

**Name of Hospital**  
**Neonatal Parenteral Nutrition Prescription**  
**TERM CONCENTRATED**  
**48 HOUR BAG**  
 E of E Term Concentrated PN Px (July 2022 – version 12)  
 Page 1 of 2

Name	Hospital No.
Date of Birth	NHS Number
Address	
Consultant	

**Instructions for Completing Parenteral Nutrition Prescription  
 FOR ADMINISTRATION VIA CENTRAL LINE ONLY**

Birth Gestation	Ward	<b>Aqueous and lipid component will provide the following</b>										
		Total volume	50	60	70	80	90	100	110	115		
<ul style="list-style-type: none"> <li>Enter one date only in each column for days 1 &amp; 2. Total the 48 hour bag requirement in the third column.</li> <li>Days of PN means number of days the baby is on PN.</li> <li>Indicate the total PN volume, volume of aqueous PN, volume of lipid, volume of enteral feed, other infusion volumes and total fluid volume required.</li> <li>Circle STD if the electrolytes requirements are the same as the standard formula. If not, fill in the specific electrolytes requirements.</li> <li>Inclusion of trace elements is dependent on PN supplier. <b>Check label for inclusion.</b> Composition dependent on manufacturer</li> <li><b>Non-standard electrolytes should only be requested where there is a clear clinical need.</b></li> <li><b>Maximum nitrogen to be prescribed is 0.36g/kg/day (2.5gAA/kg/day) provided by 115ml/kg/day of term concentrated formula. If more IV fluid is required, change to Term Standard formulation or 5% glucose or 10% glucose can be used.</b></li> </ul>		ml/kg	45	50	60	70	80	85	95	100		
		Amino acid (g/kg)	1.12	1.25	1.5	1.75	2.0	2.13	2.4	2.5		
		Nitrogen (g/kg)	0.16	0.18	0.22	0.25	0.29	0.31	0.34	0.36		
		Glucose (g/kg)	6.3	7.0	8.4	9.8	11.2	11.9	13.3	14.0		
		Sodium (mmol/kg)	1.35	1.5	1.8	2.1	2.4	2.55	2.85	3.0		
		Potassium (mmol/kg)	0.9	1.0	1.2	1.4	1.6	1.7	1.9	2.0		
		Calcium (mmol/kg)	0.43	0.48	0.57	0.66	0.76	0.81	0.89	0.94		
		Magnesium (mmol/kg)	0.09	0.1	0.12	0.14	0.16	0.17	0.19	0.2		
		Phosphate (mmol/kg)	0.33	0.37	0.44	0.52	0.59	0.63	0.7	0.74		
		Chloride (mmol/kg)	1.17	1.3	1.56	1.82	2.1	2.21	2.5	2.6		
		Acetate (mmol/kg)	0.58	0.65	0.77	0.9	1.0	1.1	1.22	1.29		
		Trace elements (ml/kg)										
		<b>Lipid Parenteral Nutrition Formula</b>										
		Lipid (g/kg)	0.85	1.7	1.7	1.7	1.7	2.55	2.55	2.55		
		Lipid volume (ml/kg)	5	10	10	10	10	15	15	15		
Phosphate (mmol/kg)	0.07	0.14	0.14	0.14	0.14	0.21	0.21	0.21				
<b>Aqueous and lipid component will provide the following</b>												
Total phosphate (mmol/kg)	0.4	0.51	0.58	0.66	0.73	0.84	0.91	0.91				

