

Aramis

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **30**
- SRM **3.5**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **15.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.5 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **72C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **20.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	3.7 kg (100%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Aramis	22 g	40 min	5.5 %
Aroma (end of boil)	Aramis	28 g	3 min	5.5 %
Whirlpool	Aramis	50 g	20 min	5.5 %