

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **30**
- SRM **7.6**
- Style **American Pale Ale**

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 **17.8 liter(s)**
- Total mash volume **23.7 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **45 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) US	4 kg (67.5%)	79 %	4
Grain	Monachijski	1 kg (16.9%)	80 %	16
Grain	Płatki pszeniczne	0.5 kg (8.4%)	85 %	3
Grain	Karmelowy Czerwony	0.3 kg (5.1%)	75 %	59
Grain	Strzegom Karmel 150	0.13 kg (2.2%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Marynka	10 g	60 min	10 %
Boil	Chinook	10 g	15 min	13 %
Dry Hop	Lublin (Lubelski)	35 g	10 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
S-05	Ale	Slant	0.3 ml	---

Extras

Type	Name	Amount	Use for	Time
Flavor	płatki debowe moczone w Cherry Casco de la Cruz	40 g	Secondary	10 day(s)