

**1. Identification**

**Product identifier** Acid Starch Indicator Powder  
**Other means of identification**  
**Product code** R-0725  
**Recommended use** Use as directed by manufacturer for purposes directly related to water testing.  
**Recommended restrictions** None known

**Manufacturer/Importer/Supplier/Distributor information****Manufacturer**

**Company name** Taylor Technologies, Inc.  
**Address** 31 Loveton Circle  
Sparks, MD 21152  
United States  
**Telephone** (410) 472-4340 Monday–Friday, 8:00 a.m.–4:30 p.m.  
**Website** www.taylortechnologies.com  
**E-mail** Not available  
**Emergency phone number** (800) 837-8548  
**Supplier** Refer to Manufacturer

**2. Hazard(s) identification**

**Physical hazards** Corrosive to metals Category 1  
**Health hazards** Eye damage/irritation Category 1  
Skin corrosion/irritation Category 1  
**Environmental hazards** Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.  
**OSHA defined hazards** This mixture does not meet the classification criteria according to OSHA HazCom 2012.  
**Label elements**



**Signal word** Danger  
**Hazard statement** May be corrosive to metals. Causes severe skin burns and eye damage.  
**Precautionary statement**  
**Prevention** Keep only in original container. Do not breathe dust. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.  
**Response** Absorb spillage to prevent material damage.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water.  
Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
Immediately call a physician or poison control center.  
**Storage** Store in corrosive-resistant container with a corrosive-resistant inner liner. Store locked up.

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

**Hazard(s) not otherwise classified (HNOC)** None

**Supplemental information** None

### 3. Composition/information on ingredients

#### Mixtures

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Sulfamic acid	Amidosulfonic acid	5329-14-6	80
Other components below reportable levels			20

### 4. First-aid measures

**Inhalation** Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.

**Skin contact** Immediately flush skin with running water for at least 20 minutes. Immediately take off all contaminated clothing. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**Ingestion** Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

**Most important symptoms/effects, acute and delayed** Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent scarring. Direct contact with solid may be corrosive to the eyes and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of dust can cause severe respiratory irritation. Symptoms may include coughing, choking, and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

**General information** Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions** Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if you can do it without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** No unusual fire or explosion hazards noted

**Hazardous combustion products** Sulfur oxides. Other irritating fumes and smoke.

## 6. Accidental release measures

<b>Personal precautions, protective equipment, and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Sweep up or vacuum up spillage and collect in suitable container for later disposal. Never return spills to original containers for reuse. For waste disposal, refer to section 13 of the SDS. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>Environmental precautions</b>	Avoid discharge into drains, watercourses, or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Do not breathe dust. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS). Protect against physical damage. Use care in handling/storage.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for the ingredient(s)
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s)
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.
<b>Other</b>	Wear appropriate chemical-resistant clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.
<b>Thermal hazards</b>	When necessary, wear appropriate thermal protective clothing.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination.

## 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Solid
<b>Form</b>	Powder
<b>Color</b>	Off-white
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available
<b>pH</b>	Not applicable
<b>Melting point/freezing point</b>	401°F (205°C)

<b>Initial boiling point and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable (does not burn)
<b>Evaporation rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit, lower (%)</b>	Not applicable
<b>Flammability limit, upper (%)</b>	Not applicable
<b>Explosive limit, lower (%)</b>	Not applicable
<b>Explosive limit, upper (%)</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	Not available
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in all proportions
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available
<b>Viscosity</b>	Not applicable
<b>Other information</b>	
<b>Explosive properties</b>	Not applicable
<b>Oxidizing properties</b>	Not applicable
<b>Percent volatile</b>	Not applicable
<b>Specific gravity</b>	Not available

## 10. Stability and reactivity

<b>Reactivity</b>	This product is stable and nonreactive under normal conditions of use, storage, and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use
<b>Conditions to avoid</b>	Contact with incompatible materials. Do not use in areas without adequate ventilation.
<b>Incompatible materials</b>	Bromine. Chlorine. Cyanides. Fuming nitric acid. Metal compounds. Oxidizing agents. Reducing agents. Strong bases. Sulfides. Sulfites.
<b>Hazardous decomposition products</b>	Sulfur oxides. Sulfuric acid. Ammonia. Nitrogen. For hazardous combustion products, refer to section 5 of the SDS.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system
<b>Skin contact</b>	Causes severe skin burns
<b>Eye contact</b>	Causes serious eye damage
<b>Ingestion</b>	Causes digestive tract burns
<b>Most important symptoms/effects, acute and delayed</b>	Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent scarring. Direct contact with solid may be corrosive to the eyes and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation of dust can cause severe respiratory irritation. Symptoms may include coughing, choking, and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding.

