

## Starter dla Quadrupla

---

- Gravity **16.8 BLG**
- ABV ---
- IBU **30**
- SRM **39.3**
- Style **Old Ale**

### 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.2 liter(s)**

### Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **21.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	4 kg (56.7%)	80 %	4
Grain	SWAEN Black Barley	0.3 kg (4.3%)	55 %	1000
Grain	SWAEN Caramunich light	1.75 kg (24.8%)	80 %	80
Grain	Strzegom Czekoladowy jasny	1 kg (14.2%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	40 g	50 min	5.5 %
Aroma (end of boil)	Lublin (Lubelski) szyszka	100 g	10 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis Safbrew BE-256	Ale	Dry	20 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Spice	Śliwka Hehlońska	30 g	Secondary	10 day(s)