



**Technical Data Sheet**

**Palmitoylethanolamid (PEA) P.  
Palmitoylethanolamide (PEA) P.**

**PRODUCT INFORMATION**

CAS No	544-31-0	Sourced /Raw Material	Palm Oil
China	China		
Carrier	None		

ITEM	SPECIFICATION	METHOD
Assay	98.0%-100.0%	HPLC
Appearance	White to Off-white Powder	Visual
Identification	Positive	IR&1H NMR
Loss on Drying	≤1.0 %	ChP
Residue on Ignition	≤1.0 %	ChP
Bulk Density	≥0.3 g/ml	ChP
Residue Solvents	≤5000 ppm	GC
Sulfate	≤0.04%	ICP-MS
Iron	≤10ppm	ICP-MS
Chloride	≤0.02%	ICP-MS

**STATEMENTS**

Contaminants	According to Reg. (EC) 1881/2006 and amendments
Preservative	Preservative Free
Residual Solvents	According to Dir. (EC) 2009/32 and amendments
Pesticides	According to Reg. (EC) 396/2005 and amendments
Microbiology	Bacterial Count: TAMC-Bacteria <1,000 cfu/g, TYMC <200 cfu/g, Coliforms ≤10 cfu/g, Salmonella negative/25g, E. Coli negative/10g, S. Aureus negative/10g, Pseudimonas aeruginosa negative/25g
GMO	GMO Free According to Reg. (EC) 1829/2003 and 1830/2003 and amendments
ETO	ETO free
Vegan	Vegan
Sterilization Method	High Temperature and Pressure
Irradiation	No ionization or other radiation is permitted According to Dir. (EC) 1999/2 and 1999/3 and amendments
BSE/TSE	Risk Free BSE/TSE
Allergen free	according to Reg. (EC) 1169/2011
Nanomaterials	Absent According to Reg. (EC) 1169/2011
Titanium dioxide	Absent According to Reg. (EC) 2022/63
Packaging	According to Reg. (EC) Nr. 10/2011 and 1935/2004

**STORAGE AND HANDLING**

Storage	Store in a well-closed container away from moisture and direct sunlight
Shelf Life	2 years if sealed and properly stored



Nutritional Values

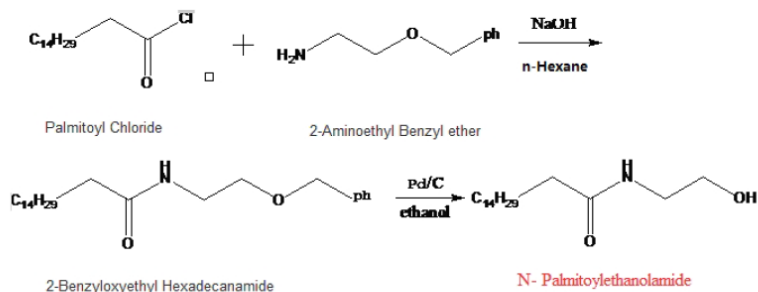
<b>Nutrition Values of Palmitoylethanolamide (PEA)</b>					
Per 100 g					
Nutrient	Amount	Source (A or C)	Nutrient	Amount	Source (A or C)
<b>*Calories</b>	0		Niacin (mg NE)	0	
<b>Total Fat (g)</b>	0		Vitamin B 6 (mg)	0	
<b>Saturated Fat (g)</b>	0		Folic Acid (mcg DFE)	0	
Polyunsaturated Fat (g)	0		Vitamin B 12 (mcg)	0	
Monounsaturated Fat (g)	0		Biotin (mcg)	0	
<b>Trans-fat (g)</b>	0		Pantothenic Acid(mg)	0	
<b>Cholesterol (mg)</b>	0		Phosphorus (g)	0	C
<b>Sodium (mg)</b>	≤10		Iodine (mcg)	0	
Potassium (mg)	0		Magnesium (mg)	11	
<b>Total Carbohydrate(g)<sup>3</sup></b>	0		Zinc (mg)	0	
<b>*Dietary Fiber (g)</b>	0		Selenium (mcg)	0	
Soluble Fiber (g)	0		Copper (mg)	0	
Insoluble Fiber (g)	0		Manganese (mg)	0	
<b>Sugar (g)</b>	0		Chromium (mcg)	0	
<b>Added Sugar(g)</b>	0		Molybdenum (mcg)	0	
Moisture(g)	≤0.24		Chloride (mg)	≤20	
Ash(g)	≤1.0		All other nutrients or Dietary Ingredients:	0	
<b>Protein (g)</b>	0		Caffeine	0	
<b>Vitamin A (mcg RAE)</b>	0		Lactose	0	
<b>Vitamin C</b>	0				
<b>Calcium (g)</b>	0				
<b>Iron (mg)</b>	0				
Vitamin D (mcg)	0				
Vitamin E (mg)	0				
Vitamin K (mcg)	0				
Thiamin (mg)	0				
Riboflavin (mg)	0				



### Flow Chart of Palmitoylethanolamide (PEA)

1. Palm Oil  $\xrightarrow{\text{NaOH}}$  Mixed Unsaturated Fatty Acid  $\rightarrow$  Crude Palmitic Acid (Vacuum Distillation)  $\rightarrow$  Pure Palmitic Acid (Crystallization)  $\rightarrow$  Palmitoyl Chloride (by Phosgenation reaction)

2.



3. Crude Palmitoylethanolamide  $\rightarrow$  Purification  $\rightarrow$  Filtration  $\rightarrow$  Re-dissolve in ethanol  $\rightarrow$  Crystallization

$\rightarrow$  Filtrate Clear liquid  $\rightarrow$  Crystallization  $\rightarrow$  Filtration  $\rightarrow$  Solid Vacuum Drying  $\rightarrow$  Testing  $\rightarrow$

Packing  $\rightarrow$  Final Product (N-Palmitoylethanolamide)

the starting Raw material is : Palm Oil

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