

Accepted Manuscript

Title: Physicochemical stable standard all-in-one parenteral nutrition admixtures for infants and children in accordance with the ESPGHAN/ESPEN guidelines

Author: Joeri De Cloet, Stephanie Van Biervliet, Myriam Van Winckel

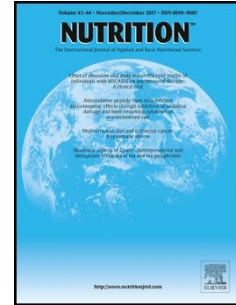
PII: S0899-9007(17)30271-X
DOI: <https://doi.org/10.1016/j.nut.2017.11.019>
Reference: NUT 10095

To appear in: *Nutrition*

Received date: 29-9-2017
Revised date: 20-11-2017
Accepted date: 27-11-2017

Please cite this article as: Joeri De Cloet, Stephanie Van Biervliet, Myriam Van Winckel, Physicochemical stable standard all-in-one parenteral nutrition admixtures for infants and children in accordance with the ESPGHAN/ESPEN guidelines, *Nutrition* (2017), <https://doi.org/10.1016/j.nut.2017.11.019>.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1 **Physicochemical stable standard all-in-one parenteral nutrition**
2 **admixtures for infants and children in accordance with the**
3 **ESPGHAN/ESPEN guidelines**

4 Joeri De Cloet, PharmD¹; Stephanie Van Biervliet, MD, PhD²; and Myriam Van Winckel,
5 MD, PhD²

6
7 ¹ Pharmacy department, University Hospital Ghent, Ghent, Belgium

8 ² Paediatric Gastroenterology department, University Hospital Ghent, Ghent, Belgium
9

10 **Corresponding Author:**

11 Joeri De Cloet, PharmD, Pharmacy department, University Hospital Ghent, De Pintelaan 185, 9000 Ghent,
12 Belgium.

13 E-mail: joeri.decloet@uzgent.be

14
15 Financial disclosure: None declared.

16
17 Conflicts of interest: None declared.
18
19

20 **Highlights:**

- 21 • Standard all-in-one (AIO) parenteral nutrition admixtures for paediatric patients
22 from birth to adolescence were developed that meet the ESPGHAN/ESPEN
23 guidelines.
24 • Long-term physicochemical stability was tested in two-compartment EVAM bags
25 for 80 days at 2°C-8°C + 24 hours at room temperature (RT).
26 • An additional physicochemical stability was obtained of 7 days 2°C-8°C + 48
27 hours RT after reconstitution to an AIO admixture including vitamins and trace
28 elements.
29 • Long-term stability allows batch-wise production and availability at all times for
30 clinical use in hospital and home care setting.

31
32 **Abstract**

33 **Objective:**

34 As there are almost no standard all-in-one parenteral nutrition (PN) admixtures available for
35 infants and children the aim was to develop standard two-compartment PN bags for different
36 weight categories based on the ESPGHAN/ESPEN guidelines. The 1g/kg/day lipid version
37 for the 3-10 kg weight category (PED1) was assessed for short and long-term
38 physicochemical stability with the ability to add additional electrolytes (PED1+E).

39 **Methods:**

Download English Version:

<https://daneshyari.com/en/article/8723827>

Download Persian Version:

<https://daneshyari.com/article/8723827>

[Daneshyari.com](https://daneshyari.com)