

DUNKELWEIZEN

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **16**
- SRM **13.4**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

Steps

- Temp **42 C**, Time **15 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **15.1 liter(s)** of strike water to **45.7C**
- Add grains
- Keep mash **15 min** at **42C**
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pszeniczny | 2.5 kg (49.5%) | 81 % | 6 |
| Grain | Strzegom Monachijski typ II | 2 kg (39.6%) | 79 % | 22 |
| Grain | Karmelowy Jasny 30EBC | 0.35 kg (6.9%) | 75 % | 30 |
| Grain | Strzegom Karmel 600 | 0.2 kg (4%) | 68 % | 601 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 25 g | 60 min | 4 % |
| Boil | Hallertau | 15 g | 30 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|---------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 1000 ml | Fermentum Mobile |