

LITE RYE APA

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **36**
- SRM **3.1**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (57.1%)	81 %	4
Grain	Żytni	1 kg (28.6%)	85 %	8
Grain	Carapils	0.5 kg (14.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	BRU-1	10 g	60 min	15.7 %
Boil	BRU-1	10 g	12 min	15.7 %
Boil	BRU-1	10 g	8 min	15.7 %
Boil	BRU-1	10 g	4 min	15.7 %
Boil	BRU-1	10 g	2 min	15.7 %

Yeasts

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