

# MMA/PA gel™

## Description

### A food for special medical purposes.

MMA/PA gel™ is an unflavoured powdered methionine, threonine and valine free, low isoleucine protein substitute containing essential and non-essential amino acids, carbohydrate, vitamins, minerals and trace elements.

## Indications

MMA/PA gel is for use in the dietary management of Methylmalonic Aciduria/Propionic Aciduria (MMA/PA) from 6 months to 10 years of age.

## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

The product can be used individually or interchanged to meet individual protein requirements.

1. The daily protein substitute requirement is given as MMA/PA gel.
2. Additional protein is provided from exchanges of natural protein, to provide restricted amino acids in controlled amounts, which is essential for growth and development.
3. Foods high in carbohydrate and fat, but low in protein, should be provided to supply the remainder of the energy.

MMA/PA gel (24g) = 10g PE

## Preparation Guidelines

MMA/PA gel can be either taken as a gel or as a low volume drink.

### For gel:



Empty the contents of the sachet into the beaker.



Add approximately 30ml of cold water. Secure the lid and shake well for 10 seconds.



Leave to stand for 2 minutes, allowing a smooth gel to form. Consume with a spoon.

### For a low volume drink:



Empty the contents of the sachet into the beaker.



Add approximately 80ml (half way up the beaker) of cold water. Secure the lid and shake well for 10 seconds.



Drink immediately.

Water or permitted drinks should be taken after MMA/PA gel.

### IMPORTANT NOTICE

Must only be given to people with proven MMA/PA under strict medical supervision.

Suitable from 6 months to 10 years of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply lysine and tryptophan, fluid and general requirements.

Not for use as a sole source of nutrition.

For enteral use only.

### Nutritional Information

|                              |            | Per<br>100g        | Per<br>MMA/PA gel<br>24g sachet |               |    | Per<br>100g | Per<br>MMA/PA gel<br>24g sachet |
|------------------------------|------------|--------------------|---------------------------------|---------------|----|-------------|---------------------------------|
| Energy                       | kJ         | 1440               | 346                             | Sodium        | mg | 379         | 91                              |
|                              |            | kcal               | 339                             |               |    | 81          | mmol                            |
| Fat                          | g          | 0.05               | 0.02                            | Chloride      | mg | 583         | 140                             |
|                              |            | of which saturates | g                               |               |    | 0.0         | 0.0                             |
| Carbohydrate                 | g          | 42.9               | 10.3                            | Potassium     | mg | 938         | 225                             |
|                              |            | of which sugars    | g                               |               |    | 27.1        | 6.5                             |
| Protein equivalent           | g          | 41.7               | 10                              | Calcium       | mg | 1083        | 260                             |
| L-Isoleucine                 | g          | 0.15               | 0.04                            |               |    | mmol        | 27.1                            |
| L-Methionine                 | g          | 0                  | 0                               | Phosphorus    | mg | 825         | 198                             |
| L-Threonine                  | g          | 0                  | 0                               |               |    | mmol        | 26.4                            |
| L-Valine                     | g          | 0                  | 0                               | Magnesium     | mg | 167         | 40                              |
| Salt                         | g          | 0.95               | 0.23                            |               |    | mmol        | 6.8                             |
| <b>Vitamins and minerals</b> |            |                    |                                 | Iron          | mg | 14          | 3.4                             |
| Vitamin A (RE)               | µg         | 600                | 144                             | Zinc          | mg | 11          | 2.6                             |
| Vitamin D                    | µg         | 14.6               | 3.5                             | Copper        | mg | 0.80        | 0.19                            |
| Vitamin E (αTE)              | mg         | 9.0                | 2.2                             | Iodine        | µg | 138         | 33.1                            |
| Vitamin K                    | µg         | 41                 | 9.8                             | Selenium      | µg | 35          | 8.4                             |
| Vitamin C                    | mg         | 63                 | 15                              | Manganese     | mg | 1.7         | 0.41                            |
| Thiamin                      | mg         | 1.0                | 0.24                            | Chromium      | µg | 71          | 17                              |
| Riboflavin                   | mg         | 1.2                | 0.29                            | Molybdenum    | µg | 50          | 12                              |
| Vitamin B6                   | mg         | 1.1                | 0.26                            | <b>Others</b> |    |             |                                 |
| Niacin                       | mg (mg NE) | 14 (32.5)          | 3.4 (7.9)                       | Choline       | mg | 279         | 67                              |
| Folic acid                   | µg         | 208                | 50                              |               |    |             |                                 |
| Vitamin B12                  | µg         | 2.0                | 0.48                            |               |    |             |                                 |
| Pantothenic Acid             | mg         | 5.0                | 1.2                             |               |    |             |                                 |
| Biotin                       | µg         | 25                 | 6.0                             |               |    |             |                                 |

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|-------------------|---|-------------|---------------------------------|--------------------------|-------------|---------------------------------|------|
| <b>Aino acids</b> |   |             |                                 | L-Leucine                | g           | 6.58                            | 1.58 |
| L-Alanine         | g | 4.15        | 1.00                            | L-Lysine                 | g           | 4.58                            | 1.10 |
| L-Arginine        | g | 4.30        | 1.03                            | L-Phenylalanine          | g           | 2.78                            | 0.67 |
| L-Aspartic Acid   | g | 7.46        | 1.79                            | L-Proline                | g           | 2.02                            | 0.48 |
| L-Cystine         | g | 1.77        | 0.42                            | L-Serine                 | g           | 2.93                            | 0.70 |
| L-Glutamine       | g | 5.06        | 1.21                            | L-Tryptophan             | g           | 1.11                            | 0.27 |
| Glycine           | g | 1.95        | 0.47                            | L-Tyrosine               | g           | 2.78                            | 0.67 |
| L-Histidine       | g | 2.78        | 0.67                            | L-Carnitine              | mg          | 46                              | 11   |
| L-Isoleucine      | g | 0.15        | 0.04                            | Taurine                  | mg          | 92                              | 22   |
|                   |   |             |                                 | <b>Osmolality:</b>       |             |                                 |      |
|                   |   |             |                                 | 24g + 30ml = 3000mOsm/kg |             |                                 |      |
|                   |   |             |                                 | 24g + 80ml = 1540mOsm/kg |             |                                 |      |

### Pack Size/Weight

30 x 24g e sachets = 720g

### Flavours

Unflavoured.

### Storage

Store in a cool dry place.

Sachets designed for single use and should be used immediately once opened.

Any unused powder in an open sachet should be kept in an airtight container or sealed with a clipper and used within 24 hours.

