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FEMAS

Feed Materials Assurance Scheme

Molasses & Blended Molasses Product

Molasses & Blended Molasses Product Sector Notes


Tim Oliver - ab.sustain


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Feed Materials FEMAS Assurance Scheme

NOTE: Although these Sector Notes may be translated into various languages for the convenience of users, the English version remains the definitive reference document in the event of any dispute.

NOTES ON THE IMPLEMENTATION OF FEMAS FOR BUSINESSES PRODUCING MOLASSES & BLENDED MOLASSES PRODUCTS

Sector Notes are provided to assist FEMAS participants and assessors in establishing some background knowledge of specific feed industry supply sectors where issues may exist that are uncommon, or of less relevance, in other sectors. These Notes are not necessarily exhaustive.

These Sector Notes are relevant to businesses involved in the production of liquid Molasses and Blended Molasses Products for use in animal feed.

These Notes are laid out in the same format as the FEMAS International Core Standard. Where additional comment is necessary, the clause reference is to the appropriate section of the FEMAS International Core Standard. It is emphasised that the comments included in this document are intended to assist in the application of the corresponding requirements of the FEMAS International Core Standard and are not to be considered in isolation. For clauses where no additional comments are provided in this document, the original requirements of the FEMAS International Core Standard continue to apply without any additions or exclusions.

In subsequent issues, additions and amendments to these Notes will be shown in *blue italics*, for ease of reference.

The expert knowledge and assistance of members of the UK Molasses Industry in preparing these Sector Notes is gratefully acknowledged.

1.10 Definitions

Blended Molasses Products: *Any blend of products consisting substantially of molasses, to which other feed ingredients have been added. These may include water, pot ale, corn steep liquor, condensed molasses solubles, spent fermentation substrates and other products, as well as flavours and aromatic substances.*

By-product (Co-product)*: Product produced as the result of a process primarily intended to produce a different product.*

Molasses: *By-product consisting of the syrupy residue collected during the manufacture or refining of sugar from sugar cane or sugar beet.*

For additional definitions refer to FEMAS International Core Standard

SECTION 3 RESOURCES AND GOOD HYGIENIC PRACTICES

3.4 Storage Facilities

To prevent nesting and other pest access, breather pipes on bulk tanks must be suitably protected. Breather pipes must also be downward facing to prevent ingress from rainwater and other potential contaminants.

3.8 Cross-Contamination

Where other food or feed products are stored on the same site as molasses or products intended for inclusion in molasses blends, participants must demonstrate effective clean-down and flushing procedures that prevent cross-contamination of molasses, molasses blends or any constituent ingredients. Cleaning methods must be validated and documented as effective and safe. Records must be kept of all clean-downs and flushing undertaken.

3.10 Pest Control

To prevent rodent access, all detachable hoses must be capped when not in use.

3.15 Process Water & Water Used For Cleaning Purposes

Where water is added to Molasses or Blended Molasses Products to achieve specification or improve handling characteristics, participants must implement testing regimes of any water held in tanks on site **in addition** to any other routine testing of water supplies. Risk assessment must be undertaken to determine the appropriate type and frequency of tests undertaken.

3.16 Control of Contaminants

Where inedible products or products prohibited from inclusion in feed are stored on the same site as molasses or products intended for inclusion in molasses blends, there must be physical separation between these products and the molasses, molasses blends or any constituent ingredients. This will ideally be achieved by use of segregated tanks and lines, but blanking plates or locked off valves may be a practical alternative. Where blanking plates and/or locked valves are used, validation must be undertaken initially and on a regular subsequent basis not exceeding 12 months to confirm the initial and ongoing integrity of each critical blanking plate and valve. Records must be kept to demonstrate this.

3.17 Sieves, Screens, Filters and Separators, Magnets & Metal Detectors

Where appropriate, filters must be used to remove the fibrous material naturally occurring in cane molasses (bagasse) and any other recognised contaminants inherent to the materials being handled.

SECTION 4 TRANSPORT REQUIREMENTS

4.2.3 Inspections of Land Transport Prior to Loading

Where the health and safety of quality personnel would be put at risk by climbing onto road tankers to carry out internal inspections, participants must comply with one of the following:

- Allow safe access by provision of safety platforms from which inspections may be done
- Nominate and train drivers to undertake inspections (in which case records of training must be held)
- Utilise risk assessment methodology to put in place alternative controls that will ensure issues of cross-contamination can be avoided (e.g. by use of dedicated tankers). In any such assessment, consideration must be given to the potential effects of inadvertently mixing different grades of the same product.

SECTION 5 PRODUCT SAFETY MANAGEMENT

5.1.5 Hazard Analysis

5.1.5.1 In carrying out a separate hazard analysis for each raw material used, participants must consider that some suppliers may not be aware of food safety or regulatory issues.

Specifically the use of antimicrobial products, antibiotics and other chemicals must be considered when sourcing raw materials from fermentation industries.

5.13.4 Analysis

Substrates derived from the production of amino acids by fermentation may contain high levels of ammonium salts. Participants must utilise risk assessment to determine testing frequencies and implement appropriate testing regimes accordingly.

Chemical Analysis regimes should include the testing for non-protein nitrogen based on a risk assessment of the raw materials used in the process.

5.13.6 Microbiological Analysis

The high sugar level in Molasses should effectively control salmonellae and bacterial pathogens: however, participants should continue to monitor microbial contamination at a frequency determined by risk assessment. Particular attention should be given to low sugar raw materials (such as roux, raffinate and urea based liquids) and the resulting Blended Molasses Products, which may have lower sugar levels, and may be at higher risk of contamination by pathogens.

Applicable Regulations

There are no specific regulations applicable to Molasses and Blended Molasses Products over and above those regulations that apply to all feed ingredients.