

Stout Guines

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **34**
- SRM **37.2**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **24.7 liter(s)**

Steps

- Temp **67 C**, Time **90 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|------|
| Grain | Pilzneński | 3.5 kg (60.9%) | 81 % | 4 |
| Grain | Monachijski | 1.5 kg (26.1%) | 80 % | 16 |
| Grain | Czekoladowy | 0.3 kg (5.2%) | 60 % | 1200 |
| Grain | Jęczmień palony | 0.45 kg (7.8%) | 55 % | 1135 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Challenger (Angielski) | 30 g | 60 min | 8.6 % |
| Boil | Challenger (Angielski) | 20 g | 20 min | 8.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|------|--------|------------|
| Gozdawa Pure Ale Yeast 7 | Ale | Dry | 10 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|-----------|------|
| Flavor | kawa | 100 g | Secondary | --- |