

Schops

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **55**
- SRM **18.5**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wędzony bukiem	2 kg (41.7%)	82 %	10
Grain	Grodziski pszeniczny wędzony dębem	2 kg (41.7%)	80 %	3
Grain	Aroma CastleMalting	0.75 kg (15.6%)	78 %	100
Grain	Jęczmień palony	0.05 kg (1%)	55 %	985
koniec zacierania- wygrzew				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Boil	Magnum	20 g	60 min	13.5 %
Aroma (end of boil)	Saaz (Czech Republic)	50 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lutra	Ale	Slant	20 ml	---