develop a recommendation for this process.
2. The Board suggests AAFCO provide NANP with the appropriate ingredient numbers.
3. The workgroup should develop a recommendation on how the process between NANP and AAFCO will work regarding updates to the feed composition database

AAFCO/NANP Communication Procedures

NANP Role:

1. NANP uses postdoctoral scholars to create the feed composition database which includes AAFCO's correlated ingredient number as a web link; currently NANP does not have a postdoctoral scholar but anticipates one in the fall of 2020.
2. NANP currently conducts periodic checks on AAFCO ingredient numbers and names to verify that the listed numbers and names are correct and accurate. Upon implementation of this procedure, NANP will provide the AAFCO Ingredient Definition Chair a spreadsheet of current ingredient names posted on the NANP website, (<https://animalnutrition.org>) including NANP's ingredient definition and AAFCO's ingredient number link so AAFCO can verify the current NANP website listed ingredients have correct and accurate AAFCO ingredient number links.
3. NANP requests notification from AAFCO when either broad-sweeping or specific changes to AAFCO ingredient numbers are expected so NANP can determine if changes to the feed composition database are required. NANP requests all contact be with those listed in item 5 (NANP Contacts) and not with the postdoctoral scholars.
4. NANP will notify AAFCO Ingredient Definition Chair of new ingredient number links to the AAFCO website before posting so AAFCO can verify appropriate definition number is used.
5. NANP Contacts
 - Merlin Lindeman, University of Kentucky - merlin.lindemann@uky.edu. Phone 859-257-7524
 - Chair of the Feed Composition committee (changes annually), see <https://animalnutrition.org/node/38>



AAFCO Role

1. For AAFCO ingredient number links already posted to the NANP website, the AAFCO Ingredient Definition Chair will assign committee members to review existing AAFCO links on the NANP website ensuring correctness and accuracy. This initial review will be documented and filed in the Ingredient Definition Committee files to include: definition numbers, date of review and comments such as “verified” or “change required”. For incorrect ingredient numbers, the AAFCO Ingredient Definition Chair will email the NANP contacts with explanation and correct ingredient number.
2. When AAFCO makes changes to ingredient numbers or names, the Ingredient Definition Chair or their designee will notify NANP contacts of those changes. Changes to Ingredient definitions do not require notification as NANP’s feed composition database only includes AAFCO’s ingredient number web link and does not include AAFCO definitions.
3. The AAFCO Ingredient Definition Chair or their designee will review NANP’s submission of proposed use of AAFCO’s ingredient number link to ensure correctness and accuracy.
4. AAFCO Contact
 - Chair of the Ingredient Definitions Committee, see: <https://www.aafco.org/Regulatory/Committees/Ingredient-Definitions>

2) ODI workgroup report to IDC 8/6/20, status – accepted, sent to BOD

Add to Procedure manual:

New ingredients auto addition to ODI

- Identify data required for ODI input

New Ingredient Tracking for ODI Input					
Definition Number	Ingredient Name (as published in OP)	Known/Allowed Synonyms	CFR Reference (if any)	IFN Reference (if any)	Date Published as Official



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- All newly approved/rescinded/modified definitions (those requiring ODI update) shall be entered into above tracking document by IDC
- After each AAFCO meeting, IDC will submit appropriately reviewed and approved tracking sheet to FASS for publication/addition to the current OP
- FASS will follow normal procedure to ensure publication.
-
- IDC will verify that submitted new definitions are satisfactorily represented in ODI and request any edits as needed.

Technology committee has no part of researching or corroborating any data in ODI. IDC shall provide all necessary data to Technology Committee.

My thought is that each tracking document will be identified by the AAFCO meeting in which definitions were approved as official. A separate document should be submitted after each meeting.

Edits (no Further Association action):

(replace existing official definition with and leave official): **57.166 Chromium Propionate**—The food additive chromium propionate may be safely used in animal feed as a source of supplemental chromium in accordance with the following prescribed conditions:

