

# SAFETY DATA SHEET

## Capture enhancement reagent



Version 1.1      Revision Date: 09-01-2018      SDS Number: 100000010878      Date of last issue: 15.11.2016  
Date of first issue: 15.11.2016

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Capture enhancement reagent

Substance name : Capture enhancement reagent  
7037

#### Manufacturer or supplier's details

Company : Menarini Silicon Biosystems, Inc

Address : 3401 Masons Mill Rd #100  
Huntingdon Valley, PA  
19006 USA

Telephone : 1 (800) 381-4929

Emergency telephone number : **US:(303) 389-1805**  
**International: +1 (303) 389-1805**

E-mail address : Us-info@siliconbiosystems.com  
Responsible/issuing person

#### Recommended use of the chemical and restrictions on use

Recommended use : Assay reagent

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS label elements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
sodium azide	26628-22-8	< 10

### SECTION 4. FIRST AID MEASURES

If inhaled : If breathed in, move person into fresh air.  
Consult a physician.

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|---|---|
| In case of skin contact   | : Take off contaminated clothing and shoes immediately.<br>Wash off with plenty of water.<br>If symptoms persist, call a physician.   |
| In case of eye contact  | : Rinse immediately with plenty of water, also under the eyelids,<br>for at least 5 minutes.<br>Remove contact lenses.<br>If eye irritation persists, consult a specialist. |
| If swallowed  | : If swallowed, rinse mouth with water (only if the person is con-<br>scious).<br>Call a physician immediately.   |
| Most important symptoms<br>and effects, both acute and<br>delayed | : No information available.   |
| Notes to physician  | : Treat symptomatically.  |
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### SECTION 5. FIREFIGHTING MEASURES

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|--|--|
| Suitable extinguishing media                     | : Use extinguishing measures that are appropriate to local cir-<br>cumstances and the surrounding environment. |
| Specific hazards during fire-<br>fighting        | : No information available.  |
| Specific extinguishing meth-<br>ods              | : No information available.  |
| Special protective equipment<br>for firefighters | : In the event of fire, wear self-contained breathing apparatus.   |
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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- |   |  |
|---|--|
| Personal precautions, protec-<br>tive equipment and emer-<br>gency procedures | : In the event of an accidental release the emergency response<br>team must respond based on a risk assessment and use per-<br>sonal protective equipment as appropriate.  |
| Environmental precautions   | : Should not be released into the environment.   |
| Methods and materials for<br>containment and cleaning up                      | : Large spills: Dam up. Soak up with inert absorbent material.<br>Keep in properly labelled containers.<br>Small spills: Gently cover the spill with an absorbent towel or<br>pad.<br>Large spills + Small spills: Keep in suitable, closed containers<br>for disposal. Treat recovered material as described in the sec-<br>tion "Disposal considerations". |
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### SECTION 7. HANDLING AND STORAGE

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|------------------------------|---------------------|
| Advice on protection against | : No data available |
|------------------------------|---------------------|
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## Capture enhancement reagent



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fire and explosion

Advice on safe handling : To avoid thermal decomposition, do not overheat.  
 Avoid inhalation, ingestion and contact with skin and eyes.  
 Use personal protective equipment as required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.  
 Store in original container.  
 Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Keep away from heat and sources of ignition.  
 Keep locked up.  
 Keep refrigerated.

Recommended storage temperature : 2 - 8 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sodium azide	26628-22-8	Peak limit	0.11 ppm 0.3 mg/m <sup>3</sup>	AU OEL
Further information: The exposure standards are established as gravimetric (mg/m <sup>3</sup> ) values and converted into volumetric values				
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH

**Engineering measures** : All personal protective equipment should be based on a risk assessment. Consult a Environment Health Safety expert if necessary.

#### Personal protective equipment

Respiratory protection : Engineering controls should always be the primary method of controlling exposures.  
 If respiratory protective equipment is needed for certain activities, the type as well as the corresponding protection factor will depend upon the risk assessment and air concentrations, hazards, physical and warning properties of substances present.  
 No personal respiratory protective equipment normally required.