Date	Day 1	Day 2	Total in 48 hour bag (day 1+2)	Day 1	Day 2	Total in 48 hour bag (day 1+2)
Days of Parenteral Nutrition						
Working Weight (kg)						
Volume of Aqueous PN (ml/kg)						
Volume of Lipid PN (ml/kg) Intralipid 20%/SMOF* *delete as appropriate						
Total volume of PN (ml/kg)						
Volume of enteral feed (ml/kg)						
Other infusion (ml/kg)						
Total fluid volume (ml/kg)						
Nitrogen (g/kg) from table above	STD only	STD only		STD only	STD only	
Glucose (g/kg) from table above	STD only	STD only		STD only	STD only	
Sodium (mmol/kg)	STD	STD		STD	STD	
Potassium (mmol/kg)	STD	STD		STD	STD	
Calcium (mmol/kg)	STD	STD		STD	STD	
Magnesium (mmol/kg)	STD	STD		STD	STD	
Total Phosphate (mmol/kg)	STD	STD		STD	STD	
Chloride (mmol/kg)	STD	STD		STD	STD	
Prescriber's Signature						
Prescriber's Name & Bleep No						

Screened by

**Name of Hospital**  
**Neonatal Parenteral Nutrition Prescription**  
**TERM CONCENTRATED**  
**48 HOUR BAG**

**E of E Term Concentrated PN Px (July 2022– version 12)**  
**Page 2 of 2**

Name Hospital No.  
 Date of Birth NHS Number  
 Address  
 Consultant

**PHARMACY DEPARTMENT SECTION**

<i>Date</i>							
<i>Total volume of Aqueous PN to be infused</i>							
<i>Total volume of Lipid to be infused</i>							
<i>Ordered by</i>							
<i>Order number</i>							
<i>Checked by</i>							
<i>Maximum infusion rate of aqueous PN (ml/hour)</i>							
<i>Maximum infusion rate of lipid (ml/hour)</i>							

**WARD ADMINISTRATION RECORD**

<i>Aqueous PN - date infusion started</i>							
<i>Aqueous PN - time infusion started</i>							
<i>Set up by</i>							
<i>Checked by</i>							
<i>Lipid - date infusion started</i>							
<i>Lipid - time infusion started</i>							
<i>Set up by</i>							
<i>Checked by</i>							

**BATCH NUMBER RECORDS**

<i>Batch number of aqueous PN</i>							
<i>Batch number of Lipid</i>							
<i>Batch number recorded by</i>							

**Additional Information:**

Date	Comment	Initial & sign

**Please note:**

Lipid syringes from ITH will be provided with the following formulation:

Intralipid/SMOFLipid 20% 37.5ml

Vitlipid N Infant 10ml

Solivito N (WFI 10ml) 2.5ml

20ml/kg would then provide:

Solivito 1ml/kg /Vitlipid N 4ml/kg/ Lipid 3.4g /kg

- Solivito will be added to aqueous PN if lipid is not prescribed. It will be added as 1ml/kg/day where possible.
  - Trace elements will be added as 0.74ml/100ml to aqueous phase.
  - Maximum licensed dose of SMOF is 3g/kg/day.
  - Aqueous PN solution of glucose concentration >12.5% or osmolarity >900mOsm/L must be infused via central line.
  - Lipid syringes must be changed every 24 hours.
  - Minimum overage for aqueous PN is 100ml and for lipid is 10ml (syringe).
  - Chloride will be capped at 6mmol/kg/day unless otherwise specified.
- Aim for Chloride:Acetate molar ratio of 2:1. Seek clarification if acetate provided exceeds chloride. Chloride value will vary if any of the electrolytes is not ordered as standard. If a specific Chloride value is required, cross off "STD" and fill in the specific Chloride requirement.

**Recommended intake for stable growth  
[ESPGHAN 2018]**

Energy kcal/kg/day	75-85kcal/kg/day
Lipid g/kg/day	3g/kg/day
Nitrogen g/kg/day	0.36g/kg/day
Amino acid g/kg/day	1.5-3g/kg/day
Carbohydrate g/kg/day	7.2-14.4g/kg/day
Sodium mmol/kg/day	2-3 mmol/kg/day
Potassium mmol/kg/day	1-3 mmol /kg/day
Calcium mmol/kg/day	0.8-1.5 mmol/kg/day
Magnesium mmol/kg/day	0.1-0.2 mmol/kg/day
Phosphate mmol/kg/day	0.7-1.3 mmol/kg/day
Chloride mmol/kg/day	2-4 mmol/kg/day