

**SOLUVIT N- thiamine mononitrate, riboflavin 5-phosphate sodium anhydrous, niacinamide, pyridoxine hydrochloride, folic acid, cyanocobalamin, sodium pantothenate, biotin, sodium ascorbate powder, for solution  
Fresenius Kabi USA, LLC**

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**Soluvit N  
Powder for solution for infusion**

**Presentation**

Soluvit N is a lyophilized, sterile, yellow mixture of water soluble vitamins for intravenous infusion. Qualitative and Quantitative Composition

One vial of Soluvit N contains:

<b>Active ingredients</b>	<b>Quantity</b>	<b>1 ml of reconstituted Soluvit N contains:</b>
Thiamine mononitrate (Corresponding to Vitamin B <sub>1</sub> 2.5 mg)	3.1 mg	0.31 mg
Riboflavine sodium phosphate (Corresponding to Vitamin B <sub>2</sub> 3.6 mg)	4.9 mg	0.49 mg
Nicotinamide	40 mg	4.0 mg
Pyridoxine hydrochloride (corresponding to Vitamin B <sub>6</sub> 4.0 mg)	4.9 mg	0.49 mg
Sodium pantothenate (corresponding to pantothenic acid 15.0 mg)	16.5 mg	1.65 mg
Sodium ascorbate (corresponding to Vitamin C 100 mg)	113 mg	11.3 mg
Biotin	60 µg	6.0 µg
Folic acid	0.40 mg	40 µg
Cyanocobalamin	5.0 µg	0.5 µg

For the full list of excipients, see section list of excipients.

- Osmolality in 10 ml of water: approx. 490 mosm/kg water
- pH in 10 ml of water: 5.8

**Therapeutic indications**

Soluvit N is indicated in adult patients and children as a supplement in intravenous nutrition to meet the daily requirements of water soluble vitamins.

## **Posology and method of administration**

### **Posology**

#### ***Adults:***

For adult patients and children weighing 10 kg or more, the recommended daily dosage is the content of one vial.

#### ***Infants:***

Children weighing less than 10 kg should be given 1/10 of the content of one vial per kg body weight per day.

### **Contraindications**

Known hypersensitivity to any of the components, e.g. thiamine or methyl parahydroxybenzoate.

### **Special warning and special precaution for use**

Soluvit N must not be given undiluted.

When Soluvit N is diluted with water based solutions, the admixture should be protected from light. This is not necessary if Soluvit N is diluted with Intralipid because of the protective effect of the fat emulsion.

#### ***Interference with clinical laboratory tests***

Biotin may interfere with laboratory tests that are based on a biotin/streptavidin interaction, leading to either falsely decreased or falsely increased test results, depending on the assay. The risk of interference is higher in children and patients with renal impairment and increases with higher doses. When interpreting results of laboratory tests, possible biotin interference has to be taken into consideration, especially if a lack of coherence with the clinical presentation is observed (e.g. thyroid test results mimicking Graves' disease in asymptomatic patients taking biotin or false negative troponin test results in patients with myocardial infarction taking biotin). Alternative tests not susceptible to biotin interference should be used, if available, in cases where interference is suspected. The laboratory personnel should be consulted when ordering laboratory tests in patients taking biotin.

### **Interaction with other medicinal products and other forms of interaction**

Folic acid may lower the serum concentration of phenytoin and obscure pernicious anaemia.

Vitamin B<sub>6</sub> can reduce the effect of levodopa.

### **Fertility, pregnancy and lactation**

Animal reproduction studies or clinical investigations during pregnancy have not been carried out with Soluvit N. There are, however, published reports on safe administration

of water soluble vitamins in this patient group.

### **Effects on ability to drive and use machines**

Not relevant.

### **Undesirable effects**

Allergic reactions including severe (anaphylactic) reactions may occur in patients hypersensitive to any component of the preparation, e.g. folic acid, thiamine or methyl parahydroxybenzoate (frequency not known).

#### *Reporting of suspected adverse reactions*

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system.

### **Overdose**

No adverse effects of an overdose of water soluble vitamins have been reported, with exception of cases of extremely high parenteral doses. Overdoses caused by parenteral preparations for nutritional supplement of water soluble vitamins have not been reported.

