

Safety Data Sheet (SDS)

PURAC Powder Basic 60

Issue date 07/13/2015

Reviewed on 10/12/2018

1. Identification

- **Product Identifier**
- **Name of the product:** PURAC Powder Basic 60
- **Recommended Use:** Food, Specialty chemical
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Ramsay Browne Chemical & Co
PO Box 6425
Moraga, CA 94570
General Number: (925)280-1661

2. Hazard(s) Identification

OSHA Regulatory Status: This material is considered hazardous for physical and/or human hazards by the OSHA Hazard Communication Standard (29 CFR 1910.1200).



Signal Word: DANGER

- **Hazard Statements:**
 - Causes skin irritation.
 - Causes serious eye damage.
- **Precautionary Statements:**
- **Prevention:** Wash hands and face thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
- **Eyes:** IF IN EYES – Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
- **Skin:** IF ON SKIN – Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash before re-use.
- **Main symptoms:** Causes severe damage to eyes – Burning feeling and temporary redness, pain. Causes skin irritation – Itching, redness.
- **Environmental Hazard:** Contains no substances known to be hazardous to the environment. See Section 12 for additional Ecological Information.

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2. Hazard(s) Identification (continued)

- **Physical state @ 20°C:** Solid
- **Appearance:** Powder
- **Color:** White, Yellowish
- **Odor:** Characteristic
- **Interactions with other chemicals:** Incompatible materials – Oxidizing agents
- **Hazards not otherwise classified (HNOC):** None known
- **Unknown Toxicity:** 0% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition / Information on ingredients

Chemical name	CAS No	Weight %
L-(+)-lactic acid	79-33-4	53-62
Calcium (S) -2-hydroxypropionate	28305-25-1	34-44
Silicon dioxide	7631-86-9	0-3

4. First-aid measures

- **General Advice:** Keep person warm and at rest. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.
- **Eye Contact:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult a physician.
- **Skin Contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician.
- **Ingestion:** Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.
- **Inhalation:** Move to fresh air. Get medical attention immediately if symptoms occur.
- **Notes to physician:** Treat symptomatically. If breathing is difficult, give oxygen. Keep victim under observation. Symptoms may be delayed.
- **Protection of first-aiders:** Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. Firefighting measures

- **Flammable properties:** No information available
- **Flash point:** Not applicable
- **Autoignition temperature:** >530°C / >986°F
- **Suitable Extinguishing Media:** Water spray, foam, dry powder, carbon dioxide (CO₂)
- **Unsuitable Extinguishing Media:** Do not use a solid water stream as it may scatter and spread fire.

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5. Firefighting measures (continued)

- **Special Hazard:** Thermal decomposition can lead to release of irritating and toxic gases and vapors.
- **Protective Equipment and Precautions for Firefighters:** Wear self-contained breathing apparatus and protective suit.
- **Fire fighting measures:** Evacuate non-essential personnel. Move containers from fire area if you can do it without risk. Keep containers and surroundings cool with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.
- **Sensitivity to Mechanical Impact:** None
- **Sensitivity to Static Discharge:** None

6. Accidental release measures

- **Personal Precautions:** Evacuate personnel to safe areas. Do not touch or walk through spilled material. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Use personal protective equipment. Ensure adequate ventilation.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so.
- **Methods for Cleaning Up:**
- **Large amounts:** Prevent further leakage or spillage if safe to do so. Dike to collect large spills. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water.
- **Small amounts:** Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water. Never return spills in original containers for re-use.

7. Handling and storage

- **Handling:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.
- **Storage:** Store in accordance with local regulations. Keep containers tightly closed in a cool, well-ventilated place. Incompatible with oxidizing agents.

8. Exposure controls / personal protection

- **Exposure guidelines:** Contains no substances with occupational exposure limit values.
- **Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Keep at temperatures below 200°C / 392°F. Ensure that eyewash stations and safety showers are close to the workstation location.

