

Dunkelweizen

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **16**
- SRM **17.3**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **3 %**
- Size with trub loss **36 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **43.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **30.6 liter(s)**
- Total mash volume **39.4 liter(s)**

Steps

- Temp **45 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **30.6 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **43.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ II | 3 kg (34.3%) | 79 % | 22 |
| Grain | Pszeniczny | 3.5 kg (40%) | 85 % | 4 |
| Grain | Pilznieński | 1 kg (11.4%) | 81 % | 4 |
| Grain | Carahell | 1 kg (11.4%) | 77 % | 26 |
| Grain | Strzegom Barwiący | 0.25 kg (2.9%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Aroma (end of boil) | Tradition | 50 g | 45 min | 5.5 % |

Yeasts

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