

graff_mk

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **21**
- SRM **10.4**
- Style **Fruit Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.4 liter(s)**

Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 4 kg (61.5%) | 80 % | 7 |
| Grain | Biscuit Malt | 0.5 kg (7.7%) | 79 % | 45 |
| Grain | żytni Strzegom | 0.5 kg (7.7%) | 75 % | 150 |
| Grain | Pszeniczny | 0.5 kg (7.7%) | 85 % | 4 |
| Sugar | sok jablkowy | 0.5 kg (7.7%) | --- % | --- |
| Grain | Strzegom Monachijski typ I | 0.5 kg (7.7%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Oktawia | 30 g | 40 min | 9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|---------|------------|
| Danstar - Nottingham | Ale | Slant | 2000 ml | Danstar |