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8. Exposure controls / personal protection (continued)

- **Personal Protective Equipment:**
- **Eye Protection:** Safety glasses with side-shields (EN166)
- **Hand Protection:**
- **Protective gloves (EV374):** Butyl rubber.
- **Glove thickness:** 0.5mm
- **Break through time:** >8 hours
- **Unsuitable materials:** Natural Rubber, Nitrile rubber, Fluorinated rubber, PVC
- **Skin and Body Protection:** Long sleeved clothing
- **Respiratory Protection:** In case of inadequate ventilation wear respiratory protection. (APF)
- **Recommended Filter Type:** A, Brown
- **Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. Workers must be trained in the proper use and handling of this product as required under applicable regulations. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before re-use.
- **Environmental exposure controls:** The product should not be allowed to enter drains, water courses or the soil.

9. Physical and chemical properties

- **Physical state @ 20°C:** Solid
- **Appearance:** Powder
- **Color:** White, Yellowish
- **Odor:** Characteristic
- **pH:** 3-4 (aqueous solution 10% w/w) (@25°C / 77°F)
- **Melting/Freezing point:** 152-156°C / 306-313°F
- **Boiling point/boiling range:** No information available
- **Flash point:** Not applicable
- **Evaporation rate:** No information available
- **Flammability (solid, gas):** No information available
- **Flammability Limits in Air:** No information available
- **Vapor pressure:** No information available
- **Vapor density:** No information available
- **Relative density:** No information available
- **Water solubility:** 140 g/L (@25°C / 77°F)
- **Partition coefficient (n-octanol/water):** No information available

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9. Physical and chemical properties (continued)

- **Autoignition temperature:** >530°C / >968°F
- **Decomposition temperature:** >200°C / >200°F
- **Viscosity, dynamic:** No information available
- **Explosive properties:** Not explosive
- **Oxidizing properties:** Not oxidizing
- **Density:** 400 kg/m³

10. Stability and reactivity

- **Stability:** Stable under recommended storage conditions.
- **Materials to avoid:** Oxidizing agents
- **Conditions to avoid:** Temperatures above 200°C / 392°F
- **Hazardous decomposition products:** None under normal use. Thermal decomposition can lead to release of irritating gases and vapors.
- **Hazardous polymerization:** None known
- **Hazardous Reactions:** No information available

11. Toxicological information

- **Acute Toxicity:**
- **Ingestion:** No known effect
- **Skin Contact:** No known effect
- **Inhalation:** No known effect

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
L-(+)-lactic acid	3542 mg/kg (Rat, female) 4936 mg/kg (Rat, male)	>2000 mg/kg (Rabbit)	>7.94 mg/L (Rat) 4h mist
Calcium (S)-2-hydroxypropionate			>7.94 mg/L (Rat) 4h
Silicon dioxide	>5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	2.2 mg/L (Rat) 1h

- **Skin Corrosion/Irritation:** Mixture – Causes skin irritation
- **Serious eye damage/irritation:** Mixture – Causes serious eye damage

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11. Toxicological information (continued)

Chemical Name	Skin Corrosion/Irritation	Serious eye damage/irritation
L-(+)-lactic acid	OECD 404, in vivo, Rabbit, solution (88%) Result: corrosive	CEET, Ex vivo, solution (8%) Result: Severe eye irritation
Calcium (S)-2-hydroxypropionate		OECD 405, in vivo, Rabbit Result: Non-irritating
Silicon dioxide	OECD 404, in vivo, Rabbit Result: Non-irritating	OECD 405, in vivo, Rabbit Result: Non-irritating

- **Respiratory or skin sensitization:** No know effect
- **Aspiration Hazard:** No known effect
- **Chronic toxicity:**
- **Carcinogenicity:** Contains no ingredient listed as a carcinogen.
- **Germ Cell Mutagenicity:** Not known to cause heritable genetic damage.
- **Reproductive Toxicity:** Not known to cause birth defects or have a deleterious effect on a developing fetus. Not known to adversely affect reproductive functions and organs.
- **STOT-single exposure:** No known effect
- **STOT-repeated exposure:** No known effect

