



Issuing Date 12/27/2010

Revision date 12/23/2013

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product name STARCH INDICATOR SOLUTION

Product Code(s) 4170

Recommended Use Test kit reagent. Laboratory chemicals. Industrial (not for food or food contact use).

Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA

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

EMERGENCY OVERVIEW

Avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes, and clothing

May be harmful if swallowed

May cause eye irritation

Appearance colorless**Physical state** liquid**Odor** None

OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential health effects**Principle Routes of Exposure**

Skin and eye contact.

Acute toxicity**Eyes**

Contact with eyes may cause irritation.

Skin

No hazard from product as supplied.

Inhalation

Not an expected route of exposure.

Ingestion

May cause gastrointestinal discomfort if consumed in large amounts.

Chronic effects

Prolonged skin contact may cause skin irritation and/or dermatitis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Salicylic acid	69-72-7	0.13
Soluble Starch (Amylodextrin)	9005-84-9	0.5
Water	7732-18-5	to 100%

4. FIRST AID MEASURES

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.

Skin contact Wash off with warm water and soap. If skin irritation persists, call a physician.

Inhalation Not expected.

Ingestion Drink plenty of water. Do not induce vomiting without medical advice (pH 3). Consult a physician. Never give anything by mouth to an unconscious person.

Protection of First-aiders Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable properties Not a fire hazard.

Flash point Not Applicable

Suitable extinguishing media Dry chemical, CO₂, alcohol-resistant foam or water spray.

<u>NFPA</u>	Health hazard 0	flammability 0	Stability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health hazard 0	flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective equipment. Refer to Section 8. Avoid contact with skin, eyes, and clothing.

Methods for cleaning up Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

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

Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. Store at room temperature. Keep away from direct sunlight. Keep away from heat and incompatibles. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Salicylic acid 69-72-7	None known	None known	None known

Soluble Starch (Amylodextrin) 9005-84-9	None known	None known	None known
Water 7732-18-5	None known	None known	None known

Personal protective equipment**Eye/face Protection**

Safety glasses with side-shields.

Skin and body protection

Wear protective gloves/clothing.

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

Appearance	colorless	Odor	None
Physical state	liquid	pH	3
Flash point	Not Applicable	Boiling Point/Range	ca. 100 °C / 212 °F

Vapor pressure	<17 mmHg @ 20°C	Vapor density	<1(Air = 1)
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10. STABILITY AND REACTIVITY

Stability Stable under normal conditions of use and storage.

Incompatible Products Strong oxidizing agents. Iron Salts.

Conditions to avoid Excessive heat. Incompatible products. Direct sunlight.

Hazardous decomposition products Carbon monoxide (CO).

Hazardous polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Salicylic acid	891 mg/kg (Rat)	2 g/kg (Rat)	900 mg/m ³ (Rat) 1 h
Soluble Starch (Amylodextrin)	None known	None known	None known
Water	90 mL/kg (Rat)	None known	None known

Chronic toxicity

Chronic toxicity Prolonged skin contact may cause skin irritation and/or dermatitis.

Chemical name	ACGIH	IARC	NTP	OSHA
Salicylic acid	None known	None known	None known	None known
Soluble Starch (Amylodextrin)	None known	None known	None known	None known
Water	None known	None known	None known	None known

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine disrupting potential
Salicylic acid	None known	None known	None known
Soluble Starch (Amylodextrin)	None known	None known	None known

Water	None known	None known	None known
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12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Salicylic acid	None known	None known	EC50 = 138 mg/L 1 h EC50 = 214 mg/L 5 min EC50 = 552 mg/L 1 h EC50 = 78 mg/L 210 min	EC50 = 105 mg/L 24 h
Soluble Starch (Amylodextrin)	None known	None known	None known	None known
Water	None known	None known	None known	None known
Chemical name	Log Pow			
Salicylic acid	0 - 2.26 37 °C			
Soluble Starch (Amylodextrin)	None known			
Water	None known			

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Salicylic acid - 69-72-7	None known	None known	None known	None known
Soluble Starch (Amylodextrin) - 9005-84-9	None known	None known	None known	None known
Water - 7732-18-5	None known	None known	None known	None known

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Salicylic acid 69-72-7 (0.13)	Present	X	X	Present	X	KE-20367	X	X
Soluble Starch (Amylodextrin) 9005-84-9 (0.5)	Present	X	X	Present	X	KE-01773	X	X
Water 7732-18-5 (to 100%)	Present	X	X	ENCS	X	KE-35400	X	X

U.S. 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	CAS-No	Weight %	SARA 313 - Threshold Values %
Salicylic acid	69-72-7	0.13	None known
Soluble Starch (Amylodextrin)	9005-84-9	0.5	None known
Water	7732-18-5	to 100%	None known

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).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Salicylic acid 69-72-7 (0.13)	None known	None known	None known	None known
Soluble Starch (Amylodextrin) 9005-84-9 (0.5)	None known	None known	None known	None known
Water 7732-18-5 (to 100%)	None known	None known	None known	None known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Salicylic acid	69-72-7	0.13	None known	Group III	None known	None known
Soluble Starch (Amylodextrin)	9005-84-9	0.5	None known	None known	None known	None known
Water	7732-18-5	to 100%	None known	None known	None known	None known

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ
Salicylic acid	None known	None known
Soluble Starch (Amylodextrin)	None known	None known
Water	None known	None known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	CAS-No	California Prop. 65
Salicylic acid	69-72-7	None known
Soluble Starch (Amylodextrin)	9005-84-9	None known
Water	7732-18-5	None known

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Salicylic acid	None known	None known	None known	None known	None known
Soluble Starch (Amylodextrin)	None known	None known	None known	None known	None known
Water	None known	None known	None known	None known	None known

International Regulations**Mexico - Grade**

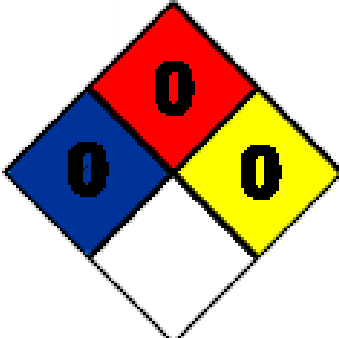

Chemical name	Carcinogen Status	Exposure Limits
Salicylic acid	None known	None known
Soluble Starch (Amylodextrin)	None known	None known
Water	None known	None known

CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

Component	WHMIS Hazard Class
Salicylic acid 69-72-7 (0.13)	0.1 % D2A
Soluble Starch (Amylodextrin) 9005-84-9 (0.5)	Uncontrolled product according to WHMIS classification criteria
Water 7732-18-5 (to 100%)	Uncontrolled product according to WHMIS classification criteria

16. OTHER INFORMATION

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0		
Health Hazard	1								
Fire Hazard	0								
Reactivity	0								

<p>Prepared by Issuing Date Revision date Revision note</p>	<p>Regulatory Affairs Department 12/27/2010 23-Dec-2013 MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request.</p>
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Disclaimer

The information provided on this MSDS 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 MSDS