

Black Rose

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **29**
- SRM **19.3**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.1 liter(s)**

Steps

- Temp **67 C**, Time **65 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **7.8 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **65 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (85.1%) | 80 % | 5 |
| Grain | Viking cookie Malt | 0.15 kg (6.4%) | 78 % | 32 |
| Grain | Strzegom Karmel 150 | 0.1 kg (4.3%) | 75 % | 150 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (4.3%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 15 g | 40 min | 7 % |
| Boil | Fuggles | 15 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 8 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|-------|
| Fining | Mech irlandzki | 5 g | Boil | 5 min |