

**Changes to legislation:** There are currently no known outstanding effects for the Commission Regulation (EU) No 231/2012, E 464 HYDROXYPROPYL METHYL CELLULOSE. (See end of Document for details)

## ANNEX

**E 464 HYDROXYPROPYL METHYL CELLULOSE**

<b>Synonyms</b>	
<b>Definition</b>	Hydroxypropyl methyl cellulose is cellulose obtained directly from strains of fibrous plant material and partially etherified with methyl groups and containing a small degree of hydroxypropyl substitution
Einecs	
Chemical name	2-Hydroxypropyl ether of methylcellulose
Chemical formula	The polymers contain substituted anhydroglucose units with the following general formula: $C_6H_7O_2(OR_1)(OR_2)(OR_3)$ , where $R_1, R_2, R_3$ each may be one of the following: — H — $CH_3$ — $CH_2CHOHCH_3$ — $CH_2CHO(CH_2CHOHCH_3)CH_3$ — $CH_2CHO[CH_2CHO(CH_2CHOHCH_3)CH_3]CH_3$
Molecular weight	From about 13 000 to 200 000
Assay	Content not less than 19 % and not more than 30 % methoxyl groups ( $-OCH_3$ ) and not less than 3 % and not more than 12 % hydroxypropoxyl groups ( $-OCH_2CHOHCH_3$ ), on the anhydrous basis
<b>Description</b>	Slightly hygroscopic white or slightly yellowish or greyish odourless and tasteless, granular or fibrous powder
Identification	
Solubility	Swelling in water, producing a clear to opalescent, viscous, colloidal solution. Insoluble in ethanol
Gas chromatography	Determine the substituents by gas chromatography
pH	Not less than 5,0 and not more than 8,0 (1 % colloidal solution)
Purity	
Loss on drying	Not more than 10 % (105 °C, 3 hours)
Sulphated ash	Not more than 1,5 % for products with viscosities of 50 mPa.s or above

---

**Changes to legislation:** There are currently no known outstanding effects for the Commission Regulation (EU) No 231/2012, E 464 HYDROXYPROPYL METHYL CELLULOSE. (See end of Document for details)

---

	Not more than 3 % for products with viscosities below 50 mPa.s
Propylene chlorohydrins	Not more than 0,1 mg/kg
Arsenic	Not more than 3 mg/kg
Lead	Not more than 2 mg/kg
Mercury	Not more than 1 mg/kg
Cadmium	Not more than 1 mg/kg

**Changes to legislation:**

There are currently no known outstanding effects for the Commission Regulation (EU) No 231/2012, E 464 HYDROXYPROPYL METHYL CELLULOSE.