Hand protection

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## Capture enhancement reagent



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Remarks : Disposable gloves

Eye protection : No special precautions required.

Skin and body protection : No special precautions required.

Protective measures : The type of protective equipment must be selected based on the Environmental Health and Safety risk assessment. Consult a Environmental Health and Safety expert if necessary.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear

Odour : No data available

### SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : None known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### **Product:**

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

##### **Components:**

##### **sodium azide:**

Acute oral toxicity : LD50 (Rat): 27 mg/kg

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

# SAFETY DATA SHEET

## Capture enhancement reagent



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### Respiratory or skin sensitisation

No data available

### Chronic toxicity

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

#### Repeated dose toxicity

No data available

#### Aspiration toxicity

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **sodium azide:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.7 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 4.2 mg/l  
Exposure time: 96 h

Toxicity to algae : IC50: 272 mg/l

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 38.5 mg/l

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

# SAFETY DATA SHEET

## Capture enhancement reagent



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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : In accordance with National, Federal, State and Local regulations.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
- 

### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### National Regulations

##### ADG

Not regulated as a dangerous good

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### SECTION 15. REGULATORY INFORMATION

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

Restricted to professional users.

R-phrases(s) : R22 Harmful if swallowed.

S-phrases(s) : S60 This material and its container must be disposed of as hazardous waste.

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### SECTION 16. OTHER INFORMATION

#### Full text of other abbreviations

# SAFETY DATA SHEET

## Capture enhancement reagent



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AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date format : dd.mm.yyyy  
Numbers 123,456.78

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

AU / EN

# SAFETY DATA SHEET

## PBS/Biotin



Version 1.13      Revision Date: 09.01.2018      SDS Number: 100000010966      Date of last issue: 27.10.2016  
Date of first issue: 18.09.2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PBS/Biotin

Substance name : PBS/Biotin  
7044

#### Manufacturer or supplier's details

Company : Menarini Silicon Biosystems, Inc

Address : 3401 Masons Mill Rd #100  
Huntingdon Valley, PA  
19006 USA

Telephone : 1 (800) 381-4929

**Emergency telephone number** : **US:(303) 389-1805**  
**International: +1 (303) 389-1805**

E-mail address : Us-info@siliconbiosystems.com  
Responsible/issuing person

#### Recommended use of the chemical and restrictions on use

Recommended use : Assay reagent

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS label elements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
sodium azide	26628-22-8	< 10

### SECTION 4. FIRST AID MEASURES

If inhaled : If breathed in, move person into fresh air.  
Consult a physician.



# SAFETY DATA SHEET

## PBS/Biotin



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- In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with plenty of water. If symptoms persist, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : Treat symptomatically.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire-fighting : No information available.
- Specific extinguishing methods : No information available.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : In the event of an accidental release the emergency response team must respond based on a risk assessment and use personal protective equipment as appropriate.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Large spills: Dam up. Soak up with inert absorbent material. Keep in properly labelled containers. Small spills: Gently cover the spill with an absorbent towel or pad. Large spills + Small spills: Keep in suitable, closed containers for disposal. Treat recovered material as described in the section "Disposal considerations".

### SECTION 7. HANDLING AND STORAGE

- Advice on protection against : No data available

# SAFETY DATA SHEET

## PBS/Biotin



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 Date of first issue: 18.09.2015

fire and explosion

Advice on safe handling : To avoid thermal decomposition, do not overheat.  
 Avoid inhalation, ingestion and contact with skin and eyes.  
 Use personal protective equipment as required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.  
 Store in original container.  
 Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Keep away from heat and sources of ignition.  
 Keep locked up.  
 Keep refrigerated.

Recommended storage temperature : 2 - 8 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sodium azide	26628-22-8	Peak limit	0.11 ppm 0.3 mg/m <sup>3</sup>	AU OEL
Further information: The exposure standards are established as gravimetric (mg/m <sup>3</sup> ) values and converted into volumetric values				
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH

**Engineering measures** : All personal protective equipment should be based on a risk assessment. Consult a Environment Health Safety expert if necessary.

