

# Chocolate SH FES

- Gravity **19.1 BLG**
- ABV ---
- IBU **47**
- SRM **61.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **58 C**, Time **5 min**
- Temp **67 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **64.3C**
- Add grains
- Keep mash **5 min** at **58C**
- Keep mash **20 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (62.5%)	79 %	6
Grain	Pszeniczny	1.5 kg (18.8%)	85 %	5
Grain	Strzegom Czekoladowy jasny	1 kg (12.5%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.3%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	30 g	60 min	13.6 %
Boil	Barbe Rouge	30 g	15 min	6.6 %
Aroma (end of boil)	Barbe Rouge	20 g	10 min	6.6 %
Whirlpool	Barbe Rouge	20 g	10 min	6.6 %
Dry Hop	Barbe Rouge	30 g	7 day(s)	6.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Liquid	500 ml	Fermentum Mobile
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