

# Stout IDAH07 & Amarillo

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **40**
- SRM **34**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **26.9 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **22.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (75%)	81 %	4
Grain	Płatki owsiane	0.4 kg (7.1%)	60 %	3
Grain	Jęczmień palony	0.4 kg (7.1%)	55 %	985
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (3.6%)	73 %	1001
Grain	Weyermann - Carapils	0.4 kg (7.1%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnat	20 g	90 min	11.7 %
Aroma (end of boil)	Amarillo	30 g	5 min	9.5 %
Whirlpool	Idaho 7	30 g	0 min	12.7 %
Dry Hop	Amarillo	60 g	3 day(s)	9.5 %
Dry Hop	Idaho 7	60 g	3 day(s)	12.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP 090	Ale	Slant	200 ml	WLP

## Extras

Type	Name	Amount	Use for	Time
Water Agent	NaCl	6 g	Mash	90 min
Water Agent	Whirfloc	1 g	Boil	5 min