

# Black Jack

- Gravity **15.9 BLG**
- ABV ---
- IBU **59**
- SRM **39**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (73.5%)	79 %	6
Grain	Strzegom Monachijski typ II	0 kg	55 %	985
Grain	Strzegom Monachijski typ II	0 kg	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.4 kg (5.9%)	68 %	1200
Grain	Pszeniczny	0.4 kg (5.9%)	85 %	4
Grain	Strzegom Monachijski typ II	1 kg (14.7%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	30 g	60 min	15.5 %
Boil	Cascade	20 g	15 min	6 %
Boil	Citra	20 g	10 min	12 %
Boil	Cascade	20 g	0 min	6 %
Boil	Citra	20 g	0 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis