SyrSpend® SF PH4 NEO

Safe for those who need you the most

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Fagron
personalizing medicine

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Taking care of your most vulnerable patients in the best possible way: discover SyrSpend® SF PH4 NEO.

Dosing challenges in treating pediatric patients

One of the most important precepts of pediatric and neonatal care is that children cannot be considered small adults.[1] Infancy and childhood mark a period of rapid growth and development.

The physiologies of neonates and infants differ considerably from that of adults; they may not be able to metabolize or eliminate active substances and excipients in pharmaceutical products in the same manner.

Absorption, distribution, metabolism and excretion vary significantly during development, with most pronounced changes during the first year of life.[2]

When it comes to excretion, neither hepatic clearance nor glomerular or filtration tubular secretion are mature at birth and development to adult capacity may take up to 12 months.[2]

The wide age range of children treated in clinical settings result in doses that can vary 50-fold through childhood.[3]

A medicinal product that is to be used in all age groups must be able to be used with a variety of different concentrations of various active ingredients and must allow for simple, accurate, and safe dosing.[2,4]

The use of liquid formulations is encouraged as it provides maximal dosing flexibility and allows the use of a single formulation over different ages.[2,3]

As not all liquid formulations are commercially available, there is a broad range of drugs that need to be compounded by the pharmacist.

Avoidable excipients in pediatric patients

Excipients should be pharmacologically inactive, but may cause adverse events in daily practice. Particularly neonates and infants are not always able to metabolize or eliminate an ingredient in a pharmaceutical product in the same manner as an adult.[2]

Excipients that need to be avoided in neonates and infants include ethanol, propylene glycol, polyethylene glycol, benzyl alcohol, parabens, benzoic acid, benzoic acid and its derivatives, sucrose, fructose, mannitol, sorbitol, xylitol, aspartame, and colorings.[5] Cumulative exposure can increase excipient toxicity.[5-6]

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The solution: SyrSpend® SF PH4 NEO

The latest addition to the successful line of Fagron's oral vehicle bases is SyrSpend® SF PH4 NEO, which inherited the patented *Active Suspending Technology* to maximize dosing safety.[7, 8]

In addition, SyrSpend® SF PH4 NEO is free of sugar, sorbitol, colorants, parabens or any other harmful or controversial ingredients. SyrSpend® SF PH4 NEO is preserved with 0.2% Sorbic acid, which makes it suitable for all patient groups.[9-12]

SyrSpend® SF PH4 NEO is quick and easy to compound with and provides pharmaceutical stability and dosage consistency with each preparation. The use of starch means that SyrSpend® SF PH4 NEO is compatible with a broad range of APIs. All combinations are included in the SyrSpend® SF PH4 NEO compatibility table and Compounding Matters formulations database.

SyrSpend® SF PH4 NEO example formulations

Acetaminophen 50 mg/mL	Phenobarbital 9 mg/mL
Caffeine 10 mg/mL	Ranitidine 14 mg/mL
Midazolam 1 mg/mL	Vancomycin 25 mg/mL

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