

Regulatory Compliance Guide

Food & Pharmaceutical Ingredients

EU & USA Markets | Updated January 2024

This guide provides an overview of key regulatory requirements for food additives and pharmaceutical ingredients in the European Union and United States markets. PharmaCo ensures all products meet or exceed applicable regulatory standards.

1. European Union (EU) Regulations

1.1 Food Additives (*Regulation EC 1333/2008*)

All food additives must be authorized and listed in Annex II of EC 1333/2008. Each approved additive receives an E-number. Common requirements include:

| E-Number | Substance | Max Level (Example) | Applications |
|----------|-------------------|---------------------|------------------------|
| E330 | Citric Acid | Quantum satis | Food, beverages |
| E270 | Lactic Acid | Quantum satis | Food, dairy |
| E300 | Ascorbic Acid | Quantum satis | Antioxidant, all foods |
| E415 | Xanthan Gum | Quantum satis | Thickener, stabilizer |
| E211 | Sodium Benzoate | 150 mg/kg | Preservative |
| E202 | Potassium Sorbate | 200 mg/kg (general) | Preservative |
| E334 | Tartaric Acid | Quantum satis | Acidulant, bakery |

1.2 Pharmaceutical Products (*Directive 2001/83/EC*)

Pharmaceutical ingredients must comply with European Pharmacopoeia (Ph.Eur.) monographs. Key requirements:

- Certificate of Suitability (CEP) or Drug Master File (DMF)
- GMP certification (Good Manufacturing Practice)
- Batch-specific Certificate of Analysis (CoA)
- Compliance with Ph.Eur. testing methods

1.3 REACH Regulation (*EC 1907/2006*)

All chemical substances manufactured or imported >1 tonne/year must be registered.

- Registration dossier with ECHA (European Chemicals Agency)
- Safety Data Sheet (SDS) in local language
- Exposure scenarios for identified uses
- Downstream user obligations

2. United States (USA) Regulations

2.1 Food Additives (FDA 21 CFR)

Food additives must be either Generally Recognized as Safe (GRAS) or have FDA approval under 21 Code of Federal Regulations (CFR). Common categories:

| CFR Citation | Substance | Status | Restrictions |
|-----------------|-------------------|----------|----------------|
| 21 CFR 184.1033 | Citric Acid | GRAS | GMP conditions |
| 21 CFR 184.1061 | Lactic Acid | GRAS | GMP conditions |
| 21 CFR 182.3013 | Ascorbic Acid | GRAS | GMP conditions |
| 21 CFR 172.695 | Xanthan Gum | Approved | Max use levels |
| 21 CFR 184.1733 | Sodium Benzoate | GRAS | 0.1% maximum |
| 21 CFR 182.3640 | Potassium Sorbate | GRAS | GMP conditions |
| 21 CFR 184.1099 | Tartaric Acid | GRAS | GMP conditions |

2.2 Pharmaceutical Ingredients (FDA Drug Regulations)

Pharmaceutical excipients and active ingredients require compliance with USP-NF monographs:

- Drug Master File (DMF) Type II submission to FDA
- Current Good Manufacturing Practice (cGMP) certification
- United States Pharmacopeia (USP) or National Formulary (NF) compliance
- Inactive Ingredient Database (IID) listing for excipients
- Annual FDA establishment registration

2.3 FDA Prior Notice (Bioterrorism Act)

All food shipments to USA require electronic Prior Notice to FDA:

- Submit via FDA Prior Notice System Interface (PNSI)
- Required information: product details, manufacturer, shipper, receiver
- Submission timing: 2 hours (road), 4 hours (air/rail), 8 hours (sea)
- Confirmation Number (CN) required for customs clearance

3. EU vs USA: Quick Comparison

| Aspect | European Union | United States |
|---------------------|----------------------------------|---------------------------------|
| Food Additives | E-number system (EC 1333/2008) | CFR listing or GRAS status |
| Pharma Standards | Ph.Eur. (European Pharmacopoeia) | USP-NF (US Pharmacopeia) |
| Documentation | CEP or DMF (EU) | DMF Type II (FDA) |
| Import Requirements | Health certificate, EUR1 | FDA Prior Notice, customs entry |
| Labeling | E-numbers mandatory on labels | Common names or CFR numbers |
| Maximum Levels | Specified per food category | GMP or specific limits |
| Testing | Ph.Eur. methods | USP methods |
| Registration | REACH (chemicals >1t/year) | FDA establishment registration |

Disclaimer: This guide provides general information only and should not be considered legal or regulatory advice. Regulations are subject to change. For specific product compliance questions, please consult with PharmaCo regulatory affairs team at regulatory@pharmaco.com or consult with your legal counsel.

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