REGULATORY TOXICOLOGY AND PHARMACOLOGY **14**, 202–212 (1991)

Generally Recognized as Safe (GRAS) Evaluation of 4-Hexylresorcinol for Use as a Processing Aid for Prevention of Melanosis in Shrimp

VASILIOS H. FRANKOS,* DONALD F. SCHMITT,* LAURIE C. HAWS,* ARTHUR J. MCEVILY,† RADHA IYENGAR,† SANFORD A. MILLER,‡ IAN C. MUNRO,§ FERGUS M. CLYDESDALE,¶ ALLAN L. FORBES,‖ AND ROBERT M. SAUER**

Received February 12, 1991

4-Hexylresorcinol ($C_{12}H_{18}O_2$) is proposed for use as a processing aid for prevention of melanosis ("black spot") in shrimp and as an alternative to the currently approved sulfites. A safety evaluation was conducted to affirm, based upon scientific procedures, the generally recognized as safe ("GRAS") status of 4-hexylresorcinol for proposed use. The GRAS safety evaluation compiled, reviewed, and analyzed data on the following areas: chemical identity, analytical methodology, historical and proposed uses, functionality, and safety. The publicly available safety data on 4-hexylresorcinol cover a broad range of potential toxicity concerns including acute and subacute toxicity, subchronic toxicity, carcinogenicity, mutagenicity, and allergenicity. These studies, along with the aforementioned data, demonstrate that 4-hexylresorcinol presents no risk of toxicity at the levels proposed for treatment of shrimp, and the use of 4-hexylresorcinol as a processing aid to prevent melanosis in shrimp is GRAS.