

PRODUCT TECHNICAL DOSSIER

N-ACETYL-L-GLUTAMINE

Product Code:

P07250

Raw Material Full Name:

N-Acetyl-L-Glutamine

Raw Material Full Botanical/Chemical/Latin/Trade Name/Synonyms:

Ac-Gln-OH

This material is Food Grade

Yes

Vegan / Vegetarian Status

Suitable for vegan / vegetarian

Limit/Range/Specification:

98.0% - 101.0%

CAS Number:

35305-74-9

Molecular Formula for the raw material:

$C_7H_{12}N_2O_4$

Average Molecular weight:

188.18

Solubility in Water:

Soluble in water

Solubility in Alcohol:

Soluble in alcohol

Particle Size:

40 Mesh

Percentage passed through:

95% Pass through 40 mesh

Bulk Density:

5.5 g/ml – 6.0 g/ml



Tapped Density:

7.2 g/ml – 7.6 g/ml

pH:

1.7 - 2.8

Loss on Drying:

Max 0.6%

Residue on Ignition:

Max 0.2%

Country of Origin:

China

Country of Origin of the Manufacture:

China

Base Source/Start Material:

Glucose

Origin of Product – Synthetic, Plant, Mineral, Animal, Fish or Fermented:

Fermented

Shelf Life from Date of Manufacture:

36 Months

Storage Conditions:

Cool and dry place

Appearance (Fine/Crystals/Crystalline/Hygroscopic):

Crystalline powder

Colour:

White

Flavour/Taste:

Characteristic

Odour:

Characteristic

Microbiological Test

Total Viable Count:

Max 1,000cfu/g

Yeast & Moulds:

Max 100cfu/g

E.Coli:

Negative

Salmonella:

Negative

Heavy Metals

Lead (Pb):

Max 3ppm

Cadmium (Cd):

Max 1ppm

Mercury (Hg):

Max 0.1ppm

Arsenic (As):

Max 3ppm

There are no nuts in this recipe, however we cannot guarantee that the raw materials entering the site are nut free.

Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.



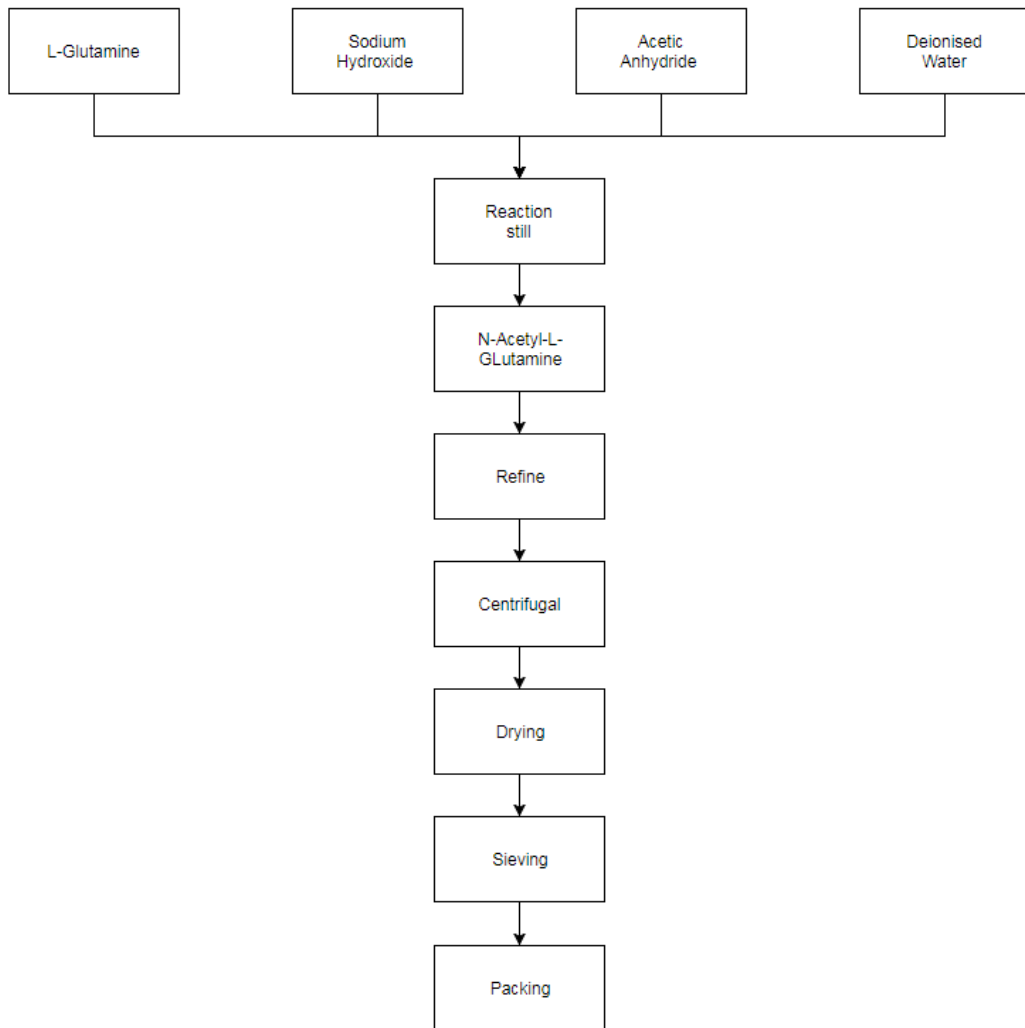
ALLERGENS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Peanuts and Peanut Derivatives (including possible cross contamination)	No	No	
Other Nut and Nut Derivatives <i>Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoensis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)</i>	No	No	
Sesame Seeds and Sesame Seed Derivatives	No	No	
Other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	No	No	
Milk and Milk Derivatives (including lactose)	No	No	
Egg and Egg Derivatives	No	No	
Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten <i>(wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barley grass)</i>	No	No	
Soya and Soya Derivatives	No	No	
Lupin and Lupin Derivatives	No	No	
Mustard and Mustard Derivatives	No	No	
Celery or Celery Derivatives (including Celeriac)	No	No	
Fish and Fish Derivatives	No	No	
Molluscs and their Derivatives	No	No	
Crustaceans and their Derivatives	No	No	
Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	No	No	