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

**Acute toxicity**

Components	Species	Test Results
Sulfamic acid (CAS 5329-14-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD <sub>50</sub>	Rabbit	Not available
<i>Inhalation</i>		
LC <sub>50</sub>	Rat	Not available
<i>Oral</i>		
LD <sub>50</sub>	Rat	3160 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage	
<b>Respiratory sensitization</b>	Not expected to be a respiratory sensitizer	
<b>Skin sensitization</b>	Not expected to be a skin sensitizer	
<b>Germ cell mutagenicity</b>	Not expected to be mutagenic	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, NTP, OSHA, or U.S. ACGIH.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)</b>		
Not regulated		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity, single exposure</b>	Not classified as a specific target organ toxicity – single exposure	
<b>Specific target organ toxicity, repeated exposure</b>	Not classified as a specific target organ toxicity – repeated exposure	
<b>Aspiration toxicity</b>	Not expected to be an aspiration hazard	
<b>Chronic effects</b>	Not expected to cause chronic effects	

**12. Ecological information**

**Ecotoxicity** This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Sulfamic acid (CAS 5329-14-6) – Aquatic		
<b>Acute</b>		
<i>Fish</i>		
LC <sub>50</sub>	Fathead minnow ( <i>Pimephales promelas</i> )	58.8–84 mg/L, 96 hours 14.2 mg/L, 96 hours
<b>Persistence and degradability</b>	Not available	
<b>Bioaccumulative potential</b>	Not available	
<b>Mobility in soil</b>	Not available	
<b>Other adverse effects</b>	No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.

**Waste from residues/unused products**

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).

**Contaminated packaging**

Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transportation information

### DOT

<b>UN number</b>	UN2967
<b>UN proper shipping name</b>	Sulphamic acid
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	Not listed
<b>Label(s)</b>	8
<b>Packing group</b>	III
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.
<b>Special provisions</b>	IB8, IP3, TP1, TP33
<b>Packaging exceptions</b>	154
<b>Packaging, non-bulk</b>	213
<b>Packaging, bulk</b>	240

### IATA

<b>UN number</b>	UN2967
<b>UN proper shipping name</b>	Sulphamic acid
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	Not listed
<b>Packing group</b>	III
<b>Environmental hazards</b>	Not listed
<b>ERG code</b>	8L
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed
<b>Cargo aircraft only</b>	Allowed

### IMDG

<b>UN number</b>	UN2967
<b>UN proper shipping name</b>	Sulphamic acid
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	Not listed
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Not listed
<b>EmS</b>	F-A, S-B
<b>Special precautions for user</b>	Read safety instructions, SDS, and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

This substance/mixture is not intended to be transported in bulk.

### DOT





## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

One or more components are not listed on the US EPA TSCA Inventory list.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**CERCLA Hazardous Substance list (40 CFR 302.4)**

Not regulated

**SARA 304 Emergency release notification**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096)**

Not regulated

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate hazard – yes

Delayed hazard – no

Fire hazard – no

Pressure hazard – no

Reactivity hazard – no

**SARA 302 Extremely hazardous substance**

Not regulated

**SARA 311/312 Hazardous Chemical**

Not regulated

**SARA 313 (TRI reporting)**

Not regulated

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) list**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Safe Drinking Water Act (SDWA)**

Not regulated

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not regulated

**US. Massachusetts RTK - Substance List**

Not regulated

**US. New Jersey Worker and Community Right-to-Know Act**

Sulfamic acid (CAS 5329-14-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not regulated

**US. Rhode Island RTK**

Not regulated

**US. California Proposition 65**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

## International inventories

Country(ies) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	yes
Canada	Domestic Substances List (DSL)	yes
Canada	Non-Domestic Substances List (NDSL)	no
China	Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)	yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	yes
Europe	European List of Notified Chemical Substances (ELINCS)	no
Japan	Existing and New Chemical Substances (ENCS)	yes
Korea	Existing Chemicals List (ECL)	yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA)	yes

\*A "yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A "no" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

## 16. Other information, including date of preparation or last revision

### List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists  
AICS: Australian Inventory of Chemical Substances  
CAA: Clean Air Act  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
CFR: Code of Federal Regulations  
CSA: Canadian Standards Association  
DEA: Drug Enforcement Agency  
DOT: Department of Transportation  
DSL: Domestic Substances List  
EC: effective concentration  
ECL: Existing Chemicals List  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
ENCS: Existing and New Chemical Substances  
EPA: Environmental Protection Agency  
HAP: hazardous air pollutants  
HMIS: Hazardous Materials Identification System  
HNOC: hazards not otherwise classified  
HPA: Hazardous Products Act  
HSDB: Hazardous Substances Data Bank  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk  
ICAO: International Civil Aviation Organization  
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China  
IMDG: International Maritime Dangerous Goods  
IUCLID: International Uniform Chemical Information Database  
LC: lethal concentration  
LD: lethal dose  
MARPOL: marine pollution  
MSHA: Mine Safety and Health Administration  
NDSL: Non-Domestic Substances List  
NFPA: National Fire Protection Association  
NIOSH: National Institute of Occupational Safety and Health  
NOEC: no observable effect concentration  
NTP: National Toxicology Program  
NZIoC: New Zealand Inventory of Chemicals  
OECD: Organisation for Economic Co-operation and Development  
OEL: occupational exposure limits  
OSHA: Occupational Safety and Health Administration  
PEL: permissible exposure limits

PICCS: Philippine Inventory of Chemicals and Chemical Substances  
PPE: personal protective equipment  
RCRA: Resource Conservation and Recovery Act  
RQ: reportable quantity  
RTECS: Registry of Toxic Effects of Chemical Substances  
RTK: right to know  
SARA: Superfund Amendments and Reauthorization Act  
SDS: Safety Data Sheet  
SDWA: Safe Drinking Water Act  
STEL: short-term exposure limit  
TLV: threshold limit values  
TSCA: Toxic Substances Control Act  
TWA: time-weighted average  
VOC: volatile organic compounds  
WEL: workplace exposure limit

**Disclaimer**

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**Issue date**

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**Last revision**

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