

Dunkelweizen

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **17**
- SRM **15.7**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Pszeniczny | 3 kg (55%) | 85 % | 4 |
| Grain | Pilzneński | 1.5 kg (27.5%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (9.2%) | 79 % | 22 |
| Grain | Caraaroma | 0.25 kg (4.6%) | 78 % | 400 |
| Grain | Weyermann Specjal W | 0.1 kg (1.8%) | 68 % | 300 |
| Grain | Strzegom pszenica prażona | 0.05 kg (0.9%) | 70 % | 1000 |
| Grain | Strzegom Czekoladowy jasny | 0.05 kg (0.9%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 15 g | 60 min | 11 % |