

# Mandziak

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- Gravity **12.9 BLG**
- ABV ---
- IBU **20**
- SRM **4**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Wheat Malt	2.1 kg (42.9%)	85 %	5
Grain	Weyermann - Pilsner Malt	1.5 kg (30.6%)	81 %	5
Grain	Weyermann - Pale Ale Malt	0.8 kg (16.3%)	85 %	7
Grain	Platki owsiane	0.35 kg (7.1%)	60 %	3
Grain	Weyermann - Carapils	0.15 kg (3.1%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Aroma (end of boil)	Cascade	15 g	15 min	6 %
Aroma (end of boil)	Cascade	15 g	7 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Other	pulpa mango alphonso	5.1 g	Secondary	14 day(s)