



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

## SAFETY DATA SHEET

Revision Date: 11/01/2020

Print Date: 2/03/2023

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	VANILLIN ACETATE
Product Number	22-31000
Brand	Penta
Identified Uses	Manufacture of substances
Company	Penta International Corporation 50 Okner Parkway Livingston NJ 07039-1604 U.S.A.
Telephone	(973)740-2300
Fax	(973)740-1839
Emergency Phone	(800)424-9300 24-Hrs

### 2. HAZARD(S) IDENTIFICATION

#### Emergency Overview

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Acute toxicity, Oral (Category 4)

GHS Label elements, including precautionary statements

Pictogram: 

Signal word                      Warning

Hazard statement(s)

H302                              Harmful if swallowed.

Precautionary  
statement(s)

P264                              Wash skin thoroughly after handling.

P270                              Do not eat, drink or smoke when using this product.

P301, P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
P330 Rinse mouth.  
P501 Dispose of contents/ container to an approved waste disposal plant.

#### **HMIS Classification**

**Health hazard** 1  
**Flammability** 1  
**Physical hazards** 1

#### **NFPA Rating**

**Health hazard** 1  
**Fire** 1  
**Reactivity Hazard** 0

#### **Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation  
**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

SYNONYM	4-Formyl-2-methoxyphenyl acetate		
Formula	C10H10O4		
Molecular Weight	194.19		
CAS-No	EC-No	Index-No.	Concentration
881-68-5	212-920-1		

No ingredients are hazardous according to OSHA criteria.

### **4. FIRST-AID MEASURES**

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

## **5. FIRE-FIGHTING MEASURES**

### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

Avoid dust formation. Avoid breathing vapors, mist or gas.

### **Environmental precautions**

Do not let product enter drains.

### **Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

### **Personal protective equipment**

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Eye protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin and body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Hygiene measures**

General industrial hygiene practice.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Appearance**

Form	solid
Colour	white

### **Safety data**

pH	no data available
Melting point (°C)	77
Boiling point (°C)	no data available
Flash point (°F) Closed cup	>200
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure (mm Hg @20 °C)	no data available
Density @25 °C	no data available
Water solubility	insoluble
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odor	white
Odour Threshold	no data available
Evaporation rate	no data available

## **10. STABILITY AND REACTIVITY**

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of hazardous reactions**

no data available

### **Conditions to avoid**

no data available

### **Materials to avoid**

Strong oxidizing agents, Strong bases

### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides  
Other decomposition products - no data available

## **11. TOXICOLOGICAL INFORMATION**

## **Acute toxicity**

**Oral LD50** - no data available

**Inhalation LC50** - no data available

**Dermal LD50** - no data available

## **Other information on acute toxicity**

no data available

## **Skin corrosion/irritation**

no data available

## **Serious eye damage/eye irritation**

no data available

## **Respiratory or skin sensitization**

no data available

## **Germ cell mutagenicity**

no data available

## **Carcinogenicity**

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## **Reproductive toxicity**

no data available

## **Teratogenicity**

no data available

## **Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

## **Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

## **Aspiration hazard**

no data available

## **Potential health effects**

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin May cause skin irritation.

Eyes

May cause eye irritation.

### **Signs and Symptoms of Exposure**

no data available

### **Additional Information**

RTECS: Not available

## **12. ECOLOGICAL INFORMATION**

### **Toxicity**

no data available

### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **PBT and vPvB assessment**

no data available

### **Other adverse effects**

no data available

## **13. DISPOSAL CONSIDERATIONS**

### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company

### **Contaminated packaging**

Dispose of as unused product

## **14. TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous goods.

### **IMDG**

Not dangerous goods.

### **IATA**

Not dangerous goods.

## 15. REGULATORY INFORMATION

### OSHA Hazards

No known OSHA hazards.

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

No SARA hazards

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

4-Formyl-2-methoxyphenyl acetate	CAS-No.	Revision Date
	881-68-5	

### New Jersey Right To Know Components

4-Formyl-2-methoxyphenyl acetate	CAS-No.	Revision Date
	881-68-5	

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER CATEGORIES

### Safety Data Sheet prepared by: Penta

The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Penta's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the SDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the SDS. The user should review these regulations to ensure full compliance.



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

## TECHNICAL DATA SHEET

<b>PRODUCT NAME:</b> VANILLIN ACETATE		
<b>PRODUCT CODE:</b> 22-31000		
<b>SHELF LIFE:</b> 24 Months	<b>CAS #:</b> 881-68-5	<b>FEMA #:</b> 3108
<b>COE #:</b> 225	<b>Flavis #:</b> 09.035	<b>JECFA #:</b> 890.0
<b>ECHA #:</b> 212-920-1	<b>Food Grade, Kosher, Halal</b>	

TEST	SPECIFICATIONS
MOLECULAR FORMULA	C <sub>10</sub> H <sub>10</sub> O <sub>4</sub>
MOLECULAR WEIGHT	194.19
APPEARANCE	WHITE POWDER
ASSAY (G.C.)	98.0% MINIMUM
ODOR	FLORAL, BALSAMIC
FLASH POINT	200+° F
MELTING POINT	77° - 79° C
SOLUBILITY	INSOLUBLE IN WATER SOLUBLE IN ETHANOL





# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## ALLERGEN CHECKLIST FOR FOOD SUPPLIERS/MANUFACTURERS

<b>Date:</b> Feb 03, 2023	<b>Product Code:</b> 22-31000	<b>Manufacturer Location:</b> Livingston, NJ
<b>Country:</b> U.S.A	<b>Product Name:</b> VANILLIN ACETATE	<b>Supplier:</b> Penta International Corporation

The first column indicates the allergens that may be found in the product, either by addition or by cross contamination, The second column indicates the allergens that are present in other products, that are run on the same equipment but at a different time, in our plant. The third column indicates whether any of those ingredients are present in our plant.

1. Please fill in each of square with a Yes or No and applicable the name of an ingredient.

<u>COMPONENT</u>	<u>PRESENT IN THE PRODUCT</u>	<u>SOURCE</u>	<u>PRESENT IN OTHER PRODUCTS MANUFACTURED ON THE SAME LINE</u>	<u>PRESENT IN THE SAME MANUFACTURING PLANT</u>
PEANUTS and peanut products	NO		NO	NO
TREE NUTS	NO		NO	NO
SESAME, SUNFLOWER, POPPY, COTTONSEEDS (except refined oils)	NO		NO	NO
MILK AND DERIVATIVES eg whey, milk, caseninate, etc.	NO		NO	NO
EGGS	NO		NO	NO
Fish and fish products	NO		NO	NO
SHELLFISH	NO		NO	NO
SOY (except refined soy oil)	NO		NO	NO
AUTOLYZED YEAST	NO		NO	NO
CEREAL PROTEINS (include HVP)	NO		NO	NO
FD&C YELLOW 5	NO		NO	NO
SULFITES	NO		NO	NO
CELERY	NO		NO	NO
SEEDS	NO		NO	NO

\*\*\*\* Items are also free from Lupin, Molluscs and products there of, as well as Gluten, Mustard, Wheat or Carmine.

2. Do you have effective procedures to avoid cross-contamination of the product with the allergens not present in the product but noted in columns II and III? **YES**

Lisa A. Amato  
Technical Services Manager



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## ANIMAL TESTING CERTIFICATION

No animal testing was performed prior to or after June 20th 2002 and all chemicals and their raw materials comply with Cosmetics Directive 76/768/EC (Directive 2003/15/EC effective from 11 September 2004) and all of its amendments. All products are manufactured in accordance with Good Manufacturing Practices (GMPs) and are F.D.A approved for use in food and/or cosmetic and/or pharmaceutical products.

**Faitma Jasmins**  
Senior Technical Coordinator

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## CONTINUING FOOD & DRUG GUARANTY

Penta Manufacturing Company hereby guarantees that each and every article contained in each shipment or other delivery hereafter made by or through us to or on the order of; Penta Manufacturing Company, as of the date of such shipment or delivery to be:

1. Not adulterated or mis-branded within the meaning of the Federal Food, Drug and Cosmetic Act, and not an article which may not, under the provisions of Section 404, 505, or 512 of the Act, be introduced into interstate commerce;
2. Free from any artificial color required to be certified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act unless the artificial color is from a batch that has been certified by the Federal Food and Drug Administration and complies with the provisions of 21 Code of Federal Regulations Parts 70 through 82; and
3. With respect to any flavor supplied by Penta Manufacturing Company which is designated as containing no artificial flavor, said flavor does not, to the best of its knowledge and belief, contain any artificial flavor and Penta Manufacturing Company has added no artificial flavor to it.

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## DIETARY PREFERENCES & RESTRICTIONS

We hereby declare that the following product:

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000

Is suitable for consumption by:

**LACTO-OVO-VEGETARIANS** (Do not eat meat, poultry, fish-seafood, but do eat eggs and dairy products)

**LACTO-VEGETARIANS** (Do not eat meat, poultry, fish/seafood, eggs, but do eat dairy products)

**OVO-VEGETARIANS** (Do not eat meat, poultry, fish/seafood, dairy products, but do eat eggs)

**VEGANS** (Do not eat meat, poultry, fish/seafood, eggs, dairy products or honey)

**Faitma Jasmins**  
Senior Technical Coordinator



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## FOOD GRADE CERTIFICATE

This is to verify that the following listed product purchased from Penta Manufacturing Corporation is food grade quality. This material is allowed for use as a flavor ingredient intended for human consumption, or as an indirect additive according to the United States Food and Drug Administration 21 CFR and / or also complies with European 88/388/EEC and 1334/2008/CE Flavorings directive. This material is manufactured in accordance with Good Manufacturing Practices (GMPs).

A handwritten signature in black ink, appearing to read "Lisa A. Amato".

