## THE GLUTEN FREE BREWER'S RECIPE COLLECTION

## STOUT – All Grain

Batch size – 20 litre Start of boil volume – 28 litre\*

Original Gravity	Final Gravity	Alcohol content	Bitterness	Colour
1.045	1.011*	4.4%*	30*	44 SRM

YEAST SUGGESTIONS:

## **INGREDIENTS:**

3.6kg of Pale Millet Malt	Lallemands BRY-97			
250g of Pale Buckwheat Malt	Safale US-05			
250g of Crystal Rice Malt	Lallemands Nottingham Ale Yeast			
300g of Chocolate Millet Malt				
400g of Dark Roast Millet Malt				
400g of Gas Hog Rice Malt	FERMENTATION TEMP. SUGGESTION:			
100g of Molasses				
50g of East Kent Goldings hop pellets (5%AA)	18-20 degrees Celsius			
3ml of liquid alpha amylase or 6g of dry alpha amylase				

## **BREW IN A BAG PROCEDURE:**

In your kettle bring 20 litres of water to the boil. Turn off the heat source, place brew bag in the pot and then add all of the crushed malt. Stir all the grains continuously for 5 mins or until all grains are gelatinised. The grain bed will thicken to a thick porridge consistency.

Once this is complete add enough cool water to bring the mash temperature to 66°C or the enzyme manufacturer's optimal conversion temperature and the kettle volume to 28 litres.

Add your enzymes and stir them in thoroughly. Maintain mash temperature for 120 minutes stirring occasionally. Once you have achieved adequate conversion of starches to sugars, remove brewing bag and grains and strain out the wort into your kettle (and yes you can give a gentle squeeze to remove a little more wort).

In your kettle mix the wort and molasses and bring to the boil. At this stage add any brewing salts that you may like to use and 30g of East Kent Goldings hop pellets.

45 minutes into the boil add any kettle finings, yeast nutrient and 20g of East Kent Goldings hop pellets. After a 60 minute boil turn off your heat source and cool the wort to 18°C or your desired fermentation temperature if it is different.

Transfer beer into a sterile fermenter, straining out the hop debris with your cleaned and sterilised brew bag, then aerate and pitch yeast.

Bottle or keg beer when the final gravity is consistent over 2 days.

\* These figures are dependent on various conditions and boil off rates and may vary.