

status

- Gravity **13.1 BLG**
- ABV ---
- IBU **39**
- SRM **11.7**
- Style **American Wheat or Rye Beer**

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 **3.5 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.3 kg (47.9%)	80 %	4
Grain	Strzegom pszeniczny	2.3 kg (47.9%)	--- %	6
Grain	Strzegom Karmel 30	0.2 kg (4.2%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	15 g	60 min	8.8 %
Boil	Amarillo	15 g	30 min	8.8 %
Boil	Citra	15 g	15 min	12.4 %
Boil	Citra	15 g	0 min	12.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	---