



UNITED

LABORATORIES

BATCH #:

UNITED 584 NITRIFYING BACTERIA USER:

- Municipal wastewater plants - particularly during an extra cold winter season.
- Petroleum refineries.
- Steel manufacturers.
- Meat processors.
- Chemical manufacturers.

UNITED 584 is a special mixture of bacteria designed to provide nitrification of ammonia-nitrogen in wastewater.

UNITED 584 may be used up to 110° F.
AMMONIA > NITRITE > NITRATE
NH₃ > NO₂ > NO₃

UNITED 584 contains *Nitrosomonas*, *Nitrobacter*, and other specialized bacteria that are capable of oxidizing ammonia at high rates.

FEATURES:

- Quick recovery of nitrification.
- High rates of nitrification.
- Nitrification in the presence of up to 200 mg/1BOD
- Nitrification in the presence of higher TOC - BOD than normal.
- Performs within a pH range of 6.5 - 8.5 with an optimum pH near 8.2.

LAB DATA:

BODmg./1 at Initial Seeding	6 Days	9 Days	13 Days
2	10%	52%	69%
50	9%	47%	56%
100	8%	47%	50%
200	<1%	34%	53%

The above test was run on a batch basis with aeration and mixing. Improved results have been shown in activated sludge systems where complete oxidation of ammonia can be obtained.

Under winter conditions, nitrification will be established in approximately 12 days at municipal facilities and approximately 20 days at industrial wastewater facilities.

Manufactured and Printed in U.S.A.

1296

NET CONTENTS:

WASTEWATER PLANT NITRIFYING BACTERIA

UNITED 584

KEEP OUT OF REACH OF CHILDREN.

CAUTION

**SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS.**

Temperature affects the working product. UNITED 584 may be used up to 110° F. (43°C.) with 60° F. (12° C.) optimum and no activity below 40° F. (5° C.)

DOSE RATE FOR ACTIVATED SLUDGE:

Day 1: 50 gal./1,000,000 gal. activated sludge
 Day 2: 50 gal./1,000,000 gal. activated sludge
 Days 3-7: 10 gal./1,000,000 gal. activated sludge
 UNITED 584 should be introduced directly into the aeration tank.

DOSE RATE FOR TRICKLING FILTERS, ISOLATED CLARIFIERS AND LAGOONS:

Day 1: 55 gal./1,000,000 gal. flow through filter
 Day 2: 55 gal./1,000,000 gal. flow through filter
 Days 3-7: 11 gal./1,000,000 gal. flow through filter
 UNITED 584 should be introduced to the trickling filter, isolated clarifier or lagoon through an equalized flow situation. This may be accomplished using an A105 drum faucet. Set the faucet drip rate such that the nitrifying bacteria will be introduced in the above mentioned proportions over the full 24 hour period. If you can recirculate the trickling filter, isolated clarifier or lagoon, base the flow rate on only ONE pass through on the filter, isolated clarifier or lagoon. If the filter is "shocked" with excess ammonia, return to Days 3-7 application of 11 gal./1,000,000 gal. flow through the filter. A daily maintenance of 2-3 gal./1,000,000 is occasionally needed - use a metering pump such as UNITED A855 Peristaltic Pump - set to allow the product to be metered equally over a 24 hour period.

EMERGENCY AND FIRST AID PROCEDURES:

SKIN: Remove contaminated clothing and footwear. Wash material off the skin with plenty of soap and water. Wash clothing and footwear before reuse.

EYES: Immediately flush with plenty of water for at least 15 minutes and call a physician or poison center.

IF SWALLOWED: Drink water or milk to dilute. Induce vomiting only if advised by physician or poison center.

CAUTION:

Store in a cool, dry place. Avoid excessive inhalation. Wash hands thoroughly with warm, soapy water after handling.

An MSDS for this product has been provided. Please read it carefully and follow all instructions when using or handling this product. Never reuse empty containers. Incompatible materials may adversely react.

PRECAUCION AL USARIO: Si usted no puede leer Ingles, pregunte a alguien que le traduzca esta etiqueta para usted entes de uso.

Call Toll Free: 1-800-323-2594

Sold By:

UNITED LABORATORIES, INC.

Main Plant: St. Charles, IL 60174

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