

RFQ 19/RFQ/LBY/TR/036
FOR SUPPLY AND DELIVERY OF BABY MILK FOR UNHCR LIBYA

Annex A: Terms of Reference

UNHCR invites qualified vendors to make a firm offer for the supply and delivery of **Baby milk N°1 (from 0 to 6 months)** at the UNHCR Gathering and Departure facility in Tripoli, as per the below specification that are based on FAO and WHO recommendation:

1) Baby milk formula specification

A product based on milk of cows prepared ready for consumption in accordance with instructions of the manufacturer shall contain per 100 ml not less than 60 kcal and not more than 70 kcal of energy. once prepared ready for consumption shall contain per 100 kcal (100 kJ) the following nutrients with the following minimum and maximum as appropriate.

a) Protein

Unit	Minimum	Maximum
g/100 kcal	1.8	3.0
g/100 kJ	0.45	0.7

b) Lipids

Unit	Minimum	Maximum
g/100 kcal	4.4	6.0
g/100 kJ	1.05	1.4

Linoleic acid

Unit	Minimum	Maximum
mg/100 kcal	300	-
mg/100 kJ	70	-

Linolenic acid

Unit	Minimum	Maximum
mg/100 kcal	50	not specified
mg/100 kJ	12	not specified

c) Carbohydrates

Unit	Minimum	Maximum
g/100 kcal	9.0	14.0
g/100 kJ	2.2	3.3

d) Vitamins

Vitamin A

Unit	Minimum	Maximum
µg RE10)/100 kcal	60	180
µg RE10)/100 kJ	14	43

Vitamin D3

Unit	Minimum	Maximum
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µg11)/100 kcal	1	2.5
µg11)/100 kJ	0.25	0.6

Vitamin E

Unit	Minimum	Maximum
mg α-TE12)/100 kcal	0.513	-
mg α-TE12)/100 kJ	0.1213	-

Vitamin K

Unit	Minimum	Maximum
µg/100 kcal	4	-
µg/100 kJ	1	-

Thiamin

Unit	Minimum	Maximum
µg/100 kcal	60	-
µg/100 kJ	14	-

Riboflavin

Unit	Minimum	Maximum
µg/100 kcal	80	-
µg/100 kJ	19	-

Niacin

Unit	Minimum	Maximum
µg/100 kcal	300	-
µg/100 kJ	70	-

Vitamin B6

Unit	Minimum	Maximum
µg/100 kcal	35	-
µg/100 kJ	8.5	-

Vitamin B12

Unit	Minimum	Maximum
µg/100 kcal	0.1	-
µg/100 kJ	0.025	-

Pantothenic acid

Unit	Minimum	Maximum
µg/100 kcal	400	-
µg/100 kJ	96	-

Folic acid

Unit	Minimum	Maximum
µg/100 kcal	10	-
µg/100 kJ	2.5	-

Vitamin C

Unit	Minimum	Maximum
mg/100 kcal	10	-
mg/100 kJ	2.5	-

Biotin

Unit	Minimum	Maximum
µg/100 kcal	1.5	-

µg/100 kJ	0.4	-
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e) Minerals and Trace Elements

Iron

Unit	Minimum	Maximum
mg/100 kcal	0.45	-
mg/100 kJ	0.1	-

Calcium

Unit	Minimum	Maximum
mg/100 kcal	50	-
mg/100 kJ	12	-

Phosphorus

Unit	Minimum	Maximum
mg/100 kcal	25	-
mg/100 kJ	6	-

Magnesium

Unit	Minimum	Maximum
mg/100 kcal	5	-
mg/100 kJ	1.2	-

Sodium

Unit	Minimum	Maximum
mg/100 kcal	20	60
mg/100 kJ	5	14

Chloride

Unit	Minimum	Maximum
mg/100 kcal	50	160
mg/100 kJ	12	38

Potassium

Unit	Minimum	Maximum
mg/100 kcal	60	180
mg/100 kJ	14	43

Manganese

Unit	Minimum	Maximum
Micro g/100 kcal	1	-
Micro g/100 kJ	0.25	-

Iodine

Unit	Minimum	Maximum
Micro g/100 kcal	10	-
Micro g/100 kJ	2.5	-

Selenium

Unit	Minimum	Maximum
Micro g/100 kcal	1	-
Micro g/100 kJ	0.24	-

Copper

Unit	Minimum	Maximum
Micro g/100 kcal	35	-

Micro g/100 kJ	8.5	-
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Zinc

Unit	Minimum	Maximum
mg/100 kcal	0.5	-
mg/100 kJ	0.12	-

f) Other Substances

Choline

Unit	Minimum	Maximum
mg/100 kcal	7	-
mg/100 kJ	1.7	-

Myo-Inositol

Unit	Minimum	Maximum
mg/100 kcal	4	-
mg/100 kJ	1	-

L-Carnitine

Unit	Minimum	Maximum
mg/100 kcal	1.2	-
mg/100 kJ	0.3	-

2) Optional ingredients

In addition to the compositional requirements listed under, other ingredients may be added in order to provide substances ordinarily found in human milk and to ensure that the formulation is suitable as the sole source of nutrition for the infant or to provide other benefits that are similar to outcomes of populations of breastfed babies.