No specific treatment is needed. See also section Contraindications.

### **List of excipients**

Glycine (Aminoacetic acid)

Disodium edetate.

Methyl parahydroxybenzoate

### **Incompatibilities**

Soluvit N may only be added to or mixed with other medicinal products for which compatibility has been documented.

### **Shelf-life of the medicinal product as packed for sale**

18 months

#### *Shelf-life after mixing*

Chemical and physical in-use stability after dilution has been demonstrated for 24 hours at 25°C. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2-8°C,

unless mixing has taken place in controlled and validated aseptic conditions.

### **Special precautions for storage**

Do not store above 25°C. Protect from light.

### **Instructions for use/handling, and disposal**

#### ***Adults and children age 11 years and above:***

The contents of one vial of Soluvit N are dissolved by adding 10 ml of:

1. Vitalipid N Adult

or 2. Intralipid 10%, Intralipid 20%, Intralipid 30%, Structolipid

or 3. Water for Injections

or 4. Glucose solution for infusion (5%-50%)

Soluvit N may be added to parenteral nutrition admixtures containing carbohydrates, lipids, amino acids, electrolytes and trace elements provided that compatibility and stability have been confirmed.

#### ***Children below 11 years of age:***

The contents of one vial are dissolved by adding 10 ml of:

1. Vitalipid N Infant (for children above 10 kg/bw)

or 2. Intralipid 10%, Intralipid 20%

or 3. Water for Injections

or 4. Glucose solution for infusion (5%-50%)

Children weighing less than 10 kg should be given 1 ml of the dissolved mixture per kg body weight per day. Children weighing 10 kg or more should be given 10 ml (one vial) per day.

Due to differences in the dosage regimes for Soluvit N and Vitalipid N Infant, the mixture 1 is not recommended for children weighing less than 10 kg.

Soluvit N may be added to parenteral nutrition admixtures containing carbohydrates, lipids, amino acids, electrolytes and trace elements provided that compatibility and stability have been confirmed.

#### ***Disposal***

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

#### **Manufacturer:**

Fresenius Kabi AB, Uppsala, Sweden

March 2019

**PACKAGE LABEL - PRINCIPAL DISPLAY - Soluvit N Vial Label****Soluvit N****Powder for solution for infusion**

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***Soluvit N*****Powder for solution for infusion**

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1 vial contains: Vitamin B<sub>1</sub> 2.5 mg – Vitamin B<sub>2</sub> 3.6 mg – Nicotinamide 40 mg – Vitamin B<sub>6</sub> 4.0 mg – Pantothenic acid 15.0 mg – Vitamin C 100 mg – Biotin 60 µg – Folic acid 0.4 mg – Vitamin B<sub>12</sub> 5.0 µg.

Additive to Infusion fluids after dissolution. See package insert.  
**Do not store above 25 °C. Protect from light.**

Batch No/Use before.:  
Manuf. date:

330 608

Fresenius Kabi AB, Uppsala, Sweden

**PACKAGE LABEL - PRINCIPAL DISPLAY - Soluvit N Carton****Soluvit™ N****Powder for solution for infusion**

10 Vials

Open here



**Soluvit™ N**  
Powder for solution for infusion

**Soluvit™ N**  
Powder for solution for infusion



Batch No. :  
Manuf. Date  
Use Before

**Soluvit™ N**  
Powder for solution for infusion

**Soluvit™ N**  
Powder for solution for infusion



### 10 Vials

One vial contains:

Thiamine mononitrate 3.1 mg (corresponding to Vitamin B<sub>1</sub> 2.5 mg), Riboflavine sodium phosphate 4.9 mg (corresponding to Vitamin B<sub>2</sub> 3.6 mg), Nicotinamide 40 mg, Pyridoxine hydrochloride 4.9 mg (corresponding to Vitamin B<sub>6</sub> 4.0 mg), Sodium pantothenate 16.5 mg (corresponding to pantothenic acid 15.0 mg), Sodium ascorbate 113 mg (corresponding to Vitamin C 100 mg), Biotin 60 µg, Folic acid 0.40 mg, Cyanocobalamin 5.0 µg, Glycine 300 mg, Disodium edetate 0.5 mg, Methylparahydroxy-benzoate 0.5 mg.

