



# GUSTAV PARMENTIER GmbH

EICHENDORFFSTRASSE 37 60320 FRANKFURT AM MAIN GERMANY

Phone: +49 (0)69 56 10 34 Fax: +49 (0)69 56 85 18

[info@parmentier.de](mailto:info@parmentier.de) [www.parmentier.de](http://www.parmentier.de)

## SPECIFICATIONS

### HPMC K4M

Hypromellose 2208  
conform to EP, USP, JP and E 464

|  |                                     |
|--|-------------------------------------|
| <i>Characters</i>                          |                                     |
| Appearance                                 | White to slightly off-white powder. |
| Clarity/Opalescence and Colour of Solution | Conforms                            |
| Identification (A, B, C, D, E)             | Conforms to identity tests          |
| Solubility                                 | Soluble in cold water               |
| Methoxy                                    | 19.0 – 24.0%                        |
| Hydroxypropoxy                             | 4.0 – 12.0%                         |
| Viscosity (2% aq. sol, 20 °C)              | 3,000 – 5,600 mPa s                 |
| Loss on drying                             | 5.0% maximum                        |
| pH (2% aq. sol.)                           | 5.0 – 8.0                           |
| Residue on Ignition                        | 1.5% maximum                        |
| <i>Heavy Metals</i>                        |                                     |
| Arsenic                                    | 10 ppm maximum                      |
| Lead                                       | 1.5 ppm maximum                     |
| Mercury                                    | 0.5 ppm maximum                     |
| Cadmium                                    | 0.5 ppm maximum                     |
| Cobalt                                     | 5 ppm maximum                       |
| Vanadium                                   | 10 ppm maximum                      |
| Nickel                                     | 20 ppm maximum                      |
| Propylene chlorohydrins                    | 0.1 ppm maximum                     |
| Iron                                       | 100 ppm maximum                     |
| Chlorides                                  | 0.5% maximum                        |
| <i>Microbial contamination</i>             |                                     |
| TMC  | <10 <sup>3</sup> CFU/g              |
| TYMC                                       | <10 <sup>2</sup> CFU/g              |
| Staphylococcus aureus                      | Absent                              |
| Escherichia coli                           | Absent                              |
| Salmonella                                 | Absent                              |

Storage: Dry environment.

Packaging: 25-kg fibre drum lined with polyethylene bag.

Shelf Life: 3 Years.