



Tapioca Syrup RS18

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Your Presenters



Jim Mitchell
Innovation &
Development
jim@ciranda.com



Tonya Lofgren
Product Manager
tonya@ciranda.com

Understanding Sugars and Labeling

As defined by the FDA, the term “sugars” refers to the sum of all mono- and di-saccharides (DP1 + DP2). Higher DP’s are not classified as sugars, but as carbohydrates.



	Degree of Polymerization (DPx)	Description
+	DP1: Mono-saccharides	Simple sugars with 1 sugar unit (glucose, fructose, galactose)
+	DP2: Di-saccharides	Composed of 2 linked sugar units (sucrose = 1 glucose + 1 fructose)
	DP3: Tri-saccharides	Composed of 3 bound sugar units (maltotriose = 3 glucose)
	DP4-DP9: Oligo-saccharides	Composed of up to 9 bound sugar units (raffinose, stachyose)
	DP10+: Poly-saccharides	Complex chains of 10 or more sugar units (starch, cellulose)

A Cleaner Way to a Sweet New World

Organic and Non-GMO Reduced Sugar Solutions

Tapioca Syrup RS18

A colorless, mildly sweet syrup produced from non-GMO tapioca starch. Using enzymes, a portion of the DP1 and DP2 sugars are converted to DP3 and DP4 which are not classified as “sugars” by the FDA, allowing a reduction in declared sugars.



Sugar Profile Comparison: RS18 vs Tapioca Syrup DE40

Comparing single tapioca syrups with similar sweetness

Tapioca Syrup RS18



Sugar Profile (100g)	Percent of Solids (%)
TOTAL SUGARS	18g
Glucose	≤6
Maltose	13-18
DP1 + DP2	18-25
DP3 + DP4	55-65

Tapioca Syrup DE40



Sugar Profile (100g)	Percent of Solids (%)
TOTAL SUGARS	29g
Glucose	≤5
Maltose	30-40
DP1 + DP2	35-45
DP3	14-18
Other carb.	≤5

Nutritional Comparison: RS18 vs Tapioca Syrup DE40

38% less sugar with similar calories and carbohydrates



Tapioca Syrup RS18

Typical values per 100g

Calories	Sugars	Carbohydrates	Dietary Fiber
320 kcal	18g ↓	80g	0g



Tapioca Syrup DE40

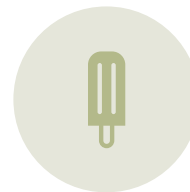
Typical values per 100g

Calories	Sugars	Carbohydrates	Dietary Fiber
312 kcal	29g	78g	0g

Sugar reduction solutions for a variety of applications



BARS &
CEREALS



FROZEN
DESSERTS



SNACKS &
BAKERY



BEVERAGES



GUMMY
SUPPLEMENTS



CONFECTIONS

Functional & Analytical Considerations

Similar sweetness to DE40 tapioca with better binding and film-forming



Properties (100g)	Tapioca Syrup RS18	Tapioca Syrup DE40
Soluble solids/Brix	79-82	78-80
Dextrose equivalence	35-45	35-45
pH (10% solution)	4-5.5	5.5-7.5
Binding	Medium High	Medium
Film-forming	High	Medium
Browning	Yes	Yes



Functional Properties

**Excellent
Film-
Forming**

**Strong
Binding**

**Sweetening
& Browning**

**Crystal
Control**

Prototype: Oatmeal Raisin Bar

With tapioca syrup substitution

Ingredients: Quick oats, tapioca syrup (substitute RS18 for DE27/DE60 blend), raisins, crisped rice, ground flax

- ✓ **38% decrease in added sugars**
- ✓ **Similar taste and texture**
- ✓ **Uses single syrup instead of two syrups to achieve sweetness and binding**

Tapioca Syrup RS18	
Nutrition Facts	
1 servings per container	
Serving size	1 Bar (93g)
Amount Per Serving	
Calories	310
% Daily Value*	
Total Fat 4g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 68g	25%
Dietary Fiber 4g	14%
Total Sugars 15g	
Includes 8g Added Sugars	16%
Protein 6g	12%
Not a significant source of vitamin D, calcium, iron, and potassium	
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Tapioca Syrup Blend	
Nutrition Facts	
1 servings per container	
Serving size	1 Bar (93g)
Amount Per Serving	
Calories	310
% Daily Value*	
Total Fat 4g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 68g	25%
Dietary Fiber 4g	14%
Total Sugars 19g	
Includes 13g Added Sugars	26%
Protein 6g	12%
Not a significant source of vitamin D, calcium, iron, and potassium	
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	



Regulatory & Labeling Guidance

Tapioca Syrup RS18 is Non-GMO Project Verified and Kosher. USDA Organic certification may be possible.

The composition of Tapioca Syrup RS18 which contains nutritive saccharides meets the FDA requirements for glucose syrup as outlined in [21CFR 168.120](#).

We list the following label declarations on our technical data sheet*:

Tapioca Syrup

**It is always advised to consult a labeling expert for final consumer labeling.*



**Achieve
sugar reduction
with familiar
ingredient
labeling**

Commercial Availability

The supply chain for tapioca-based ingredients is well-established and growing:

- ✓ **Samples** in stock for immediate shipment
- ✓ **Commercial volumes** available with 90+ days lead time in the following packaging types:
 - Carboy pails (25kg/55.11 lb)
 - Plastic drums (285kg/628.31 lb)
 - Cardboard totes with plastic liners (1360.78kg/3000 lb)
- ✓ **18 months shelf life** from date of manufacture



Questions?



Connect with us

715-386-1737

sales@ciranda.com

www.ciranda.com

Request samples and download
documents at **ciranda.com/rs-syrups**