

# GOSE WITH SOUR PITCH AND NOTTINGHAM 30L



STEP 1

## LIQUOR

	LITRES
<b>Final Kettle Vol</b>	<b>27</b>
<b>Beg Kettle Vol</b>	<b>30</b>
<b>L:G</b>	<b>3.1</b>
<b>Mashing in Liquor</b>	<b>21</b>
Lauter	0
<b>Sparge Liquor</b>	<b>18</b>
Total Liquor	39

EVAPORATION RATE

0.10

EVAPORATION AMOUNT

3



STEP 2

## MALT

<b>Original Gravity/Plato</b>	<b>1.0484</b>	<b>12.0</b>
<b>BME (premised)</b>	<b>0.860</b>	
<b>Colour (Lovibond)</b>	<b>2 to 3</b>	

TYPE OF MALT	% OF GRIST	EXTRACT (AS-IS)	YIELD	COLOUR (L)	COLOUR CONTRIBUTION
<b>Pale Ale</b>	0.450	0.810	0.697	3.0	1.4
<b>Wheat</b>	0.550	0.780	0.671	3.2	1.8
<b>TOTAL</b>					<b>3.3</b>

EXTRACT (KG): 3.40

WEIGHT OF MALT (KG)

**Pale Ale** 2.19  
**Golden naked oats** 2.79  
**TOTAL** 4.98



## TEMPERATURE

	°F	°C
<b>Conversion Temp</b>	<b>151</b>	<b>66.0</b>
<b>Strike Temp</b>	<b>163</b>	<b>72.6</b>
Sparge Temp	174	78.9

SPARGE ACID

NONE

## SALTS:

- Add CaCl<sub>2</sub> to achieve 100pm Ca
- Add 7g/hl NaCl to kettle (final boiling)
- Add lactic acid to achieve 5.4 (mash)
- Add lactic acid to achieve 4.3-4.5 (pre-sour)
  - 1) pH 5,4 after salts, lactic acid in mash
  - 2) brew as normal, boil for 2-5 min (no hop addition)
  - 3) send to whirlpool, purge kettle/lactic souring vessel
  - 4) send through to heat exchanger/cool to lactic pitch rate -- 35-38C
- **Ensure the wort has pH 4.3-4.5 (pre sour)**
  - 5) transfer back to kettle/lactic souring vessel, add Sour Pitch
  - 6) hold kettle/lactic souring vessel at 35-38°C
  - 7) should see pH drop within 24 hours to 3.2-3.5

## FONT LEGEND

**Temp**  
**Gravity/Brewing parameters**  
**Water**  
**Malts**  
**Hops**  
**Yeast**



STEP 3

## HOPS

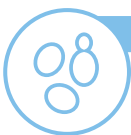
**Kettle Boil Time: 60 Min**

Hop Additions: 1

**IBUs: 4**

Irish Moss @ 15 min before knock-out: 1.5 g (1g per 20 l kettle full volume)

TYPE	ALPHA-ACID	BOIL TIME (MIN)	UTILISATION %	IBU (%)	IBU CONTRIBUTION	WEIGHT OF HOPS (G)
<b>Denali</b>	0.040	<b>60.00</b>	0.200	0.600	2.40	<b>8</b>
<b>Salt</b>		<b>10.00</b>				<b>32</b>
<b>Corriander</b>		<b>10.00</b>				<b>42</b>
<b>TOTAL</b>						<b>8</b>



STEP 4

## YEAST

<b>Yeast Type/Number</b>	<b>LalBrew® Nottingham</b>
<b>Fermentation Temp</b>	<b>18°C</b>



## NOTES

- Non-filtered