Material Safety Data Sheet

acc. to OSHA and ANSI

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- 1 <u>Identification of substance:</u>
 - ♦ Product details:
 - ♦ Product name: Agar
 - ♦ Stock number: A10752
 - ♦ Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc. 30 Bond Street

50 Bolla Beleet

Ward Hill, MA 01835-8099

Emergency Phone: (978) 521-6300

CHEMTREC: (800) 424-9300 Web Site: www.alfa.com

- ♦ Information Department: Health, Safety and Environmental Department
- ♦ Emergency information:

During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

- 2 <u>Composition/Data on components:</u>
 - ♦ Chemical characterization:

Description: (CAS#)

Agar (CAS# 9002-18-0), 100%

- ♦ Identification number(s):
- **♦ EINECS Number:** 232-658-1
- 3 Hazards identification
 - ♦ Hazard description: Not applicable
 - ♦ Information pertaining to particular dangers for man and environment

Not applicable

- ♦ Classification system
- ♦ HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 0
Flammability = 1
Reactivity = 0

• 4 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.
- 5 Fire fighting measures

♦ Suitable extinguishing agents

Product is not flammable. Use fire fighting measures that suit the surrounding fire.

♦ Special hazards caused by the material, its products of combustion or

resulting gases:

In case of fire, the following can be released: Carbon monoxide and carbon dioxide

♦ Protective equipment:

Wear self-contained respirator.
Wear fully protective impervious suit.

• 6 Accidental release measures

♦ Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

♦ Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

- ◆ Measures for cleaning/collecting: Pick up mechanically.
- ♦ Additional information:

See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

• 7 <u>Handling and storage</u>

- ♦ Handling
- ♦ Information for safe handling:

Keep container tightly sealed. Store in cool, dry place in tightly closed containers. No special precautions are necessary if used correctly.

♦ Information about protection against explosions and fires:

The product is not flammable

- ♦ 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. Store away from water/moisture.

♦ Further information about storage conditions:

Protect from humidity and water.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

- 8 Exposure controls and 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.

<u>Components with limit values that require monitoring at the workplace:</u>

Not required.

- ♦ Additional information: No data
- ♦ Personal protective equipment
- ♦ General protective and hygienic measures

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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.

♦ Breathing equipment:

Use suitable respirator when high concentrations are present.

- ♦ Protection of hands: Impervious gloves
- ♦ Eye protection: Safety glasses
- ♦ Body protection: Protective work clothing.
- 9 Physical and chemical properties:
 - ♦ General Information
 - ♦ Form: Powder
 - ♦ Color:

White

Light yellow

- ♦ Odor: Odorless
- ♦ Value/Range Unit
 Method

♦ Change in condition

♦ Melting point/Melting range: Not determined

♦ Boiling point/Boiling range: Not determined

♦ Sublimation temperature / start: Not determined

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<pre>♦ Flash point:</pre>	Not applicable	
♦ Flammability (solid, gaseous)	Product is not flammable.	
<pre>◆ Ignition temperature:</pre>	Not determined	
♦ Decomposition temperature:	Not determined	
♦ Danger of explosion:		
Product does not present an explosion hazard.		
♦ Explosion limits:		
♦ Lower:	Not determined	
♦ Upper:	Not determined	
♦ Vapor pressure:	Not determined	
♦ Density:	Not determined	
♦ Solubility in / Miscibility with		
♦ Water:	Partly soluble	
Not determined		
• 10 Stability and reactivity		

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♦ Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

♦ Materials to be avoided:

Oxidizing agents Water/moisture

- ♦ Dangerous reactions No dangerous reactions known
- ♦ Dangerous products of decomposition: Carbon monoxide and carbon dioxide

• 11 Toxicological information

♦ Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral: LD50: 6100 mg/kg (ham)

LD50: 16000 mg/kg (mus)
LD50: 11000 mg/kg (rat)
LD50: 5800 mg/kg (rbt)

Primary irritant effect:

- ♦ on the skin: May cause irritation
- ♦ on the eye: May cause irritation
- ♦ Sensitization: No sensitizing effects known.
- ♦ Subacute to chronic toxicity:

Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.

♦ Additional toxicological information:

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

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No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.		
• 12 Ecological information:		
♦ General notes:		
Do not allow material to be released to the environment without proper governmental permits.		
• 13 <u>Disposal considerations</u>		
♦ Product:		
♦ Recommendation		
Consult state, local or national regulations to ensure proper disposal.		
♦ Uncleaned packagings:		
♦ Recommendation:		
Disposal must be made according to official regulations.		
• 14 <u>Transport information</u>		
Not a hazardous material for transportation.		
♦ DOT regulations:		
♦ Hazard class: None		

♦ Land transport ADR/RID (cross-border)

None

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♦ ADR/RID class:

♦ Maritime transport IMDG:

♦ IMDG Class:	None	
♦ Air transport ICAO-TI and	IATA-DGR:	
♦ ICAO/IATA Class:	None	
♦ Transport/Additional information:		
Not dangerous according to the above	specifications.	
• 15 <u>Regulations</u>		
♦ Product related hazard informations:		
Observe the general safety regulations when handling chemicals		
♦ National regulations		
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.		
♦ Information about limitation of use:		
For use only by technically qualified individuals.		
• 16 Other information:		

Contact: