

Żytnie

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **49**
- SRM **8.3**
- Style **Rye IPA**

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 **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (52.2%)	80 %	7
Grain	Strzegom Karmel 30	0.2 kg (3.5%)	75 %	30
Grain	Żytni	1 kg (17.4%)	85 %	8
Grain	Strzegom Monachijski typ I	0.5 kg (8.7%)	79 %	16
Grain	Płatki owsiane	0.5 kg (8.7%)	85 %	3
Grain	Weyermann - Grodziski	0.5 kg (8.7%)	80 %	4
Grain	Weyermann - Carafa I	0.05 kg (0.9%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	16.1 %
Boil	Puławski	15 g	25 min	7.6 %
Boil	Oktawia	15 g	25 min	9 %
Boil	Lublin (Lubelski)	10 g	25 min	3 %
Boil	Nelson Sauvignon	5 g	25 min	11 %
Aroma (end of boil)	Nelson Sauvignon	15 g	1 min	11 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	1 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis