

# IntegriLIPID

## French Plum Oil



VIRGIN PLUM OIL

# Integrity Ingredients Corporation

“Where **Quality** and **Service** Meet”

IntegriLIPID French Plum Oil



## *About Us...*

Integrity Ingredients Corporation was founded on the belief that our customers deserve two things - high quality raw materials and true customer service.

### **We offer an extensive line of polymers...**

- Highly efficient thickeners/emulsifiers (IntegriGELS), which are available in a variety of formulating options, from broad pH to cationic and anionic.
- Gelling, thickening polymers (Integrity C900 Series and our new easy-to-disperse and electrolyte-resistant C800 Series.
- Conditioning polymers (IntegriQUATS)
- Exfoliating polymers (IntegriEXFOLIANTS)
- Natural and exotic oils (IntegriLIPIDS)
- Vitamins and vitamin complexes (IntegriVITAMINS)

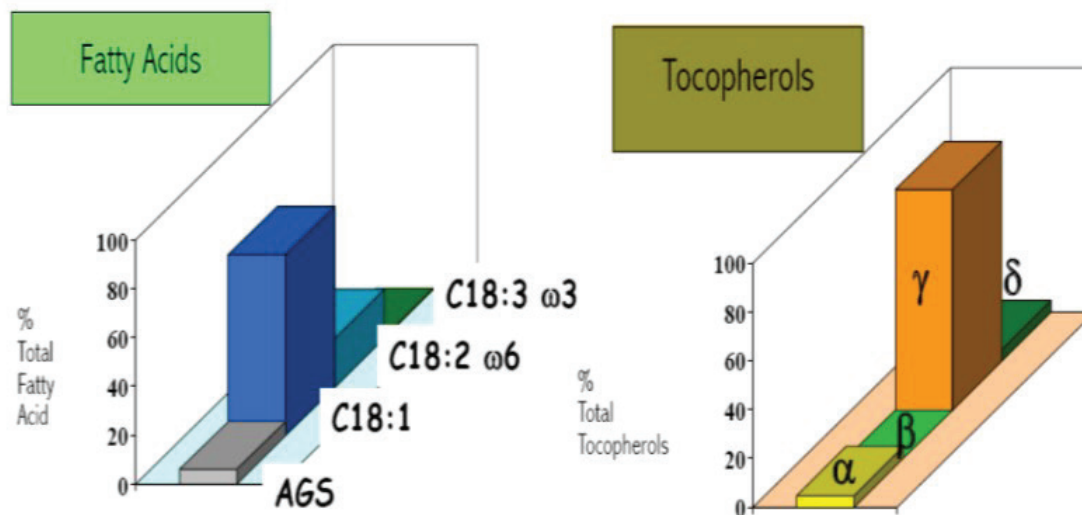
# Integrity Ingredients Corporation

“Where Quality and Service Meet”

IntegriLIPID French Plum Oil

**INCI Name: Prunus Domestica Seed Oil**

An oleic oil with high linoleic acid content - rich in anti-oxidant tocopherols.



## Properties:

- Non-greasy feel on skin.
- Emollient Oil
- Anti-radical properties (tocopherols).
- Proven innocuity by in-vivo and intro tolerance tests.
- Natural bitter almond-like fragrance (interesting when formulating hypoallergenic products without synthetic fragrances).

## Properties:

- General Skin Care
- Hair Care

## IntegriLIPID French Plum Oil

### Technical Profile Summary

IntegriLIPID French Plum Oil displays the following characteristics:

#### 1.1 General Characteristics of IntegriLIPID French Plum Oil

Criteria	Specification	Analytical Method
Aspect	Fluid at ambient temperature	Visual observation
Flavor	Flavor and aroma more or less intense, characteristic of bitter almond	Tasting
Color	Golden yellow	Visual observation

#### 1.2 Physical Characteristics of IntegriLIPID French Plum Oil

Criteria	Result	Analytical Method
Density at 20°C	0.910 - 0.920	NF ISO 6883
Refractive Value at 20°C	1.4640 - 1.4730	NF ISO 6320
Cold Test	Absence of trouble after 5H30 at 0°C (filtered oil)	AOCS 11-53

#### 2.1 Chemical Characteristics and Fatty Acid Profile

◦ IntegriLIPID French Plum Oil is rich in unsaturated fatty acids. It contains from 60 to 80% of Oleic Acid C18:1. The most prevalent triglycerides are trioleine (40 to 50% of total) and di-oleolinoleine (20 to 40% of total triglycerides).

## IntegriLIPID French Plum Oil

### Technical Profile Summary

#### 2.2 General Chemical Characteristics of IntegriLIPID French Plum Oil

Criteria	Value	Analytical Method
Iodine Value	90 - 120	NF ISO 3961
Saponification Value	170 - 210	NF ISO 3657

#### 2.3 Fatty Acid Composition

Fatty Acid	Chemical Symbol	Average Value	Value Range
Myristic Acid	C14	< 0.1	< 0.1
Palmitic Acid	C16	< 5.0	4.0 - 9.0
Palmitoleic Acid	C16:1	< 1.0	< 1.0
Margeric Acid	C17	0.1	0.1
Heptadecenoic Acid	C17:1	< 0.1	< 0.1
Stearic Acid	C18	1.5	0.5 - 3.0
Oleic Acid	C18:1 (Omega 9)	68.0	60.0 - 80.0
Linoleic Acid	C18:2 (Omega 6)	23.0	15.0 - 25.0
Linolenic Acid	C18:3 (Omega 3)	0.1	< 1.0
Arachidic Acid	C20	0.2	< 0.3
Gondoic Acid	C20:1	0.1	0.2
Behenic Acid	C22	< 0.1	< 0.1
Lignoceric Acid	C24	< 0.1	< 0.1

#### 2.4 Fatty Acid Group Composition

Fatty Acid Composition %	Average Value	Value Range
Total Saturated	7.0	5.0 - 10.0
Total Mono-Unsaturated	70.0	65.0 - 80.0
Totally Poly-Unsaturated	23.0	15.0 - 25.0
Total Isomer Trans-Fat	< 0.1	< 0.1

Analytical Method NF ISO 5508 and ISO 5509

## IntegriLIPID French Plum Oil

### Technical Profile Summary

Criteria	Value	Average Value
Non-Saponifiable Matters	0.5 - 1.0%	< 0.1
Palmitic Acid	C16	< 5.0
Palmitoleic Acid	C16:1	< 1.0
Margeric Acid	C17	0.1

*Analytical Method AFNOR NF T 60-25*

### 3.1 Sterol Composition

Sterol Composition %	Average Value	Range Value
Cholesterol	0.3	0.1 - 1.0
24-Methylen-Cholesterol	0.6	< 1.0
Campesterol	4.5	4.5 - 5.0
Campestanol	0.3	< 1.0
Stigmasterol	0.7	0.5 - 1.0
Clérosterol	0.9	0.5 - 1.0
Beta-Sitosterol	81.5	83.0 - 88.0
Sitostanol	1.5	1.0 - 2.0
Delta5-Avenasterol	7.5	5.0 - 9.0
Delta5, 24-Stigmastadienol	0.6	< 1.0
Delta7-Avenasterol	1.2	1.0 - 2.0
Non-Identified	0.1	< 1.0

*Analytical Method NF ISO 6799*

### 4.1 Total Sterol Content of IntegriLIPID French Plum Oil

Criteria	Average Value	Range Value
Total Sterol Content	0.4%	0.2 - 1.0%

*Analytical Method NF ISO 6799*

## IntegriLIPID French Plum Oil

### Technical Profile Summary

#### 5.1 Tocopherol Composition

Tocopherol Composition %	Average Value	Range Value
Alpha-Tocopherol	11.0	8.0 - 15.0
Beta-Tocopherol	< 0.1	< 0.1
Gama-Tocopherol	84.0	80.0 - 90.0
Delta-Tocopherol	5.0	3.0 - 8.0

*Analytical Method IUPAC of ISO 9936*

#### 5.2 Tocopherol Content of IntegriLIPID French Plum Oil

Tocopherol Composition (PPM)	Average Value	Range Value
Alpha-Tocopherol	90.0	80.0 - 100.0
Beta-Tocopherol	< 5.0	< 5.0
Gama-Tocopherol	700.0	600.0 - 750.0
Delta-Tocopherol	45.0	30.0 - 50.0
Total	840.0	700.0 - 900.0

*Analytical Method IUPAC 2.432 or ISO 9936*

#### 6.1 Oxidation Values

Criteria	Value (Time of Manufacturing)
Peroxide Value (Meq O <sub>2</sub> /kg)	< 10.0

## IntegriLIPID French Plum Oil

### Technical Profile Summary

#### 6.2 Oxidative Stability

Criteria	Value	Analytical Method
Rancimat Test (98°C)	> 30 Hours	NF ISO 6886
Peroxide value after 14 weeks at ambient temperature and under light	< 20 Meq O <sub>2</sub> /kg	AFNOR NF T 60-220
Peroxide value after 14 weeks in cold storage at +6°C	< 20 Meq O <sub>2</sub> /kg	AFNOR NF T 60-220

#### 6.3 Acid Hydrolysis

Criteria	Value
Oleic Acidity	1.0%
Acid Value	< 2.0

#### 7.1 External Contaminants - Solvents

- IntegriLIPID French Plum Oil is pressed by mechanical means. No organic solvent is in contact with the oil, neither during the production process, nor during storage.

#### 7.2 External Contaminants - Pesticides

Type of Pesticides	Value
Organo-Chlorine (19 Components Tested)	Not Detected
Organo-Phosphate (16 Components Tested)	Not Detected



## IntegriLIPID French Plum Oil

### Technical Profile Summary

#### 7.3 Other External Contaminants

Criteria	Criteria	Analytical Method
Water	Water	NF ISO 662
Impurities	Impurities	NF ISO 663
Soap	Soap	AFNOR NF T 60-217
Iron	Iron	NF ISO 8294
Copper	Copper	NF ISO 8294

#### 8.1 Raw Material Origin and Safety

Only kernels from non-genetically modified plums grown in the southwest of France are used. The kernels are collected, then washed and carefully dried in a controlled atmosphere (60°C maximum) to prevent any microbial propagation prior to processing. The kernels are then crushed mechanically (no solvent is used).

IntegriLIPID French Plum Oil offers the following guarantees:

- All solid particles and non-lipophilic components (sugar, proteins, shells) are eliminated during the different processing steps.
- IntegriLIPID French Plum Oil contains less than 0.2% of water.
- IntegriLIPID French Plum Oil contains less than 0.05% of solid impurities.
- IntegriLIPID French Plum Oil is stocked and protected from air, light and heat in non-humid containers.
- Technical analysis confirmed the absence of such contaminants as coliforms (at 30°C), salmonellas, e. coli or aerobic mesophilic germs.

IntegriLIPID French Plum Oil

## ADDENDUM ONE

Presence of Allergenic Agents

Allergenic Agents	Content	Unit
2-Benzylidene Heptanal	< 1.0	mg/kg
7-Hydroxycitronellal	< 1.0	mg/kg
Alcohol 4-Methoxybenzyl	< 1.0	mg/kg
Amylcinnamyl Alcohol	< 1.0	mg/kg
Benzyl Alcohol	94.0	mg/kg
Benzyl Benzoate	< 1.0	mg/kg
Benzyl Cinnamate	< 1.0	mg/kg
Benzyl Salicylate	< 1.0	mg/kg
Cetone Alpha	< 1.0	mg/kg
Cinnamaldehyde	9.0	mg/kg
Citral	< 1.0	mg/kg
Citronellol	< 1.0	mg/kg
Coumarin	< 1.0	mg/kg

Allergenic Agents	Content	Unit
Cynnamyl Alcohol	< 1.0	mg/kg
D-Limonene	< 1.0	mg/kg
Eugenol	< 1.0	mg/kg
Evernia Furfuracea	Not Detected	mg/kg
Evernia Prunastri	Not Detected	mg/kg
Farnesol	< 1.0	mg/kg
Geraniol	< 1.0	mg/kg
Hexylcinnamaldehyde	< 1.0	mg/kg
Isoeugenol	< 1.0	mg/kg
Lilial	< 1.0	mg/kg
Linalol	< 1.0	mg/kg
Lylal	< 1.0	mg/kg
Oct-2-Enoate Methyl	< 1.0	mg/kg

