

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Starch-Acid Indicator Powder

Other means of identification

Product Code(s) 6385

UN-No 2967

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use).

Details of the supplier of the safety data sheet

Manufacturer Address

LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

EMERGENCY OVERVIEW

DANGER

Hazard statements

Harmful if swallowed. Causes severe skin burns and eye damage.



Appearance White to off-white

Physical state crystalline powder

Odor Odorless

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

Immediately call a POISON CENTER or physician.

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

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth, IF SWALLOWED, Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

Harmful to aquatic life with long lasting effects

Unknown Acute Toxicity

5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Soluble Starch (Amylodextrin)	9005-84-9	5
Sulfamic acid	5329-14-6	95

4. FIRST AID MEASURES

First Aid Measures

General advice

Do not get in eyes, on skin, or on clothing. Show this safety data sheet to the doctor in attendance.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Ingestion

Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

Notes to Physician

After inhalation exposure, observe for 24 to 72 hours as pulmonary edema may be delayed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Keep in suitable and closed containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

Incompatible Products Strong oxidizing agents. Nitric acid. Chlorine. Solutions are strongly acidic and react violently with bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Soluble Starch (Amylodextrin) 9005-84-9	-	-	Not Established
Sulfamic acid 5329-14-6	-	-	Not Established

Appropriate engineering controls

Engineering Measures Provide appropriate exhaust ventilation at places where dust is formed. Ensure that eyewash stations and safety showers are close to the workstation location. Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear latex or nitrile gloves. Wear protective gloves/clothing. Risk of contact: . Chemical resistant protective sleeves.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state crystalline powder
Appearance White to off-white
Odor Odorless

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1	(0.1g/10mL water)
Melting point / freezing point	ca. 205 °C / 401 °F	
Boiling point / boiling range	Decomposes	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density ca. 2.15 g/cm³ @77°F
Bulk density No information available

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.
Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat. Incompatible products.
Incompatible materials Strong oxidizing agents. Nitric acid. Chlorine. Solutions are strongly acidic and react violently with bases.

Hazardous decomposition products Sulfur oxides (SO_x). Nitrogen oxides (NO_x). Carbon oxides (CO_x).

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	= 1450 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA

Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	Not Established	Not Established	Not Established	Not Established

ATEmix (oral)

1526

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 5 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	Not Established	14.2: 96 h Pimephales promelas mg/L LC50 static	Not Established

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Soluble Starch (Amylodextrin) 9005-84-9	Not Established
Sulfamic acid 5329-14-6	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste product or used containers according to local regulations.

Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	-	Not Established	Not Established
Sulfamic acid 5329-14-6	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Soluble Starch (Amylodextrin) 9005-84-9	-
Sulfamic acid 5329-14-6	-

14. TRANSPORT INFORMATION

DOT

Proper shipping name
UN-No

SULFAMIC ACID
2967

Hazard Class 8
Packing group III

IATA

Proper shipping name SULFAMIC ACID
UN-No 2967
Hazard Class 8
Packing group III

IMDG/IMO

Proper shipping name SULFAMIC ACID
UN-No 2967
Hazard Class 8
Packing group III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Soluble Starch (Amylodextrin) 9005-84-9	Not Established
Sulfamic acid 5329-14-6	Not Established

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

CWA (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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Soluble Starch (Amylodextrin) 9005-84-9	-	Not Established	-
Sulfamic acid 5329-14-6	-	Not Established	-

US State Regulations**California Proposition 65**

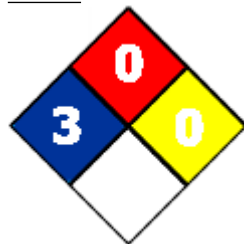
Chemical name	California Proposition 65
Soluble Starch (Amylodextrin) 9005-84-9	Not Established
Sulfamic acid 5329-14-6	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Soluble Starch (Amylodextrin) 9005-84-9	Not Established	Not Established	Not Established
Sulfamic acid 5329-14-6	X	Not Established	Not Established

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**16. OTHER INFORMATION**

NFPA	Health hazard 3	Flammability 0	Instability 0	Physical and Chemical Hazards N/A
HMIS	Health hazard 3	Flammability 0	Stability 2	



Health Hazard	3
Fire Hazard	0
Reactivity	2

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 Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its

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.

End of Material Safety Data Sheet