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12. Ecological information

- **Ecotoxicity Effects:** Contains no substances known to be hazardous for the environment.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Micro-organisms	Toxicity to daphnia and other aquatic invertebrates
L-(+)-lactic acid	EC50: >2.8 g/L2h Pseudokirchnerella subcapitata EC50: 3.5 g/L 70h Pseudokirchnerella subcapitata	LC50: 130 mg/L 96h Oncorhynchus mykiss LC50: 320 mg/L 96h Danio rerio	LC50: >100 mg/L 3h	EC50: 130 mg/L 48h Daphnia magna EC50: 250 mg/L 48h Daphnia magna
Silicon dioxide	EC50: 440 mg/L 72h Pseudokirchnerella subcapitata	LC50: 5000 mg/L 96h Brachydanio rerio static		EC50: 7600 mg/L 48h Ceriodaphnia dubia

- **Persistence and degradability:** Readily biodegradable
- **Bioaccumulative potential:** Does not bioaccumulate

Chemical name	Log Pow
L-(+)-lactic acid	-0.62
Calcium (S)-2-hydroxypropionate	<-1.5

- **Mobility in soil:** No information available
- **PBT and vPvB assessment:** This substance is not considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB)

13. Disposal considerations

- **Waste disposal methods:** Dispose of in accordance with local regulations.
- **Contaminated Packaging:** Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

- **According to:** US DOT, IMDG, ICAO/IATA, ADR: Not regulated

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15. Regulatory information

Chemical name	TSCA	DSL/NDSL
L-(+)-lactic acid	Listed	Listed
Calcium (S)-2-hydroxypropionate	Listed	Listed
Silicon dioxide	Not listed	Not listed

Legend:

TSCA: United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substance List

- **Federal Regulations:**
- **SARA 311/312 Hazard Categories:**
- **Acute health hazard:** Yes
- **Chronic health hazard:** No
- **Fire hazard:** No
- **Sudden release of pressure hazard:** No
- **Reactive hazard:** No
- **Clean Water Act:** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
- **CERCLA:** This material, as supplied, does not contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).
- **State Regulations:**
- **California Proposition 65:** This product does not contain any Proposition 65 chemicals.
- **U.S. State Right-to-Know Regulations:** No information available
- **Other information:** No information available
- **International Regulations:**
- **Canada:** This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.
- **WHMIS Hazard Class:** E Corrosive material.

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16. Other information

- **Training Advice:** Workers must be trained in the proper use and handling of this product as required under applicable regulations.
- **Abbreviations/acronyms:**
- **ACGIH TLV:** America Conference of Governmental Industrial Hygienists – Threshold Limit Value
- **OSHA PEL:** Occupational Safety and Health Administration – Permissible Exposure Limits.
- **NIOSH IDLH:** National Institute of Occupational Safety and Health – Immediately Dangerous to Life or Health.
- **OSHA:** Occupational Safety and Health Administration
- **IARC:** International Agency for Research on Cancer
- **NTP:** National Toxicity Program
- **SARA:** Superfund Amendments and Reauthorization Act
- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **CFR:** U.S. Code of Federal Regulations
- **NFPA:** National Fire Protective Association
- **HMIS:** Hazardous Materials Identification System
- **ADR:** Accord européen relatif au transport international des marchandises Dangereuses par Route
- **DOT:** Department of Transport
- **IMDG:** International Maritime Dangerous Goods Code
- **IATA:** International Air Transport Association
- **ICAO:** International Civil Aviation Organization
- **WHMIS:** Workplace Hazardous Materials Information System
- **CPR:** Controlled Products Regulations

Disclaimer: The information provided on the SDS is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.