# Integrity Ingredients Corporation

## “Where Quality and Service Meet”

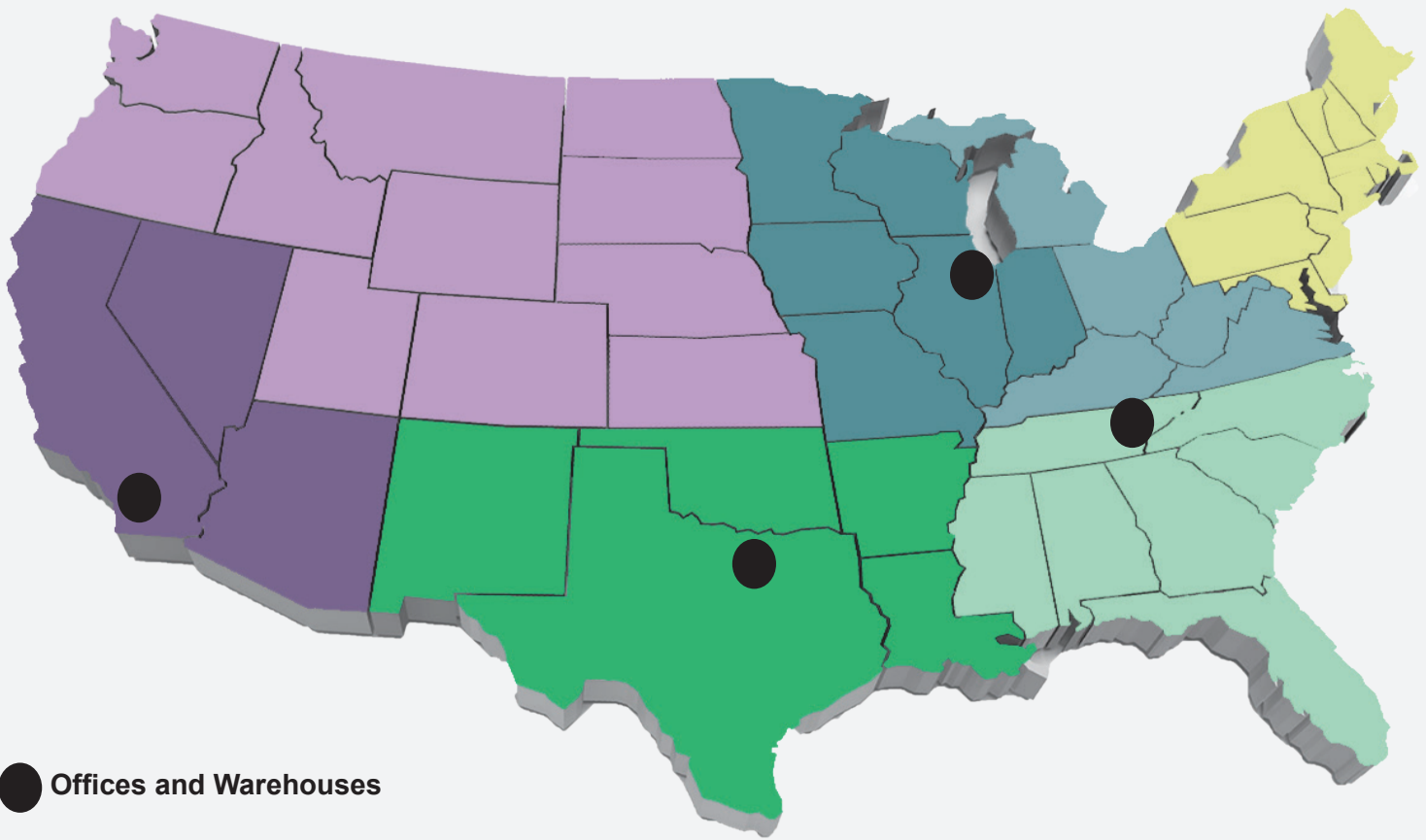


## Technical Support...

Our in-house Technical and Applications Lab is always available to address the growing needs of our customers. Whether you have a raw material technical question or need formulating assistance, we are here and ready to help.

At Integrity Ingredients Corporation, we know the important role our ingredients have in your formulations. Our lab is solely dedicated to actively working with all of our ingredients in a variety of applications. By doing this, we can make accurate recommendations to our customers on how our ingredients will interact and perform with other ingredients and system types.

Our team at Integrity Ingredients Corporation recognizes that you have many choices when formulating or purchasing your raw materials, and we want to thank you for your interest in our products and services.



● Offices and Warehouses

### Northwest Region

**Nathan Reighard**

nreighard@integrityingredientscorp.com

(803) 743-8989

### Midwest Region

**Connie Wightman**

cwrightman@integrityingredientscorp.com

(951) 867-1584

### Northeast Region

**Evelyn Kirton**

ekirton@integrityingredientscorp.com

(949) 910-0713

### West Coast Region

**Maria Reighard**

mreighard@integrityingredientscorp.com

(619) 504-6000

### South-Central Region

**Joy Roederer, PhD**

jroederer@integrityingredientscorp.com

(214) 674-0026

### Mideast Region

**Rodney Grau**

rgrau@integrityingredientscorp.com

(602) 350-6723

**For Technical and Sales Support, please contact:**

#### Joy Roederer, PhD

Vice President of Research & Development

jroederer@integrityingredientscorp.com

(214) 674-0026

#### Evelyn Kirton

Vice President of Sales

ekirton@integrityingredientscorp.com

(949) 910-0713

### Southeast Region

**Sandy Bush**

sbush@integrityingredientscorp.com

(951) 553-4175

Integrity Ingredients Corporation



"Where Quality and Service Meet"

2255 Jefferson Street  
Torrance, CA 90501  
(310) 782-0282

Email: [info@integrityingredientscorp.com](mailto:info@integrityingredientscorp.com)  
[www.integrityingredientscorp.com](http://www.integrityingredientscorp.com)