

Ginger bread stout

- Gravity **11.7 BLG**
- ABV ---
- IBU **35**
- SRM **32.9**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (66%) | 85 % | 7 |
| Grain | Cara Munich | 0.3 kg (5.7%) | --- % | 160 |
| Grain | Roast barley | 0.5 kg (9.4%) | --- % | 1300 |
| Grain | Oats, Flaked | 0.5 kg (9.4%) | 80 % | 2 |
| Grain | Barley, Flaked | 0.5 kg (9.4%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Target | 30 g | 60 min | 10.5 % |
| Aroma (end of boil) | East Kent Goldings | 25 g | 5 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|----------------|
| M15 | Ale | Dry | 10 g | Mangrove jacks |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-----------------|-----|------|--------|
| Spice | Cardamom, Black | 2 g | Boil | 15 min |
| Herb | Ginger Root | 5 g | Boil | 15 min |
| Spice | Star Anise | 2 g | Boil | 15 min |
| Flavor | Melasa | 5 g | Boil | 15 min |