

Schwärzla 2

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **29**
- SRM **43.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Best	3.7 kg (61.2%)	80 %	6
Grain	Münchner Malz Best	1.3 kg (21.5%)	78 %	20
Grain	Carabelage	0.3 kg (5%)	75 %	30
Grain	Special W	0.3 kg (5%)	73 %	300
Grain	Carafa II Best	0.3 kg (5%)	65 %	1100
Grain	Chocolate Best	0.1 kg (1.7%)	75 %	900
Liquid Extract	sinamar	0.05 kg (0.8%)	--- %	8500

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Perle	20 g	60 min	9.7 %
Boil	Tettnanger	30 g	15 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - 1728 Scottish Ale	Ale	Slant	300 ml	Wyeast Labs
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