

Kooperacyjjne

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **79**
- SRM **10.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pale Ale (Strzegom)	5 kg (78.1%)	79 %	7
Grain	Strzegom Monachijski typ I	1 kg (15.6%)	79 %	16
Grain	Strzegom Karmel 150	0.4 kg (6.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	9.1 %
Boil	Magnum	20 g	60 min	12.3 %
Boil	Cascade	15 g	60 min	7.4 %
Boil	Cascade	25 g	30 min	7.4 %
Boil	Cascade	10 g	10 min	7.4 %
Boil	Citra	15 g	10 min	11.9 %
Aroma (end of boil)	Cascade	15 g	0 min	7.4 %
Dry Hop	Cascade	25 g	4 day(s)	7.4 %
Dry Hop	Amarillo	30 g	3 day(s)	9.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale