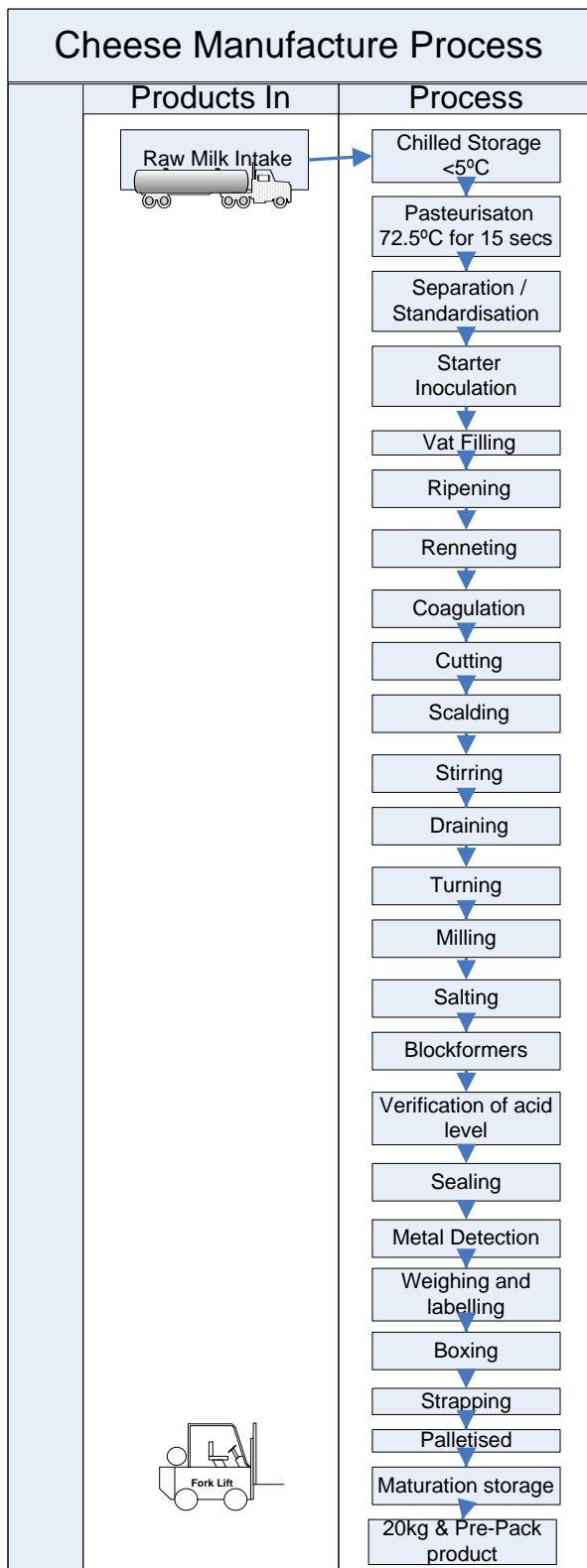


**CHEDDAR CHEESE SPECIFICATION – S/Ba/01**

UK  
 MZ 012  
 EC

**Process Flow Diagram**



**Process Summary**

Cheddar cheese is produced from local top quality cows milk and starter culture pasteurised at 72.5°C for a minimum of 15 seconds, hand turned in the traditional cheddar way and packed according to Good Manufacturing Practise and a fully documented HACCP system.

**Product Description**

A good firm body with close texture, ivory yellow in colour with a clean cheddar flavour and aroma.

Maturity is as agreed with customer.

Product is suitable for cutting, slicing and grating.

Free moisture is not uncommon on a two year old cheddar.

**Ingredients**

Cows Milk	96.73%
Pure Dried Vaccum Salt	2.0%
Starter Culture	1.25%
Vegetarian Rennet	0.02%

**Nutritional Information Per 100g**

Energy Kcal	410
Energy (KJ)	1700
Protein (g)	25.0
Fat (g)	34.4
Of which saturates (g)	21.7
Of which mono (g)	9.4
Of which poly (g)	1.4
Carbohydrate (g)	0.1
Salt (g)	2.0

**Dietary & Intolerance Information**

Suitable for Vegetarians, Ovo-Lacto Vegetarians and Coeliacs.

**Allergens**

Cows Milk

## CHEDDAR CHEESE SPECIFICATION – S/Ba/01

### MATURITY LEVELS

Maturity	Average Age Profile*	Flavour Level
Mild Cheddar	2 – 4 Months	1
Medium Cheddar	5 – 6 Months	2
Mature Cheddar	7 – 13 Months	3 - 4
Extra Mature Cheddar	14 – 16 Months	5
Vintage Cheddar	17 – 19 Months	6
Vintage Reserve	20 + Months	7

\* Or as agreed with customer

### CHEMICAL COMPOSITION

Parameter	Typical Value	Unit	Limits
Moisture	35	%	<39
Fat	35	%	>29
FDM	54	%	>48
Salt	1.9	%	>1.5, <2.3
Aw	0.90		
Antibiotics	Absent	Pass / Fail	Absent

### MICROBIOLOGICAL SPECIFICATION

Parameter	Typical	Unit	Parameters	Method
Coliforms	<10	Cfu/g	>1000	30°C for 24 hours (VRBA)
E. coli	Absent	Cfu/g	Absent	37°C for 24 hours (Maconkey Broth) 44°C confirmation (Brill Green/Tryptone Water)
Staph aureus	<20	Cfu/g	>20	37°C for 48 hours (BP)
Yeasts & Mould	<100	Cfu/g	>1000	22°C for 4 days (YGC)
Salmonella	Absent in 25g		Absent in 25g	External UKAS accredited Lab
Listeria	Absent in 25g		Absent in 25g	External UKAS accredited Lab

## CHEDDAR CHEESE SPECIFICATION – S/Ba/01

### CRITICAL CONTROL POINTS - DAIRY

Test	Frequency	Standard	Tolerance	Corrective Action
High temperature batch pasteurisation	Every bulk starter vessel	80°C for 40 mins		Re-sterilise batch
Raw Milk Intake for antibiotics	Every tanker	Absent		Tanker not unloaded
Pasteurisation	Continuous	Min 72.5°C for 15 seconds	Divert set at 72.5°C	Correct pasteurisation of non conforming product
Verification of acid level	Every vat	Min of 0.50% lactic acid in 5 hours for bulk cultures, Min of 0.30% lactic acid in 5 hours for DVI cultures		Isolate stock and place on QA Hold, retest for staphs within 72 hrs
Metal Detection	Every block, metal detection pieces checked at beg, end and every 90mins	Fe 4.0mm Non Fe 5.0mm Stainless Steel 7.5mm		Isolate failed stock since the last good test and place on QA hold.

### CRITICAL CONTROL POINTS – PRE-PACK

Metal Detection	Every wedge, metal detection pieces checked at beg, end and every 30 mins	Fe 1.5mm Non Fe 2.5mm Stainless Steel 4.0mm		Isolate failed stock since the last good test and place on QA hold and metal detect at a later date. If metal detector is not working correctly call engineer.
Metal Detection (off cuts )	Every bag, metal detection pieces checked at beg, end and every hour	Fe 4.0mm Non Fe 4.5mm Stainless Steel 6.0mm		Retest the bag, if alarm sounds again remove the bag from production and inspect.
Metal Detection (Bulk Line)	Every block, metal detection pieces checked at beg, end and every hour	Fe 1.5mm Non Fe 2.5mm Stainless Steel 5.0mm		Retest the offending block, if alarm sounds again remove the block from production and inspect.

## CHEDDAR CHEESE SPECIFICATION – S/Ba/01

### PACKAGING

<b>20kg Blocks</b>	Food contact	Secondary
Packaging Material	Co extruded multilayer film with PA/PE structure	Adhesive label
Weight	110g/m <sup>2</sup>	0.7725g
Gauge	120µm	78 µm
Colour	Transparent	White
Modified Atmosphere	No	n/a

<b>5kg,3kg,2.5kg,1.25kg</b>	Food contact	Secondary
Packaging Material	High barrier, multilayer, coextruded shrink bag	Adhesive label
Weight		0.7725g
Gauge	50 µm	78 µm
Colour	Transparent	White
Modified Atmosphere	No	n/a

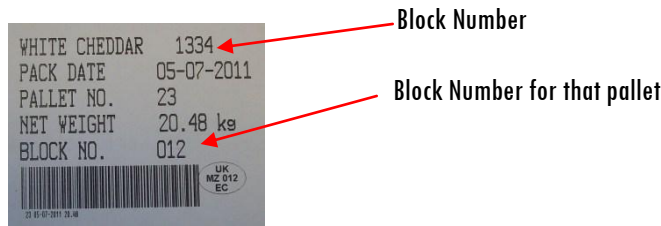
<b>43g, 100g 123g, 150g, 200g, 320g, 400g, 1.25kg</b>	Food contact
Packaging Material	Bialon 52 HFP, OPA/PE Film or OPA 12/PE 40 Metalocene
Weight	52.6 g/m <sup>2</sup>
Gauge	54 µm
Colour	Transparent
Modified Atmosphere	Yes CO <sup>2</sup>

**CHEDDAR CHEESE SPECIFICATION – S/Ba/01**

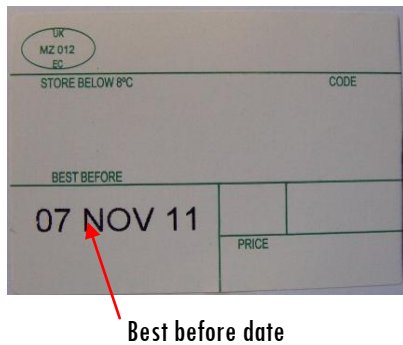
**TRACEABILITY**

Full traceability can be traced from either the production date code DD/MM/YYYY or the Best Before date.

