

# Ginger bread stout

- Gravity **11.7 BLG**
- ABV **4.7 %**
- 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 |