#### Personal protective equipment

Respiratory protection : Engineering controls should always be the primary method of controlling exposures.  
 If respiratory protective equipment is needed for certain activities, the type as well as the corresponding protection factor will depend upon the risk assessment and air concentrations, hazards, physical and warning properties of substances present.  
 No personal respiratory protective equipment normally required.

Hand protection

# SAFETY DATA SHEET

## PBS/Biotin



Version 1.13      Revision Date: 09.01.2018      SDS Number: 100000010966      Date of last issue: 27.10.2016  
Date of first issue: 18.09.2015

Remarks : Disposable gloves

Eye protection : No special precautions required.

Skin and body protection : No special precautions required.

Protective measures : The type of protective equipment must be selected based on the Environmental Health and Safety risk assessment. Consult a Environmental Health and Safety expert if necessary.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear

Odour : odourless

### SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : None known.

Hazardous decomposition products : None known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

##### Components:

##### **sodium azide:**

Acute oral toxicity : LD50 (Rat): 27 mg/kg

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

# SAFETY DATA SHEET

## PBS/Biotin



Version 1.13      Revision Date: 09.01.2018      SDS Number: 100000010966      Date of last issue: 27.10.2016  
Date of first issue: 18.09.2015

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### Respiratory or skin sensitisation

No data available

### Chronic toxicity

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

#### Repeated dose toxicity

No data available

#### Aspiration toxicity

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **sodium azide:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.7 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 4.2 mg/l  
Exposure time: 96 h

Toxicity to algae : IC50: 272 mg/l

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 38.5 mg/l

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

# SAFETY DATA SHEET

## PBS/Biotin



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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : In accordance with National, Federal, State and Local regulations.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
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### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### National Regulations

##### ADG

Not regulated as a dangerous good

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### SECTION 15. REGULATORY INFORMATION

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

Restricted to professional users.

R-phrases : R22 Harmful if swallowed.

S-phrases : S60 This material and its container must be disposed of as hazardous waste.

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### SECTION 16. OTHER INFORMATION

#### Full text of other abbreviations

# SAFETY DATA SHEET

## PBS/Biotin



Version	Revision Date:	SDS Number:	Date of last issue: 27.10.2016
1.13	09.01.2018	100000010966	Date of first issue: 18.09.2015

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AU / EN

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



Version 1.11      Revision Date: 09.01.2018      SDS Number: 100000010880      Date of last issue: 15.11.2016  
Date of first issue: 18.09.2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Anti-EpCAM ferrofluid

Substance name : Anti-EpCAM ferrofluid  
7036

#### Manufacturer or supplier's details

Company : Menarini Silicon Biosystems, Inc

Address : 3401 Masons Mill Rd #100  
Huntingdon Valley, PA  
19006 USA

Telephone : 1 (800) 381-4929

**Emergency telephone number** : **US:(303) 389-1805**  
**International: +1 (303) 389-1805**

E-mail address : Us-  
Responsible/issuing person info@siliconbiosystems.com

#### Recommended use of the chemical and restrictions on use

Recommended use : Assay reagent

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS label elements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Anti-EpCAM mouse mAb conjugated to Ferrofluid	Not Assigned	< 10

### SECTION 4. FIRST AID MEASURES

If inhaled : If breathed in, move person into fresh air.  
Consult a physician.

