

Karolia Sour Ale

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **16**
- SRM **4**
- Style **Flanders Red Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **50 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **10 min** at **62C**
- Keep mash **50 min** at **72C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (71.4%)	81 %	4
Grain	Słód zakwaszający	0.2 kg (4.8%)	--- %	4
Grain	Słód krótki	0.2 kg (4.8%)	--- %	---
Grain	Słód dekstrynowy	0.8 kg (19%)	--- %	15

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	30 min	8.8 %
Aroma (end of boil)	Marynka	30 g	0 min	8.8 %

Extras

Type	Name	Amount	Use for	Time
Flavor	Wiśnie	1400 g	Secondary	7 day(s)