

AM 03,17

- Gravity **13.3 BLG**
- ABV ---
- IBU **28**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.7 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.12 kg (50.2%)	80 %	4
Grain	Strzegom Monachijski typ I	1.3 kg (30.8%)	79 %	16
Grain	Strzegom Pszeniczny	0.5 kg (11.8%)	81 %	6
Grain	Strzegom Karmel 30	0.3 kg (7.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	10 g	60 min	9.5 %
Boil	Amarillo	10 g	20 min	9.5 %
Boil	Amarillo	10 g	10 min	9.5 %
Boil	Citra	10 g	5 min	12 %
Whirlpool	Citra	30 g	0 min	12 %
Dry Hop	Amarillo	20 g	5 day(s)	9.5 %
Dry Hop	Citra	20 g	5 day(s)	12 %

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Gozdawa german alt	Ale	Slant	200 ml	---