DOUGH YIELD: 1.050 Kg 12 at 85 g

OVERALL FORMULA			BAKER'S %
Whole spelt flour	0.315 kg	3 cups	50 %
White spelt flour	0.315 kg	2 1/2 cups	50 %
Water	0.371 kg	$1 \frac{1}{2} cups + 2 Tbs$	59 %
Salt	0.013 kg	Scant 1 Tbs	2 %
Yeast, IDY	0.004 kg	2 tsp	0.7 %
Diastatic malt powder, optional	0.001 kg	Pinch	0.2 %
Butter, unsalted, soft	0.031 kg	1/4 stick	5 %
Total	1.050 kg		166.9 %
Firm Levain			
Whole spelt flour	0.047 kg	Scant 1/2 cup	100 %
Water	0.028 kg	2 Tbs	60 %
Salt	0.001 kg	Pinch	2 %
Sourdough culture, firm	0.005 kg	1Tbs	10 %
TOTAL	0.081 kg		

FINAL DOUGH

Whole spelt flour	0.267 kg	Generous 2 1/2 cups
White spelt flour	0.315 kg	2 1/2 cups
Water	0.343 kg	1 1/2 cups
Salt	0.012 kg	Scant 1 Tbs
Yeast, IDY	0.004 kg	2 tsp
Diastatic malt powder, optional	0.001 kg	Pinch
Butter, soft	0.031 kg	1/4 stick
Levain	0.076 kg	All of above less 1 Tbs
Total	1.050 kg	

Method:

Prepare the levain by mixing all the ingredients together 12 to 16 hours before mixing the final dough. Remove a portion of the ripe levain before mixing the final dough in order to perpetuate the culture. Add all the ingredients to the mixing bowl. In a planetary mixer, mix on low speed for 3 minutes to incorporate ingredients. Mix for 4--5 minutes on medium speed. The dough will be firm and strong. Desired dough temperature: 76--78F.

Bulk fermentation: 1 to 1.5 hours at room temperature. Fold once at 45 minutes if fermenting for 1.5 hours. Divide the dough into 3 oz (85 gram) pieces, pre-shape into blunt cylinders about 5" long. Res covered for about 5 minutes, then shape the dough into pretzels.

Proof up to 30 minutes at room temperature, until about half risen. Refrigerate.

When thoroughly cold, dip in a 4% lye (sodium hydroxide) solution, wearing gloves and optional eye protection.

Drain and then transfer to sheet pans lined with oiled parchment paper or silicone sheets.

Salt the tops, then slash with a blade.

Bake at 440F for about 15 minutes.

Notes:

The shaped pretzels can be retarded overnight and baked next day.

Lye bath: 750 g cold water: 30 g lye pellets, whisk in carefully. Label prominently!