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21 Authors

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22 Date of Revision

4 May 2017.

Hypromellose Acetate Succinate

1 Nonproprietary Names

JP: Hypromellose Acetate Succinate

USP–NF: Hypromellose Acetate Succinate

2 Synonyms

Aqoat; *Aqoat AS-HF/HG*; *Aqoat AS-LF/LG*; *Aqoat AS-MF/MG*; cellulose, 2-hydroxypropyl methyl ether, acetate succinate; HPMCAS.

3 Chemical Name and CAS Registry Number

Cellulose, 2-hydroxypropylmethyl ether, acetate hydrogen butanedioate [71138-97-1]

4 Empirical Formula and Molecular Weight

The USP 40–NF 35 S1 describes hypromellose acetate succinate as a mixture of acetic acid and monosuccinic acid esters of hydroxypropylmethyl cellulose. It is available in several subclasses, which vary in extent of substitution, mainly of acetyl and succinoyl groups, and in particle size (fine or granular). When dried at 105°C for one hour, it contains 12.0–28.0% of methoxy groups; 4.0–23.0% of hydroxypropoxy groups; 2.0–16.0% of acetyl groups; and 4.0–28.0% of succinoyl groups.

The molecular weight of hypromellose acetate succinate cannot be characterized by the external calibration or universal calibration methods. It can only be characterized using a mass sensitive detector such as triple detection or multiangle laser light scattering.⁽¹⁾