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## GMO QUESTIONNAIRE (GENETICALLY MODIFIED ORGANISMS)

**Supplier:** PENTA INTERNATIONAL CORPORATION

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000

1. Is this product, or any of its ingredients that are used in the manufacturing process, derived from any genetically modified material? NO
2. Does the final product, or any of its ingredients, contain any genetically modified material? NO
3. Was this product irradiated or contain any irradiated ingredients? NO
4. Does the product require labeling under EU Regulations 1829/2003, 1830/2003 and 1820/2003? NO
5. Does the product consist of GMOs, Contains GMOs, or is it produced from GMOs as defined in EU 1829/2000 and 1830/2003? NO

Justification certification: Supplier questionnaire and written certification.

Faitma Jasmins  
Senior Technical Coordinator



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## GRAS CERTIFICATE

This is to certify that the below reference item, purchased from Penta Manufacturing Corporation is GRAS and is approved by the FDA for use in flavors under 21 CFR. This product is manufactured in accordance with Good Manufacturing Practices (GMPs).

**Faitma Jasmins**  
Senior Technical Coordinator

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## HEAVY METALS STATEMENT

We confirm that the following material(s) supplied to you by Penta International Corporation, Conforms to Article 4 of the EEC Flavoring Directive 88/388/EEC and 1334/2008 EC, with regard to heavy metals, namely:

CADMIUM: MAX 1mg/kg

MERCURY: MAX 1mg/kg

ARSENIC: MAX 3mg/kg

LEAD: MAX 10mg/kg

A handwritten signature in black ink, appearing to read "Lisa A. Amato".

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000





# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## MELAMINE FREE CERTIFICATION

This is to certify the below referenced item purchased from Penta Manufacturing Corporation does not contain nor is it derived from any raw materials that contain Melamine. Also, Melamine is not produced from any manufacturing processes incorporated by Penta Manufacturing Corporation.

All products are manufactured in accordance with Good Manufacturing Practices (GMPs) and are F.D.A. approved for use in food and/or cosmetic and/or pharmaceutical products.

**Faitma Jasmins**  
Senior Technical Coordinator

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## **PROPOSITION 65 EXEMPT**

To the best of our knowledge, the below referenced item does not contain any ingredients listed under the State of California, Proposition 65 Environmental Protection Agency Office of Environmental Health Hazard Assessment Safe Drinking Water and Toxic Enforcement Act Of 1986.

A handwritten signature in black ink, appearing to read "Lisa A. Amato".

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE  
**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## CERTIFICATE OF ORIGIN

We hereby declare that the country of origin for the below listed product supplied by Penta International Corporation is the U.S.A.

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## PESTICIDE AND HEAVY METAL DECLARATION

We hereby confirm that the ingredients listed below meet the E.U. regulations as outlined in 1881/2006/EC in regards to contaminants prohibited in food grade raw material ingredients. The below listed ingredients also comply with the E.U. regulation 396/2005/EC, regarding the maximum residue levels of pesticides in food grade raw material ingredients of plant and animal origin.

**Faitma Jasmins**  
Senior Technical Coordinator

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## IRRADIATION & SEWAGE SLUDGE

We hereby confirm that the ingredient listed below, has not been:

- Exposed to Ionizing Radiation
- Derived from Sewage Sludge
- Treated with Ethylene Oxide

A handwritten signature in black ink, appearing to read "Lisa A. Amato".

**Lisa A. Amato**  
Technical Services Manager

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## LATEX FREE CERTIFICATION

This is to certify the below referenced material purchased from Penta Manufacturing Corporation does not contain nor is it derived from any raw materials that contain Latex.

Also, Latex is not produced from any manufacturing processes incorporated by Penta Manufacturing Corporation.

All products are manufactured in accordance with Good Manufacturing Practices (GMPs) and are F.D.A. approved for use in food and/or cosmetic and/or pharmaceutical products.

**Faitma Jasmins**  
Senior Technical Coordinator

**Product Name:** VANILLIN ACETATE  
**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

February 3, 2023

## PALM OIL FREE CERTIFICATION

This is to verify the below listed product, purchased from Penta Manufacturing Corporation is Palm Oil Free and manufactured in accordance with Good Manufacturing Practices (GMPs). No Palm Oil or Palm Oil Derivatives are used in the manufacturing process.

**Alisa Commerato**  
Technical Coordinator

**Product Name:** VANILLIN ACETATE

**Product Code:** 22-31000



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

## SHELF LIFE

<b>PRODUCT NAME:</b> VANILLIN ACETATE		
<b>PRODUCT CODE:</b> 22-31000		
<b>CAS #:</b> 881-68-5	<b>FEMA #:</b> 3108	<b>COE #:</b> 225
<b>Flavis #:</b> 09.035	<b>JECFA #:</b> 890.0	<b>ECHA #:</b> 212-920-1
<b>Food Grade, Kosher, Halal</b>		

Minimum Shelf Life of the above referenced product will vary depending on Storage Conditions, temperature of storage area, and the type of chemicals the raw material is stored near. We recommend the re-testing of raw material ingredients kept in stock at intervals of 9 to 12 months.

This material has a maximum Shelf Life of 24 Months from the Date of Manufacture when stored under proper storage conditions.

\*The maximum shelf life given reflects the time line for studies performed by Penta. It is meant to indicate that after that period of time has elapsed, the customer should re-check the material to validate the quality of the product.

Faitma Jasmins  
Senior Technical Coordinator