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Revision Date 03-May-2012

Revision Number 4

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product Identifier****Product Description:****Starch****Cat No.****S/7920/50, S/7920/65, S/7920/60****Synonyms**

Potato starch: iodine indicator.; Corn starch

Relevant identified uses of the substance or mixture and uses advised against**Recommended Use**

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet**Company**

Fisher Scientific UK

Bishop Meadow Rd

Loughborough, Leicestershire, Great Britain

LE115RG

Tel: 01509 231166

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

Tel: 01509 231166

Chemtrec US: (800) 424-9300

Chemtrec EU: 001 (202) 483-7616

SECTION 2. HAZARDS IDENTIFICATION**Classification of the substance or mixture****REGULATION (EC) No 1272/2008**

Not hazardous

Classification according to EU Directives 67/548/EEC or 1999/45/EC*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16***R-phrases(s)**

none

Label Elements**Signal Word**

None

Hazard Statements**Other Hazards**

No information available.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Starch 9005-25-8	EEC No. 232-679-6	100	9005-25-8		-	-

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES**Description of first aid measures****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact

Wash off immediately with plenty of water.. Get medical attention if symptoms occur..

Ingestion

Do not induce vomiting. Get medical attention if symptoms occur..

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur..

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for fire-fighters

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

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SECTION 6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE
Precautions for Safe Handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific End Uses
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters
Exposure limits
Component

Starch

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 30 mg/m ³ 15 min STEL: 12 mg/m ³ 15 min TWA: 10 mg/m ³ 8 hr TWA: 4 mg/m ³ 8 hr		TWA: 10 mg/m ³ 8 uren	VLA-ED: 10 mg/m ³ 8 horas

Component

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Italy	Germany	Portugal	The Netherlands	Finland
		TWA: 10 mg/m ³ 8 horas		

Component

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Austria	Denmark	Switzerland	Poland	Norway
		MAK: 3 mg/m ³ 8 Stunden		

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Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Starch	TWA: 10.0 mg/m ³	TWA: 4 mg/m ³ 8 satima. respirable dust TWA: 10 mg/m ³ 8 satima. total dust	TWA: 10 mg/m ³ 8 hr. total inhalable dust TWA: 4 mg/m ³ 8 hr. respirable dust		TWA: 4.0 mg/m ³ 8 hodinách. dust

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Starch			TWA: 10 mg/m ³ TWA: 5 mg/m ³		

Component	Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
Starch	MAC: 10 mg/m ³	TWA: 4 mg/m ³ total solid aerosol			

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls
Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment
Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
Physical State

Powder, Solid

Appearance

Off-white

odor

odorless

pH

5 - 7 (2 % Solution)

Vapor Pressure

negligible

Vapor Density

No information available.

Boiling Point/Range

No information available.

Melting Point/Range

No information available.

Decomposition temperature

200 °C

Flash Point

No information available.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Autoignition Temperature	400°C / 752°F
Water Solubility	Insoluble in cold water. Soluble in hot water
Specific Gravity	1.5
Molecular Formula	(C ₆ H ₁₀ O ₅) _n

SECTION 10. STABILITY AND REACTIVITYReactivityChemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	No information available.

Conditions to Avoid

Avoid dust formation, Incompatible products, Excess heat.

Incompatible MaterialsHazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂).**SECTION 11. TOXICOLOGICAL INFORMATION**Information on Toxicological EffectsAcute Toxicity

Product Information	No acute toxicity information is available for this product
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Component InformationChronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product
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Sensitization	No information available.
Mutagenic Effects	No information available

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SECTION 11. TOXICOLOGICAL INFORMATION

Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	None known.
Other Adverse Effects	The toxicological properties have not been fully investigated.
Endocrine Disruptor Information	None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO Not regulated

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SECTION 14. TRANSPORT INFORMATION
ADR Not regulated

IATA Not regulated

SECTION 15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Starch	232-679-6	-		XU	X	-	X	X	X	X	X

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment
SECTION 16. OTHER INFORMATION
Full text of R-phrases referred to under sections 2 and 3

No information available.

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Revision Summary

Reason for revision (M)SDS sections updated, 9.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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SECTION 16. OTHER INFORMATION**Disclaimer**

The information provided on this Safety Data Sheet 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 Safety Data Sheet