Safety Data Sheet
acc. to OSHA HCS

1 Identification
Product identifier
Product name: Starch, soluble, ACS

Stock number: 36703
CAS Number: 9005-84-9
EC number: 232-686-4

Relevant identified uses of the substance or mixture and uses advised against.
Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Information Department: Health, Safety and Environmental Department
Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification
Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)
The substance is not classified as hazardous according to 29 CFR 1910 (OSHA GHS).

Hazards not otherwise classified
No information known.

Label elements
GHS label elements Not applicable
Hazard pictograms Not applicable
Signal word Not applicable
Hazard statements Not applicable
WHMIS classification Not controlled

Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)

Health (acute effects) = 0
Flammability = 1
Physical Hazard = 0

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients
Chemical characterization: Substances
CAS# Description: 9005-84-9 Amylodextrin
Identification number(s):
EC number: 232-686-4

4 First-aid measures
Description of first aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing
Seek medical treatment.

Information for doctor
Most important symptoms and effects, both acute and delayed
No further relevant information available.

Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures
Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide

Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures
Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Environmental precautions: Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up: Pick up mechanically.

Prevention of secondary hazards: No special measures required.

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7 Handling and storage

Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: No data

Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:
Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards.

Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Material of gloves Nitrile rubber, NBR
Penetration time of glove material (in minutes) 480
Glove thickness 0.11 mm

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information
Appearance:
Form: Powder
Odor: Odorless

Odor threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/Melting range: 256-258 °C (493-496 °F) (dec)
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined
Flammability (solid, gaseous) Not determined.
Ignition temperature: Not determined
Decomposition temperature: Not determined
Auto igniting: Not determined.

Danger of explosion: Not determined.
Explosion limits:
Lower: Not determined
Upper: Not determined

Vapor pressure: Not applicable.
Density: Not determined.

Vapor density Not applicable.
Evaporation rate Not applicable.

Solubility in / Miscibility with
Water at 90 °C (194 °F): 50 g/l
Partition coefficient (n-octanol/water): Not determined.

Viscosity:
dynamic: Not applicable.

Kinematic: Not applicable.

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No information known.
Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions Reacts with strong oxidizing agents

(Contd. on page 3)
11 Toxicological information

11.1 Acute toxicity
No effects known.

11.2 Skin irritation or corrosion
May cause irritation

11.3 Eye irritation or corrosion
May cause irritation

11.4 Sensitization
No sensitizing effects known.

11.5 Germ cell mutagenicity
No effects known.

11.6 Carcinogenicity
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

11.7 Reproductive toxicity
No effects known.

11.8 Specific target organ system toxicity - single exposure
No effects known.

11.9 Specific target organ system toxicity - repeated exposure
No effects known.

11.10 Aspiration hazard
No effects known.

11.11 Subacute to chronic toxicity
No effects known.

11.12 Toxicological information
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

12.1 Aquatic toxicity
No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

12.5 Additional ecological information:
General notes: Avoid transfer into the environment.

13 Disposal considerations

13.1 Waste treatment methods
Consult state, local or national regulations to ensure proper disposal.

13.2 Uncleaned packagings
Consult state, local or national regulations to ensure proper disposal.

14 Transport information

14.1 UN-Number
Not applicable

14.2 DOT, ADN, IMDG, IATA
Not applicable

14.3 UN proper shipping name
DOT, ADN, IMDG, IATA
Not applicable

14.4 Transport hazard class(es)
DOT, ADN, IMDG, IATA
Class
Not applicable

14.5 Packing group
DOT, IMDG, IATA
Not applicable

14.6 Environmental hazards
Not applicable.

14.7 Special precautions for user
Not applicable.

14.8 Transport/Additional information:
DOT
Marine Pollutant (DOT):
No

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2 GHS label elements
Not applicable

15.3 Hazard pictograms
Not applicable

15.4 Signal word
Not applicable

15.5 Hazard statements
Not applicable

15.6 National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).
SARA Section 313 (specific toxic chemical listings) Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity Substance is not listed.

16 Other information

Although this chemical may sometimes be used as a food or drug or cosmetic, our products are not approved or suitable for such use or for human consumption. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department

Date of preparation / last revision 08/19/2016 / -

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)