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## Anti-EpCAM ferrofluid



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- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off immediately with plenty of water.  
If symptoms persist, call a physician.  
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,  
for at least 5 minutes.  
Remove contact lenses.  
If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, rinse mouth with water (only if the person is con-  
scious).  
Call a physician immediately.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : Treat symptomatically.
- 

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-  
cumstances and the surrounding environment.
- Specific hazards during fire-fighting : No information available.
- Specific extinguishing meth-ods : No information available.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- 

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protec-tive equipment and emer-gency procedures : In the event of an accidental release the emergency response team must respond based on a risk assessment and use per-sonal protective equipment as appropriate.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Large spills: Dam up. Soak up with inert absorbent material.  
Keep in properly labelled containers.  
Small spills: Gently cover the spill with an absorbent towel or pad.  
Large spills + Small spills: Keep in suitable, closed containers for disposal. Treat recovered material as described in the sec-tion "Disposal considerations".
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### SECTION 7. HANDLING AND STORAGE



**SAFETY DATA SHEET**  
**Anti-EpCAM ferrofluid**



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 Date of first issue: 18.09.2015

- Advice on protection against fire and explosion : No data available
- Advice on safe handling : To avoid thermal decomposition, do not overheat. Avoid inhalation, ingestion and contact with skin and eyes. Use personal protective equipment as required.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
- Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up. Keep refrigerated.
- Recommended storage temperature : 2 - 8 °C

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Anti-EpCAM mouse mAb conjugated to Ferrofluid	Not Assigned	PBOEL-HHC	2	J&J OEL/PBOEL HHC
Further information: J&J has a hazard banding notation: PBOEL HHC. This substance is classified by J&J as being PBOEL HHC 2. This means that the OEL is estimated to be from 20 to 100 µg/m3				

**Engineering measures** : All personal protective equipment should be based on a risk assessment. Consult a Environment Health Safety expert if necessary.

**Personal protective equipment**

Respiratory protection : Engineering controls should always be the primary method of controlling exposures. If respiratory protective equipment is needed for certain activities, the type as well as the corresponding protection factor will depend upon the risk assessment and air concentrations, hazards, physical and warning properties of substances present. No personal respiratory protective equipment normally required.

Hand protection

Remarks : Disposable gloves

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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Eye protection : No special precautions required.

Skin and body protection : No special precautions required.

Protective measures : The type of protective equipment must be selected based on the Environmental Health and Safety risk assessment. Consult a Environmental Health and Safety expert if necessary.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : brown

pH : 7.5

Solubility(ies)  
Water solubility : soluble

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : None known.

Hazardous decomposition products : None known.

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### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

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### **Chronic toxicity**

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

No data available

#### **Reproductive toxicity**

No data available

#### **STOT - single exposure**

No data available

#### **STOT - repeated exposure**

No data available

#### **Repeated dose toxicity**

No data available

#### **Aspiration toxicity**

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

No data available

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

### **Other adverse effects**

No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### **Disposal methods**

Waste from residues : In accordance with National, Federal, State and Local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14. TRANSPORT INFORMATION

### **International Regulations**

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

### ADG

Not regulated as a dangerous good

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## SECTION 15. REGULATORY INFORMATION

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

Restricted to professional users.

R-phrases(s)	: R43	May cause sensitisation by skin contact.
S-phrases(s)	: S24 S37 S60	Avoid contact with skin. Wear suitable gloves. This material and its container must be disposed of as hazardous waste.

## SECTION 16. OTHER INFORMATION

### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Pre-

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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Date format : dd.mm.yyyy  
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The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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# SAFETY DATA SHEET

## Dilution buffer



Version 1.12      Revision Date: 09.01.2018      SDS Number: 100000010879      Date of last issue: 27.10.2016  
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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dilution buffer

Substance name : Dilution buffer  
7039

#### Manufacturer or supplier's details

Company : Menarini Silicon Biosystems, Inc

Address : 3401 Masons Mill Rd #100  
Huntingdon Valley, PA  
19006 USA

Telephone : 1 (800) 381-4929

Emergency telephone number : **US:(303) 389-1805**  
**International: +1 (303) 389-1805**

E-mail address : Us-info@siliconbiosystems.com  
Responsible/issuing person

#### Recommended use of the chemical and restrictions on use

Recommended use : Assay reagent

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Not a hazardous substance or mixture.

#### GHS label elements

Not a hazardous substance or mixture.

