Safety Data Sheet

Material Name: First Pulse® D, Product Code: 2020 **SDS ID: 2020**

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
PO Box 1083
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 Galactan	25-75
n/a	Colostrum Extract	20-50
8001-25-0	Olive oil	5-15

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.
Environmental Precautions
None Known.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Use Personal Protective equipment as required.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Conditions for Safe Storage, Including any Incompatibilities
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
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.
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
Wear eye protection/face 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

Appearance	Liquid.	**Physical State**	Liquid.
Odor	Sweet/oregano.	**Color**	Dark brown.
Odor Threshold	Not available	**pH**	Not available
Melting Point	Not available	**Boiling Point**	Not available
Boiling Point Range	Not available	**Freezing point**	Not available
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	Not available	**Flash Point**	Not available
Lower Explosive Limit	Not available	**Decomposition temperature**	Not available
Upper Explosive Limit	Not available	**Vapor Pressure**	Not available
Vapor Density (air=1)	Not available	**Specific Gravity (water=1)**	Not available
Water Solubility	Not available	**Partition coefficient: n-octanol/water**	Not available
Viscosity	Not available	**Kinematic viscosity**	Not available
Solubility (Other)	Not available	**Density**	Not available
Taste	sweet oregano	**Molecular Weight**	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
Sodium saccharin (128-44-9)
Oral LD50 Rat 14200 mg/kg
Oils, origanum (8007-11-2)
Oral LD50 Rat 1850 mg/kg
Product Toxicity Data
Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Vapor	> 20 mg/L
Oral	> 2000 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

Sodium saccharin	**128-44-9**
IARC:	Monograph 73 [1999] (downgraded from 2B to 3); Supplement 7 [1987] ; Monograph 22 [1980] (Group 3 (not classifiable))

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
Sodium saccharin	**128-44-9**
Fish:	LC50 96 h Pimephales promelas 16400 - 20400 mg/L [static] (30 days old)

Section 13 - DISPOSAL CONSIDERATIONS

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

Component Waste Numbers
The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
No Classification assigned.

International Bulk Chemical Code
This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Olive oil	**8001-25-0**
IBC Code:	Category Y

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
None of this product's 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.
SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories
No hazard categories applicable.
U.S. State Regulations
The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Sodium saccharin	**128-44-9**	No	Yes	No	No	Yes

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)
Not listed under California Proposition 65.
Canada Regulations
Canadian WHMIS Ingredient Disclosure List (IDL)
The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.
Component Analysis - Inventory
Arabino Galactan (9036-66-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	NSL	Yes	No	EIN	No	No	No	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	No	Yes	Yes	No	Yes	Yes

Colostrum Extract (n/a)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
No	No	No	No	No	No	No	No	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	No	No	No	No	No	No

Olive oil (8001-25-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	No	Yes	Yes

Section 16 - OTHER INFORMATION

Preparation Date
SDS: 06/27/2019
Supersedes: 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; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); 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; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); 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; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; 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; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; 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; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

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.