

## #35 Winterbier

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- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **34**
- SRM **22.3**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **14 %/h**
- Boil size **25 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.16 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.8 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **73 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **21.1 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **0 min** at **76C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (59.8%)	81 %	4
Grain	Weyermann pszeniczny jasny	1.1 kg (16.4%)	80 %	6
Grain	Carabelge	0.57 kg (8.5%)	80 %	30
Grain	Płatki owsiane	0.45 kg (6.7%)	85 %	3
Grain	Płatki pszeniczne	0.24 kg (3.6%)	85 %	3
Grain	Zakwaszający	0.03 kg (0.4%)	80 %	4
Grain	Carafa III	0.3 kg (4.5%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	8.5 %
Aroma (end of boil)	Marynka	20 g	10 min	8.5 %