Additive to infusion fluids after dissolution. See package insert.

Do not store above 25 °C. Protect from light.

Keep out of reach of children.

Additions should be made aseptically.



## PACKAGE LABEL - PRINCIPAL DISPLAY - Soluvit N Vial Label

**Soluvit -  
Trockensubstanz zur Infusionsbereitung**

# Soluvit-

## Trockensubstanz zur Infusionsbereitung

1 Trockenstechampulle enthält: Vitamin B<sub>1</sub> 3,1 mg, Vitamin B<sub>2</sub> 4,9 mg, Nikotinamid 40,0 mg, Vitamin B<sub>6</sub> 4,9 mg, Pantothensäure 16,5 mg, Vitamin C 113,0 mg, Biotin 60,0 µg, Folsäure 0,4 mg, Vitamin B<sub>12</sub> 5,0 µg. Glycin, Natrium EDTA.

1 Trockenstechampulle

Pulver zur Herstellung einer Infusionslösung

Zur intravenösen Infusion nach Auflösung und Verdünnung.

Packungsbeilage beachten. Nur zur einmaligen Entnahme.

Arzneimittel für Kinder unzugänglich aufbewahren. Nur frisch zubereitete Lösungen verwenden. Nicht über 25° C lagern. Die Ampullen im Umkarton aufbewahren, um den Inhalt vor Licht zu schützen.

Rezept- und apothekenpflichtig.

Z.Nr.: 1-19573

Ch.-B.:

Pharmazeutischer Unternehmer:  
Fresenius Kabi Austria GmbH, A-8055 Graz

Verwendbar bis:



339 190

## PACKAGE LABEL - PRINCIPAL DISPLAY - Soluvit N Carton

**Soluvit -  
Trockensubstanz zur Infusionsbereitung**  
10 Trockenstechampullen

Hier öffnen



**Soluvit** –  
Trockensubstanz zur Infusionsbereitung

**Soluvit** –  
Trockensubstanz zur Infusionsbereitung



Ch-B:  
Verwendbar bis:

**Soluvit** –  
Trockensubstanz zur Infusionsbereitung

**Soluvit** –  
Trockensubstanz zur Infusionsbereitung



## 10 Trockenstechampullen

Pulver zur Herstellung einer Infusionslösung

1 Trockenstechampulle enthält:

Vitamin B<sub>1</sub> 3,1 mg, Vitamin B<sub>2</sub> 4,9 mg, Nikotinamid 40,0 mg, Vitamin B<sub>6</sub> 4,9 mg,  
Pantothenensäure 16,5 mg, Vitamin C 113,0 mg, Biotin 60,0 µg, Folsäure 0,4 mg,  
Vitamin B<sub>12</sub> 5,0 µg

Glycin, Natrium EDTA.

Zur intravenösen Infusion nach Auflösung und Verdünnung.

Packungsbellage beachten. Nur zur einmaligen Entnahme.

Arzneimittel für Kinder unzugänglich aufbewahren.

Nur frisch zubereitete Lösungen verwenden.

Nicht über 25° C lagern.

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Rezept- und apothekenpflichtig.

Z.Nr.: 1-19573



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## SOLUVIT N

thiamine mononitrate, riboflavin 5-phosphate sodium anhydrous, niacinamide, pyridoxine hydrochloride, folic acid, cyanocobalamin, sodium pantothenate, biotin, sodium ascorbate powder, for solution

### Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:65219-077
<b>Route of Administration</b>	INTRAVENOUS		

