

National Organic Standards Board Meeting, September 17 – 19, 2002, Washington, D.C.

Processing Committee: Recommendation Tetrasodium Pyrophosphate (TSPP)

Introduction: The NOSB received a petition to consider TSPP as a PH buffer and dough conditioner for use in organic meat alternative products.

Background: The reviewers unanimously considered TSPP synthetic. TSPP is a pyrophosphate that belongs to the generic classification of sodium phosphates. One reviewer recommended TSPP be allowed in both "Organic" and "Made with Organic" categories while two prohibited TSPP in both categories. The TAP review indicated linkage to kidney damage and renal failure, plus the need to determine the biological quality of processed protein. Extrapolation from rat models may overestimate kidney damage from TSPP as a food additive.

Through a conversation with AgriSystems International (representative of the petitioner) the committee discovered that TSPP is used as a texturizer and considered to be an ingredient. Further the committee discovered that the final product made by the petitioner (texturized wheat protein) is in fact an ingredient used in the production of meat alternatives. When mixed with the final product (meat alternatives) TSPP is approximately .35% of the final product. Thus the percent of TSPP in the final consumer product is less than originally considered in the TAP review.

The petitioner has experimented (unsuccessfully) with disodium phosphate, calcium phosphate, calcium citrate and elemental sulfur. The alternatives tested did not produce the desired result. Some changed flavor, were considered allergens or were considered not functionally desirable.

Application of the criteria raised some concerns with the materials use to improve texture, color and flavor. The committee also agreed with the reviewers that the use of TSPP is not directly compatible with the principles of organic handling. However, the committee also felt that the production of this meat alternative is difficult without the use of TSPP and the petitioner has experimented with alternatives.

After consideration of the criteria, the information included in the TAP review and information gathered in direct communication with the petitioner the processing committee concluded that certain meat alternative products would experience significantly diminished quality and consumer acceptance with regard to taste and texture. However, the use of TSPP did not meet certain criteria. Therefore the committee offers the following recommendation for the use of TSPP in organic meat alternatives.

Recommendation:

205.605 (b) Synthetics allowed:

For use only in dairy foods labeled as "organic" or for use only in agricultural products labeled as "made with organic (specified ingredients or food group(s))"

Committee Vote:

Approve – 6
Disapprove - 1
Recuse – 0
Absent - 0
Abstain - 0

Conclusion: This recommendation supports the previous recommendation of the NOSB concerning the use of sodium phosphates in dairy foods and further supports the use of TSPP for meat alternatives in the "made with organic" category.