

Apa v3

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **41**
- SRM **9.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **30.1 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (82.1%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (14.9%)	79 %	16
Grain	Strzegom Czekoladowy 400	0.2 kg (3%)	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Amarillo	25 g	5 min	3 %
Aroma (end of boil)	Cascade	25 g	0 min	6 %
Aroma (end of boil)	Chinook	25 g	0 min	11 %

Yeasts

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