

---

**Section 1 - PRODUCT AND COMPANY IDENTIFICATION**

---

**Material Name**

First Pulse® D, Product Code: 2020

**Product Use**

A Nutritional Supplement for use in Nursing & Weaning Pigs.

**Restrictions on Use**

Use Only as Directed on Label.

**Details of the supplier of the safety data sheet**

Ralco Nutrition, Inc.  
1600 Hahn Road  
Marshall, MN 56258  
Phone: 1-800-533-5306

---

**Section 2 - HAZARDS IDENTIFICATION**

---

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

None needed according to classification criteria.

**GHS Label Elements****Symbol(s)**

None needed according to classification criteria.

**Signal Word**

None needed according to classification criteria.

**Hazard Statement(s)**

None needed according to classification criteria.

**Precautionary Statement(s)****Prevention**

None needed according to classification criteria.

**Response**

None needed according to classification criteria.

**Storage**

None needed according to classification criteria.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

---

**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

---

CAS	Component Name	Percent
9036-66-2	Arabino Galactin	25-75
n/a 20	Colostrum Extract	20-50
8001-25-0	Olive oil	5-15
7732-18-5	Water	1-10

---

**Section 4 - FIRST AID MEASURES**

---

**Inhalation**

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Skin**

Wash thoroughly after handling.

**Eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion**

Rinse mouth thoroughly with water.

**Most Important Symptoms/Effects****Acute**

None Known.

**Delayed**

None Known.

**Note to Physicians**

Treat symptomatically.

---

**Section 5 - FIRE FIGHTING MEASURES**

---

**Extinguishing Media****Suitable Extinguishing Media**

Water spray. regular dry chemical. carbon dioxide. fire-fighting foam.

**Unsuitable Extinguishing Media**

None Known.

**Fire Fighting Measures**

Co-ordinate fire-fighting measures to the fire surroundings.

**Special Protective Equipment and Precautions for Firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

---

**Section 6 - ACCIDENTAL RELEASE MEASURES**

---

**Personal Precautions, Protective Equipment and Emergency Procedures**

Use Personal Protective equipment as required.

**Methods and Materials for Containment and Cleaning Up**

Collect in closed and suitable containers for disposal. Dispose of contents/container in accordance with local/regional/national/international regulations.

---

**Section 7 - HANDLING AND STORAGE**

---

**Precautions for Safe Handling**

Use Personal Protective equipment as required.

**Conditions for Safe Storage, Including any Incompatibilities**

None needed according to classification criteria.

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a cool dry place. Protect against direct sunlight.

---

**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

**Component Exposure Limits**

ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components

**EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures**

There are no biological limit values for any of this product's components.

**ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)**

There are no biological limit values for any of this product's components.

**Engineering Controls**

Sufficient to maintain atmospheric concentrations below applicable regulatory limits.

**Individual Protection Measures, such as Personal Protective Equipment****Eye/face protection**

Use suitable eye protection.

**Skin Protection**

Wear suitable protective clothing.

**Respiratory Protection**

In case of inadequate ventilation wear respiratory protection.

**Glove Recommendations**

Wear protective gloves.

---

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

---

<b>Appearance</b>	Brown liquid	<b>Physical State</b>	liquid
<b>Odor</b>	Sweet oregano	<b>Color</b>	dark brown
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	Not available
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Not available	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	Not available	<b>Taste</b>	sweet oregano
<b>Molecular Weight</b>	Not available		

---

**Section 10 - STABILITY AND REACTIVITY**

---

**Reactivity**

No known hazardous reactions.

**Chemical Stability**

The product is stable under storage at normal ambient temperatures.

**Conditions to Avoid**

Avoid contact with incompatible materials.

**Incompatible Materials**

None Known.

**Hazardous decomposition products**

None Known.

---

**Section 11 - TOXICOLOGICAL INFORMATION**

---

**Acute and Chronic Toxicity****Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

Potassium sorbate (24634-61-5)

Oral LD50 Rat 3200 mg/kg

Propylene glycol alginate (9005-37-2)

Oral LD50 Rat 7200 mg/kg

**Immediate Effects**

No information on significant adverse effects.

**Delayed Effects**

No information on significant adverse effects.

**Irritation/Corrosivity Data**

No data available.

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available.

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

---

**Section 12 - ECOLOGICAL INFORMATION**
**Component Analysis - Aquatic Toxicity**

Potassium sorbate	24634-61-5
Fish:	LC50 96 h Brachydanio rerio 1250 mg/L [static]
Invertebrate:	EC50 48 h Daphnia magna 750 mg/L IUCLID

**Section 13 - DISPOSAL CONSIDERATIONS**
**Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Section 14 - TRANSPORT INFORMATION**
**US DOT Information:**

No Classification assigned.

**TDG Information:**

No Classification assigned.

**Section 15 - REGULATORY INFORMATION**
**U.S. Federal Regulations**

None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

**U.S. State Regulations**

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA

**Not listed under California Proposition 65**
**Component Analysis - Inventory**

Arabino Galactin (9036-66-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	NSL	EIN	Yes	Yes	No	No	No	No	No	Yes	No

Water (7732-18-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

---

### Section 16 - OTHER INFORMATION

---

**Summary of Changes**

New SDS: 12/09/2015

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

**Other Information**
**Disclaimer:**

The information provided in this Safety Data Sheet is correct to the best of Ralco's knowledge, information and belief at the date of preparation. The information provided is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The conditions or methods of said handling, storage, use, and disposal of this product are beyond our control. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expenses arising out of or connected with the handling, storage, use, or disposal of this product. The information provided relates only to the specific material designated, and may not be valid for such material used in combination with any other materials or in any process, unless specified in text.