

ApaArt

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **22**
- SRM **7.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.5 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (39.2%)	81 %	4
Grain	Strzegom Monachijski typ II	2.5 kg (39.2%)	79 %	23
Grain	Strzegom Karmel 30	0.25 kg (3.9%)	75 %	30
Grain	Carahell	0.625 kg (9.8%)	77 %	26
Grain	Briess - Carapils Malt	0.5 kg (7.8%)	74 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Mittelfruh	10 g	58 min	3 %
Boil	Amarillo	20 g	48 min	9.5 %
Aroma (end of boil)	Amarillo	30 g	5 min	9.5 %
Aroma (end of boil)	Amarillo	50 g	0 min	9.5 %
Whirlpool	Hallertau Blanc	100 g	0 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	40 ml	Fermentum Mobile