

Dunkelweizen

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **18**
- SRM **22.8**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

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

Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	2 kg (40%)	81 %	6
Grain	Strzegom Monachijski typ I	2.5 kg (50%)	79 %	16
Grain	Karmelowy Pszeniczny Strzegom	0.25 kg (5%)	79 %	130
Grain	Strzegom Czekoladowy ciemny	0.25 kg (5%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Spalt	20 g	60 min	5.5 %
Aroma (end of boil)	Spalt	20 g	15 min	5.5 %

Yeasts

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