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>thiamine mononitrate</b> (UNII: 8K0I04919X) (thiamine ion - UNII:4ABT0J945J)	thiamine	1.581 mg in 1 mL
<b>riboflavin 5'-phosphate sodium anhydrous</b> (UNII: 957E53WW42) (riboflavin 5'-phosphate - UNII:7N464URE7E)	riboflavin 5'-phosphate	2.45 mg in 1 mL
<b>niacinamide</b> (UNII: 25X51I8RD4) (niacinamide - UNII:25X51I8RD4)	niacinamide	20.0 mg in 1 mL
<b>pyridoxine hydrochloride</b> (UNII: 68Y4CF58BV) (pyridoxine - UNII:KV2JZ1BI6Z)	pyridoxine hydrochloride	2.45 mg in 1 mL
<b>folic acid</b> (UNII: 935E97BOY8) (folic acid - UNII:935E97BOY8)	folic acid	0.216 mg in 1 mL
<b>cyanocobalamin</b> (UNII: P6YC3EG204) (cyanocobalamin - UNII:P6YC3EG204)	cyanocobalamin	2.775 ug in 1 mL
<b>sodium pantothenate</b> (UNII: OES0R93FOC) (pantothenic acid - UNII:19F5HK2737)	sodium pantothenate	8.25 mg in 1 mL
<b>biotin</b> (UNII: 6SO6U10H04) (biotin - UNII:6SO6U10H04)	biotin	30.0 ug in 1 mL
<b>sodium ascorbate</b> (UNII: S033EH8359) (ascorbic acid - UNII:PQ6CK8PD0R)	ascorbic acid	56.5 mg in 1 mL

### Inactive Ingredients

Ingredient Name	Strength
<b>edetate disodium</b> (UNII: 7FLD91C86K)	
<b>glycine</b> (UNII: TE7660XO1C)	
<b>water</b> (UNII: 059QF0KO0R)	
<b>methylparaben</b> (UNII: A2I8C7HI9T)	

### Packaging

Marketing Start      Marketing End

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:65219-077-15	10 in 1 CARTON	07/07/2023	
1		2 mL in 1 VIAL; Type 0: Not a Combination Product		

## Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
Export only		07/07/2023	

## SOLUVIT N

thiamine mononitrate, riboflavin 5-phosphate sodium anhydrous, niacinamide, pyridoxine hydrochloride, folic acid, cyanocobalamin, sodium pantothenate, biotin, sodium ascorbate powder, for solution

### Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:65219-075
<b>Route of Administration</b>	INTRAVENOUS		

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>thiamine mononitrate</b> (UNII: 8K0I04919X) (thiamine ion - UNII:4ABT0J945J)	thiamine	1.581 mg in 1 mL
<b>riboflavin 5'-phosphate sodium anhydrous</b> (UNII: 957E53WW42) (riboflavin 5'-phosphate - UNII:7N464URE7E)	riboflavin 5'-phosphate	2.45 mg in 1 mL
<b>niacinamide</b> (UNII: 25X51I8RD4) (niacinamide - UNII:25X51I8RD4)	niacinamide	20.0 mg in 1 mL
<b>pyridoxine hydrochloride</b> (UNII: 68Y4CF58BV) (pyridoxine - UNII:KV2JZ1BI6Z)	pyridoxine hydrochloride	2.45 mg in 1 mL
<b>folic acid</b> (UNII: 935E97BOY8) (folic acid - UNII:935E97BOY8)	folic acid	0.216 mg in 1 mL
<b>cyanocobalamin</b> (UNII: P6YC3EG204) (cyanocobalamin - UNII:P6YC3EG204)	cyanocobalamin	2.775 ug in 1 mL
<b>sodium pantothenate</b> (UNII: OES0R93F0C) (pantothenic acid - UNII:19F5HK2737)	sodium pantothenate	8.25 mg in 1 mL
<b>biotin</b> (UNII: 6S06U10H04) (biotin - UNII:6S06U10H04)	biotin	30.0 ug in 1 mL
<b>sodium ascorbate</b> (UNII: S033EH8359) (ascorbic acid - UNII:PQ6CK8PD0R)	ascorbic acid	56.5 mg in 1 mL

### Inactive Ingredients

Ingredient Name	Strength
<b>edetate disodium</b> (UNII: 7FLD91C86K)	
<b>glycine</b> (UNII: TE7660XO1C)	

water (UNII: 059QF0KO0R)

### Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:65219-075-25	10 in 1 CARTON	07/07/2023	
1		2 mL in 1 VIAL; Type 0: Not a Combination Product		

### Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
Export only		07/07/2023	

**Labeler** - Fresenius Kabi USA, LLC (013547657)

### Establishment

Name	Address	ID/FEI	Business Operations
Fresenius Kabi USA, LLC		840771732	ANALYSIS(65219-077, 65219-075) , MANUFACTURE(65219-077, 65219-075)

Revised: 6/2024

Fresenius Kabi USA, LLC