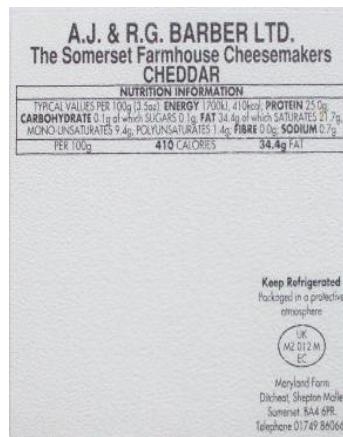
**Example of a 20kg label**



**Example of 3 – 5kg Label**



**Examples of 150g – 1.25kg Label**



**SHELF LIFE**

- 20kg - Varies with maturity and /or customer requirement
- Vacuumed Pack (various sizes) - Varies with maturity and /or customer requirement
- Flow wrap (various sizes) - Varies with maturity and /or customer requirement
- 4 x 5kg - 3 months
- Waxed Truckles - 6 weeks

**DESPATCH STORAGE TEMPERATURES**

Min - 2.0°C  
 Max – 10.0°C

## QUALITY ASSURANCE

### QUALITY ASSURANCE

All products supplied by AJ & RG Barber Limited conform in all respects to the Food Safety Act 1990 & relevant UK and EC legislation.

A controlled Quality System, giving due diligence is run by the Quality Assurance Manager, which covers all aspects from raw materials to despatch, & includes identification, traceability & document control. This system is regularly audited in-house and annually for BRC

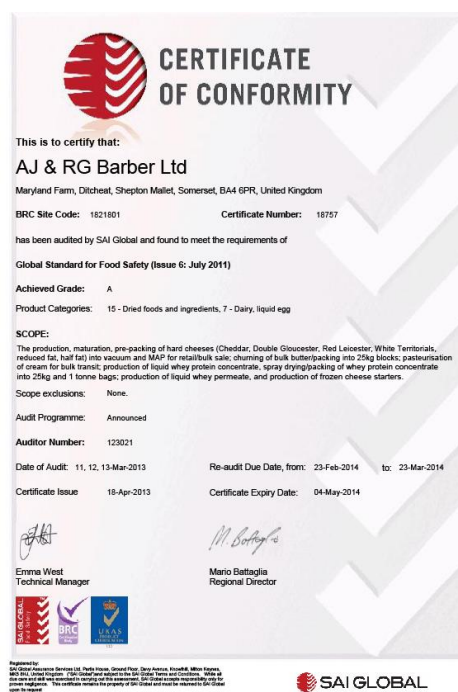
A certificate of analysis can be available to accompany each delivery.

Examples of the quality schemes to which we are committed are attached below, latest certificates are available on request.

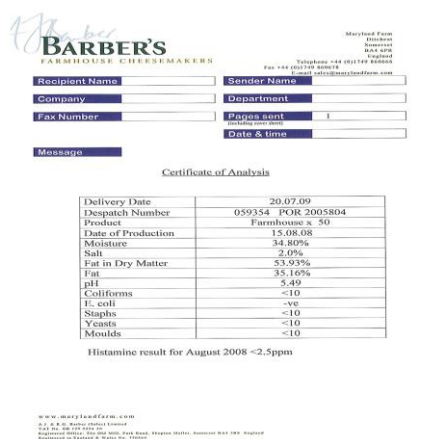
### Environmental 14001 Certificate



### BRC Certificate



### Example of a Certificate of Analysis



### Red Tractor Certificate





Company Name : .....

Address : .....  
.....  
.....

Telephone No : .....

Please return to :

Quality Assurance Manager  
AJ & RG Barber Ltd.  
Maryland Farm  
Ditcheat  
Shepton Mallet  
Somerset  
BA4 6PR

Fax No : 01749 860678

**SPECIFICATION FOR CHEDDAR CHEESE**

No : S/Ba/01      Issue No : 10      Issue Date : 05.07.13

Specification agreed by supplier :

Name : .....

Signature : .....

Position : .....

Date : .....

Specification agreed by customer :

Name : .....

Signature : .....

Position : .....

Date : .....