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

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.7 kg <i>(100%)</i>	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 %