

# PMI® Micro-Stabilized Alcohol Rabbit Liquid Diet LD 304A\* Technical Data

## DESCRIPTION

This Rabbit Liquid Diet is nutritionally balanced with excellent palatability. Its purpose is to provide the daily dietary nutrients for animals and can be used to provide dietary test substances where solid diets are not appropriate. Stabilized against microbial growth for 10 days.

### Features and Benefits

- Nutritionally-balanced
- Volatile ingredients can be included
- Easily prepared
- Provides stable nutrients
- Shipped in dry form to simplify storage, shipping and stability
- Minimal foaming
- Fully suspended
- Stabilized against microbial growth

### Product Forms Available

- Dry Powder

**Catalog #**  
58876 (530L)

## GUARANTEED ANALYSIS

Crude protein not less than	27.0%
Crude fat not less than	8.0%
Crude fiber not more than	12.0%
Ash not more than	5.0%

\*Composition of diet after it has been prepared according to diet preparation instructions.

**\* Diet Preparation Instructions:** To the appropriate grams of water indicated in the chart, add 208 gms. Micro-Stabilized Rabbit Liquid Diet mix (LD 304A). Blend vigorously for 15-30 seconds with a mechanical blender until completely suspended. For best results add water to blender before dry mix. See information provided to prepare isocaloric diet with alcohol or other test substances.

### Additional Considerations:

- For best results a mechanical blender should be used for diet preparation; hand blending does not suspend the diet adequately to avoid some settling out of undissolved ingredients.
- Do not over-blend; excessive mechanical blending creates foaming.

## INGREDIENTS

Isolated soy protein, maltodextrin, dried corn syrup, alfalfa meal, lactose, olive oil, soy fiber, sucrose, corn oil, suspension colloid, safflower oil, L-cystine, DL-methionine, natural flavors, vitamin A acetate, cholecalciferol, dl-alpha tocopheryl acetate, menadione sodium bisulfite (source of vitamin K), ascorbic acid, cyanocobalamin, citric acid, thiamin mononitrate, riboflavin, calcium pantothenate, nicotinic acid, choline bitartrate, pyridoxine hydrochloride, folic acid, inositol, p-aminobenzoic acid, propionic acid, biotin, calcium acetate, fumaric acid, potassium phosphate, potassium sorbate, magnesium sulfate, sodium chloride, manganese sulfate, ferrous fumarate, zinc chloride, cupric sulfate, chromium chloride, sodium fluoride, ammonium molybdate, calcium iodate, sodium selenite.

## FEEDING DIRECTIONS

About 350-360 gms of the diet (varies with animal size) needs to be consumed per animal per day to sustain a normal daily weight gain. The growth rate needs to be similar to that attained by young rabbits when maintained on good quality, non-purified rabbit diets. Prepare as needed (daily if necessary) and always refrigerate to minimize any loss of nutrients after preparation. We advise preparation of fresh diet (if not daily) every 4 days even though bacterial growth is not occurring. Always make certain that good suspension is maintained in the prepared diet. Additional water may be provided from separate drinking tubes, but may not be consumed. Animals need to adjust to their surroundings and conditions. After this period, provide some of this liquid diet to the animal while its regular feed is present. Over a 5-10 day period gradually reduce the regular feed until it is no longer needed. This adjustment period is critical to allow the intestinal/cecal microflora to adjust and thus avoid potential imbalances to develop where unhealthy animals could result. An animal that does not seem to adjust properly should be removed from the treatment.

## CHEMICAL COMPOSITION<sup>1</sup>

Nutrients <sup>2</sup>	Reconstituted <sup>2</sup>	Dry Powder		
<b>Protein, %</b>	<b>6.16</b>	<b>29.6</b>	Pantothenic Acid, ppm	.44 21
Arginine, %	.042	2.03	Choline Chloride, ppm	387 1860
Cystine, %	.010	0.50	Folic Acid, ppm	.065 3.1
Glycine, %	.026	1.25	Pyridoxine, ppm	1.6 7.4
Histidine, %	.016	0.75	Biotin, ppm	.007 0.32
Isoleucine, %	.031	1.49	Inositol, ppm	.25 109
Leucine, %	.048	2.33	p-aminobenzoic acid, ppm	12.5 54
Lysine, %	.036	1.71	B <sub>12</sub> , mcg/kg	.25 120
Methionine, %	.012	0.57	Vitamin A, IU/gm	3.0 14
Phenylalanine, %	.031	1.49	Vitamin D <sub>3</sub> (added), IU/gm	.040 1.9
Tyrosine, %	.021	1.01	Vitamin E, IU/kg	.33 160
Threonine, %	.023	1.10	Ascorbic Acid, mg/gm	.10 49
Tryptophan, %	.007	0.34	<b>Energy*</b>	
Valine, %	.030	1.44	Protein, kcal/kg	.262
<b>Fat (ether extract), %</b>	<b>2.03</b>	<b>9.8</b>	Fat, Kcal/kg	.183
<b>Fiber (Crude), %</b>	<b>2.1</b>	<b>10.1</b>	Carbohydrates, kcal/kg	.255
<b>Minerals</b>			*Energy Levels used (kcal/gm)	
Calcium, %	.020	0.98	Protein = 4.25; Fat = 9.00;	
Phosphorus, %	.013	0.62	Maltodextrin = 4.00; Ethanol =	
Potassium, %	.021	1.02	7.07. The protein value is different	
Magnesium, %	.004	0.21	than the 4 kcal/gm for protein, as	
Sulfur, %	.010	0.47	generally used.	
Sodium, %	.009	0.45	* 1 kilogram of diet in liquid form,	
Chlorine, %	.008	0.37	when prepared according to direc-	
Fluorine, ppm	.035	1.70	tions, provides 1000 kilocalories (1	
Iron, ppm	.46	220	kcal per gram).	
Zinc, ppm	.11	52	* Lieber, CS & LM DeCarli (1982)	
Manganese, ppm	.16	78	Alcoholism: Clinical and	
Copper, ppm	.37	18	Experimental Research 6: 523-531.	
Chromium, ppm	.067	3.2	Miller, SS, ME Goldman, CK	
Iodine, ppm	.006	0.31	Erickson & RL Shorey (1980)	
Molybdenum, ppm	.0104	0.50	Psychopharmacology 68: 55-59.	
Selenium, ppm	.003	0.14		
<b>Vitamins</b>			*Product Code	
Vitamin K			1. Based on the latest ingredient	
(as menadione), ppm	.073	3.5	analysis information.	
Thiamin, ppm	1.7	8.2	2. Values are based upon the liquid	
Riboflavin, ppm	2.0	9.7	form of the diet when prepared	
Niacin, ppm	9.4	45	according to directions.	

### PMI® Micro-Stabilized Rabbit Liquid Diet (LD 304A) Diet Preparation Chart

Diet composition varies according to the amount of alcohol added to maintain an isocaloric diet. The following chart indicates the amount of water, PMI® Micro-Stabilized Rabbit Liquid Diet LD 304A mix (Dry Mix), PMI® Maltodextrin LD 104, and ethanol to be used to make one kilogram of liquid diet.

% Calories from	Ethanol gms.	Water gms.	dry mix gms.	Maltodextrin gms.	Ethanol
30		748.5	208	0	43.5
20		738.0	208	25.0	29.0
10		727.5	208	50.0	14.5
0		792	208	75.0	0

### For Calculation purposes:

- 208 gms. dry Alcohol Rodent Liquid Diet mix=700 kcal.
- Ethanol=7.07 kcal/gm
- PMI® Maltodextrin LD 104=4.0 kcal/gm