Starch, Soluble and Hydrolysed 21875

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Starch, Soluble and Hydrolysed Catalog Numbers:

S71202, S78931, S78931-1, S78931-2, S79015, S79016, S516 100, S516 500, S516-100, S516-500, S516100, S516500, S676 2, S676-2, S6762

Synonyms:

Corn Starch; Potato Starch: iodine indicator

Company Identification: Fisher Scientific

1 Reagent Lane

Fairlawn, NJ 07410

For information, call: 201-796-7100 Emergency Number:

201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

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CAS#	Chemical Name	ે	EINECS#
9005-25-8	STARCH	app.100	232-679-6
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**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white.

Caution! May cause respiratory tract irritation. This is expected to be a low hazard for usual industrial handling. May cause eye and skin irritation.

Target Organs: None.

Potential Health Effects

May cause eye irritation.

Skin:

May cause mild skin irritation. Low hazard for usual industrial handling.

Ingestion:

Low hazard for usual industrial handling.

May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic:

No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing,

give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

No specific antidote exists. Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

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	Chemical Name	ACGIH	NIOSH	OSHA - Final PELs	
	STARCH	10 mg/m3		total dust: 15 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA	

OSHA Vacated PELs:

STARCH:

total dust: 15 mg/m3 TWA; respirable fraction: 5 mg/m3 TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize

contact with skin.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator

when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid Appearance: white Odor:

odorless 4.5-6 (2% solution) pH:

Vapor Pressure: Negligible. Vapor Density: Not available. Evaporation Rate: negligible Viscosity: Not available. Boiling Point: Not available. Freezing/Melting Point: Not available.

Autoignition Temperature: Not available. Flash Point:

Not available. NFPA Rating: (est.) Health: 1; Flammability: 0; Reactivity: 0

Explosion Limits, Lower: Not available. Upper: Not available.

Decomposition Temperature: Not available.

Solubility: soluble in boiling water

Specific Gravity/Density: 1.5 Molecular Formula: C6H10O5x Molecular Weight: varies

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

High temperatures, incompatible materials.

Incompatibilities with Other Materials:

Oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 9005-25-8: GM5090000

LD50/LC50:

Not available.

Carcinogenicity:

STARCH -

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Epidemiology:

No information available.

Teratogenicity:

No information available.

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity: Please refer to RTECS# GM5090000 for specific information.

Other Studies:

None.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Other

No information available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classif as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CFR Part Additionally, waste generators must consult state and local hazardous waste reguensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT

No information available

Canadian TDG

No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL

TSCA

CAS# 9005-25-8 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as ${\tt Hazardous}$ Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by $\ensuremath{\mathsf{OSHA}}$.

STATE

STARCH can be found on the following state right to know lists:

Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases: Safety Phrases:

WGK (Water Danger/Protection)

CAS# 9005-25-8: 0

United Kingdom Occupational Exposure Limits

Canada

CAS# 9005-25-8 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of Not controlled..

CAS# 9005-25-8 is not listed on Canada's Ingredient Disclosure List. Exposure Limits

CAS# 9005-25-8: OEL-AUSTRALIA:TWA 10 mg/m3

OEL-BELGIUM: TWA 10 mg/m3

OEL-SWITZERLAND: TWA 6 mg/m3

OEL-UNITED KINGDOM: TWA 10 mg/m3 (total dust) JAN9

OEL-UNITED KINGDOM: TWA 5 mg/m3 (resp. dust)

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/01/1998 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.