#### Other hazards which do not result in classification

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid

#### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
sodium azide	26628-22-8	< 10

### SECTION 4. FIRST AID MEASURES

If inhaled : If breathed in, move person into fresh air.  
Consult a physician.

# SAFETY DATA SHEET

## Dilution buffer



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- In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with plenty of water. If symptoms persist, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, rinse mouth with water (only if the person is conscious). Call a physician immediately.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : Treat symptomatically.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire-fighting : No information available.
- Specific extinguishing methods : No information available.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : In the event of an accidental release the emergency response team must respond based on a risk assessment and use personal protective equipment as appropriate.
- Environmental precautions : Should not be released into the environment.
- Methods and materials for containment and cleaning up : Large spills: Dam up. Soak up with inert absorbent material. Keep in properly labelled containers. Small spills: Gently cover the spill with an absorbent towel or pad. Large spills + Small spills: Keep in suitable, closed containers for disposal. Treat recovered material as described in the section "Disposal considerations".

### SECTION 7. HANDLING AND STORAGE

- Advice on protection against : No data available

# SAFETY DATA SHEET

## Dilution buffer



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fire and explosion

Advice on safe handling : To avoid thermal decomposition, do not overheat.  
 Avoid inhalation, ingestion and contact with skin and eyes.  
 Use personal protective equipment as required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.  
 Store in original container.  
 Keep containers tightly closed in a dry, cool and well-ventilated place.  
 Keep away from heat and sources of ignition.  
 Keep locked up.  
 Keep refrigerated.

Recommended storage temperature : 2 - 8 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sodium azide	26628-22-8	Peak limit	0.11 ppm 0.3 mg/m <sup>3</sup>	AU OEL
Further information: The exposure standards are established as gravimetric (mg/m <sup>3</sup> ) values and converted into volumetric values				
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH

**Engineering measures** : All personal protective equipment should be based on a risk assessment. Consult a Environment Health Safety expert if necessary.

#### Personal protective equipment

Respiratory protection : Engineering controls should always be the primary method of controlling exposures.  
 If respiratory protective equipment is needed for certain activities, the type as well as the corresponding protection factor will depend upon the risk assessment and air concentrations, hazards, physical and warning properties of substances present.  
 No personal respiratory protective equipment normally required.

Hand protection



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Remarks : Disposable gloves

Eye protection : No special precautions required.

Skin and body protection : No special precautions required.

Protective measures : The type of protective equipment must be selected based on the Environmental Health and Safety risk assessment. Consult a Environmental Health and Safety expert if necessary.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear

Odour : odourless

pH : 7.5

Solubility(ies)  
Water solubility : soluble

### SECTION 10. STABILITY AND REACTIVITY

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : Oxidizing agents

Hazardous decomposition products : None known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

##### **Product:**

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

##### **Components:**

##### **sodium azide:**

Acute oral toxicity : LD50 (Rat): 27 mg/kg

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### **Skin corrosion/irritation**

No data available

### **Serious eye damage/eye irritation**

No data available

### **Respiratory or skin sensitisation**

No data available

### **Chronic toxicity**

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

No data available

#### **Reproductive toxicity**

No data available

#### **STOT - single exposure**

No data available

#### **STOT - repeated exposure**

No data available

#### **Repeated dose toxicity**

No data available

#### **Aspiration toxicity**

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

#### **Components:**

##### **sodium azide:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.7 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 4.2 mg/l  
Exposure time: 96 h

Toxicity to algae : IC50: 272 mg/l

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 38.5 mg/l

#### **Persistence and degradability**

No data available

#### **Bioaccumulative potential**

No data available

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### Mobility in soil

No data available

### Other adverse effects

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : In accordance with National, Federal, State and Local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### ADG

Not regulated as a dangerous good

## SECTION 15. REGULATORY INFORMATION

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

Restricted to professional users.

R-phrases) : R22 Harmful if swallowed.

S-phrases) : S60 This material and its container must be disposed of as hazardous waste.

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## Dilution buffer



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### SECTION 16. OTHER INFORMATION

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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