

# SWEET FES

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **40**
- SRM **36.7**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.9 kg (43.9%)	80 %	4
Grain	Monachijski	1.1 kg (16.7%)	80 %	16
Grain	owsiany	0.7 kg (10.6%)	80 %	6
Grain	Płatki żytnie	0.6 kg (9.1%)	85 %	10
Grain	Karmelowy ciemny	0.3 kg (4.5%)	75 %	600
Grain	Strzegom Barwiący	0.2 kg (3%)	68 %	1300
Grain	Jęczmień palony	0.3 kg (4.5%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.5 kg (7.6%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	33 g	50 min	14.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	kawa ziarna	200 g	Secondary	7 day(s)
Flavor	laktoza	500 g	Boil	5 min