

Foreign Extra Stout z melasą, jeżynami i płatkami sherry oloroso

- Gravity **21.8 BLG**
- ABV **9.8 %**
- IBU **35**
- SRM **47.6**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (64.5%)	81 %	4
Grain	Jęczmień palony	0.25 kg (3.2%)	55 %	1100
Grain	Strzegom Czekoladowy 400	1 kg (12.9%)	68 %	400
Grain	Weyermann - Carafa III special	0.25 kg (3.2%)	70 %	1300
Liquid Extract	Melasa	1 kg (12.9%)	75 %	---
Sugar	laktoza	0.25 kg (3.2%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	11.1 %
Boil	Centennial	20 g	30 min	10 %
Boil	Chinook	10 g	5 min	11.1 %
Boil	Centennial	10 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

WLP099 - Super High Gravity Ale Yeast	Ale	Liquid	1000 ml	White Labs
---------------------------------------	-----	--------	---------	------------

Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe sherry oloroso macerowane	100 g	Secondary	30 day(s)
Flavor	jeżyny	5000 g	Primary	10 day(s)
Fining	whirfloc	2.5 g	Boil	10 min