PRODUCT NAME
Eastman™ C-A-P Cellulose Ester NF (Powder) or (Pellets)

SPECIFICATIONS

PROPERTY	LIMITS	TEST METHOD*
NF Infrared Identity	PASS	TECE-A-NF-G-IR-5
NF Viscosity, cps	45 – 90	TECE-A-NF-15792-V-32
NF Water, W%	5.0 maximum	TECE-A-NF-15792-POT-31
NF Residue on Ignition, W%	0.1 maximum	TECE-A-NF-15792-GA-57
NF Free Acid, W%	3.0 maximum	TECE-A-NF-15792-POT-31
NF Phthalyl, %	30.0 – 36.0	TECE-A-NF-15792-POT-31
NF Acetyl, %	21.5 – 26.0	TECE-A-NF-15792-POT-31
NF Heavy Metals, wt% 0.001 MAX	PASS	TECE-A-NF-15792-VCC-63
NF Residual Solvents	PASS	TECE-A-NF-15792-POT-31

* This methodology is derived from the United States Pharmacopeia (USP)/National Forumulary (NF), current edition.

ADDITIONAL INFORMATION

This specification describes Eastman™ C-A-P NF Powder or Pellets (Cellulose Ester). The Eastman™ C-A-P NF described in this specification is judged to be produced and handled in accordance with current Good Manufacturing Practices (cGMP) and meets each of the requirements listed in the section above according to the methods of testing Eastman™ C-A-P NF as set forth in the U.S. Pharmacopoeia and National Formulary. Eastman™ C-A-P NF is available as a white pellet or as a white powder that may, on occasion, have some discolored particles present. These discolored particles, ranging from translucent off-white to black, are overheated Eastman™ C-A-P NF particles or low phthalyl substituted cellulose acetate occurring in the manufacturing process. These particles, when present, are in parts per million and are not preventable in our manufacturing process. They will either dissolve in the customer's solvent system (dependent upon the solvent system) or can be removed by filtration of the customer's solution.

This product is in compliance with the requirements in USP General Chapters <232> Elemental Impurities, ICH Q3D Guideline for Elemental Impurities and EP Metal Catalyst or Metal Reagent Residues.