

TECHNICAL INFORMATION SHEET: AMMONIUM TETRAFORMATE SOLUTION

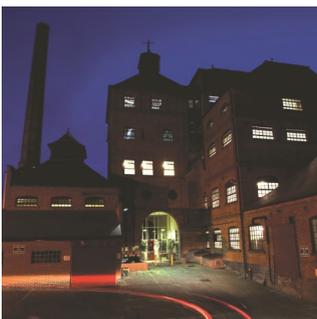
PRODUCT NAME:**AMMONIUM
TETRAFORMATE
SOLUTION****PRODUCT CODE:****AMMFOR****COMMODITY CODE:****29151200****PACKAGING:****25 AND1200 KG**

Description

Ammonium Tetraformate Solution is used for killing surplus yeast and preventing the growth of micro-organisms and mould in spent grain prior to use as animal feed.

Benefits

- Improves digestion and absorption of nutrients in livestock.
- Prevents contamination and recontamination by pathogens in animal feed.
- Assists compliance with:
 - FEMAS
 - BFBi Feed Assurance Scheme
 - BFBi Code of practice for moist feeds
 - HACCP
- Suitable for Organic Feedstuffs
- Permitted Preservative in Feedstuffs



TECHNICAL SUPPORT

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REGULATORY COMPLIANCE INFORMATION

Refer to the **Product Specification Sheet** or contact us on
tel: +44 (0) 115 978 5494 | e: compliance@murphyandson.co.uk

HEALTH & SAFETY INFORMATION

Refer to the **Safety Data Sheet (SDS)**

Principle

Brewery and distillery co-products that are sent for animal feed must be “safe” for animal and human consumption.

“Feed ingredients shall be deemed safe if they do not have an adverse effect on human or animal health and do not make food derived from food producing animals injurious to health or unfit for humans consumption” Regulation (EC) 178/2002 adapted)

To ensure the safety of co-products, HACCP assessments have to be carried out in order to minimise chemical, physical or microbiological contamination.

In yeast slurry the possible microbiological contamination include:

- Bacteria including Salmonella - from birds, pests, environment or operatives within the brewery
- Mould - From the environment
- Mycotoxins - Produced from mould growth

Controls needed to eliminate microbial contamination in yeast slurry may include:

- Prevent ingress of birds, insects and other pests
- Ensure a clean environment within the brewhouse and yeast storage areas
- Treat yeast slurry with Ammonium Tetraformate Solution to kill micro organisms and prevent further growth of mould and mycotoxin production.
- These steps will become Critical Control Points (CCP's) identified in the HACCP assessment to either eliminate or reduce the hazards to an acceptable level.

Guidelines for use

- Check that the product is within its shelf life before use
- Experiment with additions to determine the minimum effective rates
- Read the Safety Data Sheet prior to use
- Do not mix with alkaline product

Application and rates of use

For the treatment of Spent Grain

How to dilute the product

The product can be diluted prior to use to ensure even distribution throughout the grains.

How much of the product to add

Spray the product evenly onto the spent grains or mix in to give 0.1- 0.5% (1-5 litres per tonne of spent grains)

For the treatment of Spent Yeast

How to dilute the product

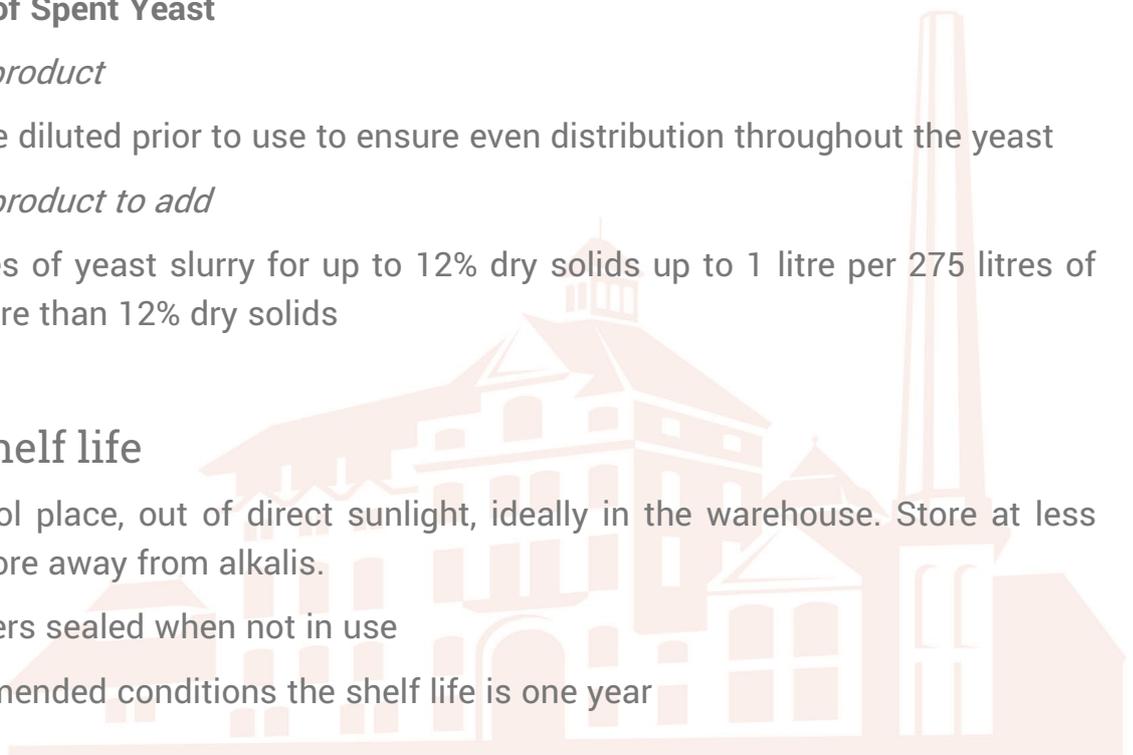
The product can be diluted prior to use to ensure even distribution throughout the yeast

How much of the product to add

1 litre per 300 litres of yeast slurry for up to 12% dry solids up to 1 litre per 275 litres of yeast slurry for more than 12% dry solids

Storage and shelf life

- Store in a cool place, out of direct sunlight, ideally in the warehouse. Store at less than 30°C. Store away from alkalis.
- Keep containers sealed when not in use
- Under recommended conditions the shelf life is one year



Regulations

This material is a permitted preservative under:-

- Register of Feed Additives EC No 1831/2003
- Additives in Feedstuffs Council Directive 70/524/EEC
- List of Authorised Additives in Feedingstuffs 2004/c50/01
- Permitted Preservatives in spent grains for Organic Production of Agricultural products and Foodstuffs (EEC No 2277/2003) (amended EEC No 2092/91)
- Directive 2002/32/EC

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