- (a) The additive is manufactured by the reaction of a chromium salt with propionic acid, at an appropriate stoichiometric ratio, to produce triaqua-(mu₃-oxo) hexakis (mu₂-propionato-*O,O'*) trichromium propionate with the empirical formula, $[\text{Cr}_3(\text{O})(\text{CH}_3\text{CH}_2\text{CO}_2)_6(\text{H}_2\text{O})_3]\text{CH}_3\text{CH}_2\text{CO}_2$.
- (b) The additive is added to feed as follows:
 - (1) In complete feeds for broiler chickens and swine at a level not to exceed 0.2 milligrams (mg) of chromium from chromium propionate per kilogram of feed.
 - (2) In cattle diets at levels not to exceed 0.5 mg of chromium from chromium propionate per kilogram of the complete feed. Chromium propionate must be premixed with dry ingredients prior to adding to high moisture ingredients or forages.
 - (3) In feed for horses at a level not to exceed an intake of 4 mg of chromium from chromium propionate per horse per day.
- (c) The additive meets the following specifications:
 - (1) Total chromium content, 8 to 10 percent.
 - (2) Hexavalent chromium content, less than 2 parts per million (ppm).
 - (3) Arsenic, less than 1 ppm.
 - (4) Cadmium, less than 1 ppm.
 - (5) Lead, less than 0.5 ppm.
 - (6) Mercury, less than 0.5 ppm.
 - (7) Viscosity, not more than 2,000 centipoise.
- (d) The additive shall be incorporated into feed as follows:
 - (1) It shall be incorporated into each ton of feed by adding no less than one pound of a premix containing no more than 181.4 mg of added chromium from chromium propionate per pound.
 - (2) The premix manufacturer shall follow good manufacturing practices in the production of chromium propionate premixes. Inventory, production, and distribution records must provide a complete and accurate history of product production.
 - (3) Chromium from all sources of supplemental chromium cannot exceed:
 - (i) A level of 0.2 ppm of the complete feeds for broiler chickens and swine;
 - (ii) A level of 0.5 ppm of the complete feed for cattle; and
 - (iii) An intake of 4 mg per horse per day.
- (e) To assure safe use of the additive in addition to the other information required by the Federal Food, Drug, and Cosmetic Act:

- (1) The label and labeling of the additive, any feed premix, and feed shall contain the name of the additive.
 - (2) The label and labeling of the additive and any feed premix shall also contain:
 - (i) A guarantee for added chromium content.
 - (ii) Adequate directions for use and cautions for use including these statements: “Caution: Follow label directions” and consistent with the directions for use, the following:
 - (A) “Chromium from all sources of supplemental chromium cannot exceed 0.2 parts per million of the complete feed for broiler chickens and swine and 0.5 parts per million of the complete feed for cattle.”
 - (B) “Chromium from all sources of supplemental chromium cannot exceed 4 milligrams per horse per day.”
- (21 CFR 573.304) (Adopted 2017 rev.1, Amended 2021)

(replace existing official definition with and leave official): **71.40 Low Glucosinolate High Erucic Acid Rapeseed Meal, Solvent Extracted**** is the meal obtained after the removal of most of the oil by the prepress solvent extraction of whole seeds obtained from the genus *Brassica* (*Brassica napus*, *Brassica rapa* (formerly *B. campestris*), or *Brassica juncea*) from which the oil shall contain more than 2% erucic acid and the solid component shall contain less than 30 micromoles of any one or any mixture of 3-butenyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3-butenyl glucosinolate and 2-hydroxy-4-pentenyl glucosinolate, and allyl glucosinolate per gram of air dry, oil free solid. **When produced from *Brassica juncea* it must also contain less than 5 micromoles of allyl glucosinolates per gram of air dry, oil free solid.** It must contain a maximum of 2% erucic acid, a maximum of 12% crude fiber and a maximum of 30 micromoles of glucosinolates per gram. It is used in the diets of animals as a source of protein, in accordance with good feeding practice.

(replace existing official definition with and leave official): **71.77 Canola Meal is the** low erucic acid, low glucosinolate ~~consists of the~~ meal obtained after the removal of most of the oil by mechanical extraction, or by direct solvent or prepress solvent extraction process, from the ~~of~~ whole seeds **obtained from** ~~of the species~~ **the genus *Brassica*** (*Brassica napus*, ***Brassica rapa*** (formerly *B. campestris*) or *Brassica juncea*). ~~The oil component of which seed~~ from which the oil shall contain less than 2% erucic acid and the solid component of which seed ~~contains~~ shall contain less than 5 micromoles allyl glucosinolate and less than 30 micromoles of any one or any mixture of 3-butenyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3 butenyl glucosinolate, 2-hydroxy-4-pentenyl glucosinolate, and allyl glucosinolate per gram of air dry, oil free solid. **When produced from *Brassica juncea* it must also contain less than 5 micromoles of allyl glucosinolates per gram of air dry, oil free solid.** It must contain a maximum of 12% crude fiber and a maximum of 30 micromoles of glucosinolates per gram. **It is used in the diets of animals as a source of protein, in accordance with good feeding practice.**



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~~Note: A method of analysis for glucosinolates is contained in the publication by J.K. Daun and D.I. McGregor, December 15, 1981, Glucosinolate Analysis of Rapeseed (Canola). Method of the Canadian Grain Commission, Grain Research Laboratory. (The method is on file with the Feed Methods Clearinghouse, Division of Animal Feeds, Center for Veterinary Medicine, Food and Drug Administration.~~