ADDITIVES / CONTAMINANTS / DIETARY REQUIREMENTS	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	If YES, Please Comment
Additives	No	No	
Antioxidants	No	No	
Ethylene Oxide	No	No	
Gelatine	No	No	
Flavourings (Artificial / Nature Identical / Natural / Smoked)	No	No	
Maize / Corn and any Derivatives	No	No	
Legumes / Pulses	No	No	
Rice and Rice Derivatives	No	No	
Added Salt	No	No	
Added Sugar / artificial or natural sweeteners	No	No	
Aspartame	No	No	
BHA / BHT (E320 / E321)	No	No	
Caffeine	No	No	
Colours (Artificial / Nature Identical / Natural / Smoked)	No	No	
Dextrose	No	No	
Dioxins	No	No	
MSG (Added and Naturally Occurring E621) or Glutamates (E620 to E625)	No	No	
Nucleotides (E627, E630, E631, E635)	No	No	
Polyols (sugar alcohols)	No	No	
Benzoates (E210 / E219)	No	No	
Sorbic Acid (E200, E203)	No	No	
Any other Preservatives	No	No	
Ethanol	No	No	
Honey	No	No	
Lactose	No	No	
Yeast and Yeast Derivatives	No	No	
All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	No	No	



PRODUCTION FLOW CHART



CONFIRMATION OF BSE/TSE STATUS

This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.

This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.

CONFIRMATION OF GM STATUS

This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under regulations 1829/2003/EC and 1830/2003/EC.

CONFIRMATION OF NON IRRADIATION STATUS

This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives 1999/3/EC.

CONFIRMATION OF NANDROLONE STATUS

This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.

CONFIRMATION OF IOC PRODUCT STATUS

This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.

CONFIRMATION OF ANIMAL TESTING STATUS

This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with regulation 86/609/EEC.

CONFIRMATION OF PESTICIDES STATUS

This is to certify that the above-mentioned product complies with the regulation (EC) No.396/2005 of 23rd February 2005 and commission Regulation (EU) No. 559/2011 of 7th June 2011 amending annexes II and III of the above Regulation.

CONFIRMATION OF NANOPARTICLE STATUS

This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation 2011/696/EU, defines as follows: "'Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product name: N-Acetyl-L-Glutamine
Synonym: Ac-Gln-OH
Chemical formula: C₇H₁₂N₂O₄
CAS No.: 35305-74-9
Company: Cambridge Commodities Limited
Lancaster Way, Ely, Cambridgeshire, CB6 3NX.
Tel: 01353 667258. Email: qa@c-c-l.com

2. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects: N/A

Repeated or prolonged exposure is not known to aggravate medical condition.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name: N-Acetyl-L-Glutamine
CAS No.: 35305-74-9
Percentage: Min 98.0%

4. FIRST-AID MEASURES

Eye contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, crease and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious skin contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.



Inhalation:

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

5. FIREFIGHTING MEASURES

Flammability of the product:

May be combustible at high temperature.

Firefighting media and instructions:

Small fire: Use dry chemical powder

Large fire: Use water spray, fog or foam. Do not use waterjet.

6. ACCIDENTAL RELEASE MEASURES

Small spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. HANDLING AND STORAGE

Precautions:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing if ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal protection in case of a large spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical appearance: Solid (White powder)
Odour: Characteristic
Molecular weight: 188.18
pH (1% soln/water): 1.7-2.8
Specific gravity: 1.677 (water=1)
Solubility: Soluble in hot water

10. STABILITY AND REACTIVITY

Stability: The product is stable.

Corrosivity: Non-corrosive in presence of glass.

Polymerization: No.

11. TOXICOLOGICAL INFORMATION

Routes of entry:

Eye contact. Ingestion.

Chronic effects on humans: N/A

Other toxic effects on humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).

Slightly hazardous in case of skin contact (permeator)

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12. ECOLOGICAL INFORMATION

Products of biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the products of biodegradation:

The products of degradation are more toxic.

13. DISPOSAL CONSIDERATIONS

Data not available.

14. TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (United States)

15. REGULATORY INFORMATION

Federal and state regulations:

Connecticut carcinogen reporting list: N-Acetyl-L-Glutamine

Other regulations:

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada)

DSCL (EEC):

R36/37/38 – Irritating to eyes, respiratory system and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Protective Equipment:

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Gloves. Lab coat. Dust respirator.
Be sure to use an approved/certified respirator or equivalent. Splash goggles.

16. OTHER INFORMATION

This advice is given by Cambridge Commodities Ltd who accepts no legal liability for it. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

Individuals working with chemicals should consider all chemicals to be potentially hazardous even if their individual hazards may be uncharacterised or unknown.

This Information provided in this document is subject to change and the batch specific Certificate of Analysis should always be referenced.

To be used as per local legislation.

Change History

Version	Change	Customer Notification required Yes / No
1	First Issue	No
2	The Pharmacopeia parameter was removed, both the flowchart and format was updated.	Yes

Document Approval

Originator Job Title	Quality Specialist	Approver Job Title	Assistant Quality Manager
<i>Matthew Vincent</i>		<i>Richard Cecil</i>	




P07250 Acetyl (N) L-Glutamine Technical Dossier

Adobe Sign Document History

12/07/2017

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