

# INFANT FORMULA PREPARATION GUIDELINES AND DILUTION CHARTS

## FOR HEALTH CARE PROFESSIONAL USE ONLY

Abbott data on calorically dense feedings is limited. Hypocaloric and hypercaloric formulas should be used under medical supervision.

- 27 Cal/30 mL or more calorically dense formulas may not supply enough water for some infants. Hydration status should be monitored and water supplied from other sources if necessary.
- When using a hypo- or hypercaloric formula, monitor the changes in vitamin and mineral status as well as gastrointestinal tolerance.
- For improved tolerance, it is best to increase caloric density slowly, by 2- to 4-Cal/30 mL increments.

### Ready to use cans, 235-mL and HFS bottles

- Do not dilute.

### Concentrated Liquid (40 Cal/30 mL)

Standard dilution (20 Cal/30 mL) is one part concentrated liquid to one part water. See product label for detailed preparation instructions.

Caloric Density <sup>1</sup> (Cal/30 mL)	Concentrated Liquid (mL)	+	Water (mL)	=	Final Volume (mL)
20 (standard)	30		30		60
24	90		60		150
27	60		30		90

### Powder

Standard dilution (20 Cal/30 mL) is one level, unpacked scoop of powder for each 60 mL of water. See product label for detailed preparation instructions.

Caloric Density <sup>1</sup> (Cal/30 mL)	Unpacked Level Scoop(s) <sup>†</sup>	+	Water (mL)	=	Approximate Yield <sup>‡</sup> (mL)
20 (standard)	1		60		60
22	2		105		120
24	3		150		180
27	3		130		150

### Scoop Measurement and Displacement Volumes for Infant Powders

Product	Grams of powder per scoop	Displacement volume per scoop <sup>‡</sup> (mL)	Displacement volume per g of powder <sup>‡</sup> (mL)
<b>Preterm</b>			
Similac <sup>®</sup> Neosure <sup>®</sup>	9.6	7.3	0.76
Similac <sup>®</sup> Human Milk Fortifier	N/A	N/A	0.69 <sup>§</sup>
<b>Term Infants</b>			
Similac Pro-Advance <sup>®</sup> Step 1	8.6	6.5	0.76
Similac Pro-Advance <sup>®</sup> Step 2	8.6	6.5	0.76
Similac <sup>®</sup> Alimentum <sup>®</sup>	8.7	6.6	0.76
Similac <sup>®</sup> Advance <sup>®</sup> Step 1	8.8	6.8	0.77
Similac <sup>®</sup> Advance <sup>®</sup> Step 2	8.8	6.8	0.77
Similac <sup>®</sup> Step 1	8.8	6.8	0.77
Similac <sup>®</sup> Step 2	8.8	6.8	0.77
Similac <sup>®</sup> Lower Iron	8.8	6.8	0.77
Similac <sup>®</sup> Sensitive <sup>®</sup> Lactose Sensitivity	8.7	6.7	0.78
Similac <sup>®</sup> Isomil <sup>®</sup>	8.9	6.8	0.76
Similac Total Comfort <sup>®</sup>	8.7	6.8	0.78
Go & Grow by Similac <sup>®</sup> Step 3	10.4	6.7	0.64

N/A: Not applicable.

<sup>†</sup> Use only scoop provided in the container.

<sup>‡</sup> Values are approximate.

<sup>§</sup> Per 0.9-g packet.

#### REFERENCE:

1. Adapted from Young T, Mangum B. Dilution Tables Neofax 17<sup>th</sup> ed. Raleigh NC 2004:232.

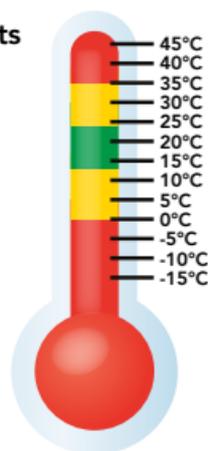
# STORAGE GUIDELINES

## TO ENSURE THE HIGHEST QUALITY OF UNOPENED PRODUCTS

### Ready-to-use or concentrated liquid formats

- Store at room temperature.

Avoid extreme temperatures. Do not freeze. While the product would remain sterile and the nutritional quality should not be affected, there could be changes to the physical consistency of the product that could affect its appearance, flavour, and other sensory attributes.



### Powder

- Store in dry, cool area.
- Do not refrigerate.

## GUIDELINES FOR PREPARING AND STORING FORMULA

### Human Milk Fortifiers

See individual product pages for storage instructions of:

- Similac® Human Milk Fortifier Extensively Hydrolyzed Protein Concentrated Liquid
- Similac® Human Milk Fortifier Special Care® 30
- Similac® Human Milk Fortifier, powder
- LiquiProtein®

### Ready-to-use products

Cans and bottles: after opening, cover, refrigerate, and use within 48 hours.

### Concentrated liquid products

- Open can (undiluted): cover, refrigerate, and use within 48 hours.
- Prepare as per label instructions.
- Pour into individual feeding bottles or cups, cover, and store in refrigerator.
- Use prepared formula within 48 hours.

### Powdered products

- Prepare as per label instructions.
- Pour into individual feeding bottles or cups, cover, and store in refrigerator.
- Use within 24 hours.
- Cover opened container after each use.
- **Use product within 1 month of opening container.**
  - Similac® Isomil® should be used within 3 weeks of opening.

**If ready-to-use, undiluted, or prepared formula is left opened at room temperature, it should be used within 2 hours.<sup>1</sup>**

# STORAGE GUIDELINES

## GUIDELINES FOR PREPARING AND STORING FORMULA (continued)

- Once feeding begins (first time the baby's mouth comes into contact with the nipple), use within 1 hour or discard.
- Do not reuse plastic bottles.

### If a product is consumed directly from the original container (includes use of a straw):†

- Use or refrigerate within 1 hour.
- If refrigerated, use product within 24 hours.

## RECOMMENDED HANG TIMES

### Ready to use (commercially sterile)

- 4 hours for neonates and immunocompromised infants/children.<sup>2</sup>
- 8 hours for non-immunocompromised infants (>30 days of age) and children.<sup>2</sup>

### Reconstituted formulas

**Includes:** Concentrated liquid, powder, any formula to which a modular product has been added, or fortified human milk.

- Prepare using aseptic technique.
- 4-hour hang times are recommended for human milk and facility-prepared formulas.<sup>2</sup>

It is recommended that feeding bags, containers, and tubing be replaced with each new hang time.<sup>2</sup>

Health care facilities should have guidelines in place for using safe techniques in the preparation and administration of feedings and should also have established quality assurance protocols for monitoring purposes.

## EXPIRATION DATES

- To ensure the highest quality, use the product by the date indicated.
- The vitamin content and the physical stability of the product cannot be guaranteed beyond the expiry date because both may degrade with time.

## WARNINGS

- **Never use a microwave oven to warm formula;** serious burns can result.
- Abbott nutritional products are not intended for parenteral use.

† This practice exposes the product to significant amounts of bacteria.

#### REFERENCES:

1. Government of Canada. Preparing and handling powdered infant formula. Last modified on 2021-04-16. [Accessed online on 2021-05-13]. 2. Steele C, Collins E (editors). Infant and Pediatric Feedings: Guidelines for Preparation of Human Milk and Formula in Health Care Facilities, 3<sup>rd</sup> Ed. Academy of Nutrition and Dietetics. 2019.