

Dunkel

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **16**
- SRM **16.4**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **7.7 liter(s)**
- Total mash volume **9.9 liter(s)**

Steps

- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **7.7 liter(s)** of strike water to **79.4C**
- Add grains
- Keep mash **10 min** at **72C**
- Sparge using **4.6 liter(s)** of **76C** water or to achieve **10.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Pszeniczny | 1.1 kg (50%) | 85 % | 4 |
| Grain | Monachijski | 0.7 kg (31.8%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 0.2 kg (9.1%) | 79 % | 10 |
| Grain | Fawcett - Crystal | 0.1 kg (4.5%) | 70 % | 160 |
| Grain | Strzegom Karmel 600 | 0.1 kg (4.5%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 10 g | 60 min | 5.9 % |