Additional substances may be added in conformity with national legislation, in which case their content per 100 kcal (100 kJ) in the Infant Formula ready for consumption shall not exceed:

Taurine

Unit	Minimum	Maximum
mg/100 kcal	-	12
mg/100 kJ	-	3

Only L(+)-lactic acid producing cultures may be used.

Fluoride

Fluoride should not be added to infant formula. In any case its level should not exceed 100 µg /100 kcal (24µg/100 kJ) in infant formula prepared ready for consumption as recommended by the manufacturer.

Vitamin Compounds and Mineral Salts

Consistency and Particle Size

When prepared according to the label directions for use, the product shall be free of lumps and of large coarse particles and suitable for adequate feeding of young infants.

Purity Requirements:

All ingredients shall be clean, of good quality, safe and suitable for ingestion by infants. They shall conform with their normal quality requirements, such as colour, flavour and odour.

Specific Prohibitions:

The product and its component shall not have been treated by ionizing irradiation.

Food Additive:

The amount of the food additive in the raw materials or other ingredients (including food additives) does not exceed the maximum level specified;

INS	Additive	Maximum level in 100 ml of the product ready for consumption
4.1 Thickeners		
412	Guar gum	0.1 g in liquid formulas containing hydrolysed protein
410	Carob bean gum (Locust bean gum)	0.1 g in all types of infant formula
1412	Distarch phosphate	0.5 g singly or in combination in soy-based infant formula only 2.5 g singly or in combination in hydrolysed protein- and/or amino acid based infant formula only
1414	Acetylated distarch phosphate	
1413	Phosphated distarch phosphate	
1440	Hydroxypropyl starch	
407	Carrageenan	0.03 g in regular milk- and soy-based liquid infant formula only 0.1 g in hydrolysed protein- and/or amino acid based liquid infant formula only
1450	Starch sodium octenyl succinate	2 g in hydrolysed protein and/or amino acid-based infant formula only
4.2 Emulsifiers		
322	Lecithins	0.5 g in all types of infant formula
471	Mono- and diglycerides	0.4 g in all types of infant formula
472c	Citric and fatty acid esters of glycerol	0.9 g in all types of liquid infant formula 0.75 g in all types of powder infant formula
4.3 Acidity Regulators		
524	Sodium hydroxide	0.2 g singly or in combination and within the limits for sodium, potassium and calcium in all types of infant formula
500ii	Sodium hydrogen carbonate	0.2 g singly or in combination and within the limits for sodium, potassium and calcium in all types of infant formula
500i	Sodium carbonate	
525	Potassium hydroxide	
501ii	Potassium hydrogen carbonate	
501i	Potassium carbonate	
526	Calcium hydroxide	
270	L (+) lactic acid	Limited by GMP* in all types of infant formula

330	Citric acid	Limited by GMP* in all types of infant formula
331i	Sodium dihydrogen citrate	Limited by GMP* in all types of infant formula
331iii	Trisodium citrate	Limited by GMP* in all types of infant formula
332	Potassium citrate	Limited by GMP* in all types of infant formula
339 i, ii and iii	Sodium dihydrogen phosphate, disodium hydrogen phosphate and trisodium phosphate	45 mg as phosphorus singly or in combination and within the limits for sodium, potassium and phosphorus
340 i, ii and iii	Potassium dihydrogen phosphate, dipotassium hydrogen phosphate and tripotassium phosphate	
4.4 Antioxidants		
307b	Mixed tocopherol concentrate	1 mg in all types of infant formula singly or in combination
304i	Ascorbyl palmitate	1 mg in all types of infant formula singly or in combination
4.9 Packaging Gases		
290	Carbon dioxide	By GMP
941	Nitrogen	

* GMP: good manufacturing practices

Contaminants

Pesticide Residues:

The product shall be prepared with special care under good manufacturing practices, so that residues of those pesticides which may be required in the production, storage or processing of the raw materials or the finished food ingredient do not remain, or, if technically unavoidable, are reduced to the maximum extent possible.

Other Contaminants:

The product shall not contain contaminants or undesirable substances (e.g. biologically active substances) in amounts which may represent a hazard to the health of the infant.

Maximum level:

Lead 0.02 mg/kg (in the ready-to-use product)

Hygiene

It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the General Principles of Food Hygiene Packaging.

The product shall be packed in containers which will safeguard the hygienic and other qualities of the food.

The containers, including packaging materials, shall be made only of substances which are safe and suitable for their intended uses.

List of Ingredients:

A complete list of ingredients shall be declared on the label in descending order of proportion except that in the case of added vitamins and minerals, these ingredients may be arranged as separate groups for vitamins and minerals. Within these groups the vitamins and minerals need not be listed in descending order of proportion.

Date Marking and Storage Instructions:

The date of minimum durability (preceded by the words "best before") shall be declared by the, month and year.

In addition to the date, any special conditions for the storage of the food shall be indicated if the validity of the date depends thereon.

Where practicable, storage instructions shall be in close proximity to the date marking.

Information for Use:

Adequate directions for the appropriate preparations and use of the product, including its storage and disposal after preparation, i.e. that formula remaining after feeding should be discarded, shall appear on the label and in any accompanying leaflet.

The label shall carry clear graphic instructions illustrating the method of preparation of the product.

The directions should be accompanied by a warning about the health hazards of inappropriate preparation, storage and use.

Adequate directions regarding the storage of the product after the container has been opened, shall appear on the label and in any accompanying leaflet.