

### Description

#### A food for special medical purposes.

MSUD gel™ is an unflavoured leucine, isoleucine and valine free protein substitute containing essential and non-essential amino acids, carbohydrate, vitamins, minerals and trace elements.

### Indications

MSUD gel is for use in the dietary management of Maple Syrup Urine Disease (MSUD) 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.

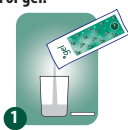
1. The daily protein substitute requirement is given as MSUD gel.
2. Additional protein is provided from exchanges of natural protein, to provide restricted amino acids in controlled amounts, which is essential for growth and development.
3. Foods high in carbohydrate and fat, but low in protein, should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

MSUD gel (24g) = 10g PE

### Preparation Guidelines

MSUD gel can be either taken as a gel or 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 MSUD gel.

### IMPORTANT NOTICE

Must only be given to people with proven Maple Syrup Urine Disease 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 leucine, isoleucine and valine, fluid and general requirements.

Not for use as a sole source of nutrition.

For enteral use only.

### Nutritional Information

		Per 100g	Per MSUD gel 24g sachet			Per 100g	Per MSUD gel 24g sachet
Energy	kJ	1440	346	Sodium	mg	379	91
		kcal	81			mmol	16.3
Fat	g	0.05	0.02	Chloride	mg	583	140
		of which saturates	0.0			0.0	mmol
Carbohydrate	g	42.9	10.3	Potassium	mg	938	225
		of which sugars	27.1			6.5	mmol
Protein equivalent	g	41.7	10	Calcium	mg	1083	260
L-Isoleucine	g	0	0			mmol	27.1
L-Leucine	g	0	0	Phosphorus	mg	825	198
L-Valine	g	0	0			mmol	26.4
Salt	g	0.95	0.23	Magnesium	mg	167	40
						mmol	6.8
<b>Vitamins and minerals</b>				Iron	mg	14	3.4
Vitamin A (RE)	µg	600	144			Zinc	mg
Vitamin D	µg	14.6	3.5	Copper	mg		
Vitamin E (αTE)	mg	9.0	2.2			Iodine	µg
Vitamin K	µg	41	9.8	Selenium	µg		
Vitamin C	mg	63	15			Manganese	mg
Thiamin	mg	1.0	0.24	Chromium	µg		
Riboflavin	mg	1.2	0.29			Molybdenum	µg
Vitamin B6	mg	1.1	0.26	<b>Others</b>			
Niacin	mg (mg NE)	14 (38.2)	3.4 (9.2)	Choline	mg	279	67
Folic acid	µg	208.0	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>Amino acids</b>				L-Methionine	g	1.05	0.25
L-Alanine	g	5.11	1.23	L-Phenylalanine	g	2.73	0.66
L-Arginine	g	4.85	1.16	L-Proline	g	4.29	1.03
L-Aspartic Acid	g	6.13	1.47	L-Serine	g	2.90	0.70
L-Cystine	g	1.45	0.35	L-Threonine	g	2.61	0.63
L-Glutamine	g	5.51	1.32	L-Tryptophan	g	1.45	0.35
Glycine	g	4.06	0.97	L-Tyrosine	g	2.90	0.70
L-Histidine	g	1.74	0.42	L-Carnitine	mg	46	11
L-Lysine	g	3.65	0.88	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.

