

**Capture enhancement reagent**

Version 1.46      Revision Date: 2018/01/09      SDS Number: 100000010878      Date of last issue: 2017/08/04  
Date of first issue: 2015/02/04

**SECTION 1. IDENTIFICATION**

Product name : Capture enhancement reagent  
Substance name : Capture enhancement reagent  
7037

**Manufacturer or supplier's details**

Company name of supplier : Menarini Silicon Biosystems, Inc

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

Telephone : 1 (800) 381-4929  
E-mail address Responsible/issuing person : Us-info@siliconbiosystems.com

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

**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**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Liquid

**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
sodium azide	26628-22-8	>= 0.1 - < 1

**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. 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.
Further information	: 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
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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.

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	C	0.1 ppm (HN <sub>3</sub> )	NIOSH REL
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.1 ppm (Ammonia)	OSHA P0
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	NIOSH REL
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	OSHA P0
		C	0.1 ppm 0.3 mg/m <sup>3</sup>	CAL PEL

**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 re-

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quired.

Hand protection

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.

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

**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: > 5,000 mg/kg  
Method: Calculation method**Components:**

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**sodium azide**

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

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**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

**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 : EC50 (Daphnia pulex (Water flea)): 4.2 mg/l

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aquatic invertebrates                      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****Product:**

Ozone-Depletion Potential                : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances  
Remarks: This product neither contains, nor was  
manufactured with a Class I or Class II ODS as defined by the  
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +  
B).

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues                        : In accordance with National, Federal, State and Local regula-  
tions.

Contaminated packaging                    : Empty containers should be taken to an approved waste han-  
dling 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

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

Not applicable for product as supplied.

**National Regulations**
**49 CFR**

Not regulated as a dangerous good

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**SECTION 15. REGULATORY INFORMATION**
**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

**Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

DINATRIUMMONOHYD	7558-79-4	0.122 %
ROGEENFOSFAAT		

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

DINATRIUMMONOHYD	7558-79-4	0.122 %
ROGEENFOSFAAT		

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**Massachusetts Right To Know**

sodium azide	26628-22-8	0.1 - 1 %
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**Pennsylvania Right To Know**

water	7732-18-5	90 - 100 %
DINATRIUMMONOHYDROGEENFOSFAAT	7558-79-4	0.1 - 1 %
sodium azide	26628-22-8	0.1 - 1 %

**New Jersey Right To Know**

water	7732-18-5	90 - 100 %
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**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Other regulations**

: Restricted to professional users.

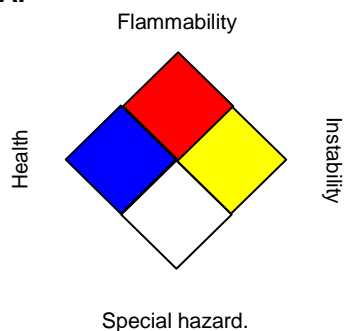
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### SECTION 16. OTHER INFORMATION

#### Further information

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	
<b>FLAMMABILITY</b>	
<b>PHYSICAL HAZARD</b>	

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Revision Date : 2018/01/09

#### Date and Number Formats

This document uses the following notation for printing dates and numbers:

**Date:**                      Dec 31th, 2012                      as                      2012/12/31  
**Numbers:**                      123456,78                      as                      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.

US / EN



**PBS/Biotin**

Version 1.31      Revision Date: 2018/2/26      SDS Number: 100000010966      Date of last issue: 2016/11/22  
Date of first issue: 2015/02/04

**SECTION 1. IDENTIFICATION**

Product name : PBS/Biotin  
Substance name : PBS/Biotin  
7044

**Manufacturer or supplier's details**

Company name of supplier : Menarini Silicon Biosystems, Inc.

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

Telephone : 1 (800) 381-4929  
E-mail address Responsible/issuing person : Us-info@siliconbiosystems.com

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

**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**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Liquid

**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
sodium azide	26628-22-8	$\geq 0.1 - < 1$

**SECTION 4. FIRST AID MEASURES**

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

## 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 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.
Further information	: 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".

### SECTION 7. HANDLING AND STORAGE

Advice on protection against	: No data available
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## PBS/Biotin

Version 1.31      Revision Date: 2018/2/26      SDS Number: 100000010966      Date of last issue: 2016/11/22  
Date of first issue: 2015/02/04

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.

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	C	0.1 ppm (HN3)	NIOSH REL
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.1 ppm (Ammonia)	OSHA P0
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	NIOSH REL
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	OSHA P0
		C	0.1 ppm 0.3 mg/m <sup>3</sup>	CAL PEL

**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 re-

**PBS/Biotin**

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/22
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quired.

Hand protection

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.

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

**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: > 5,000 mg/kg  
Method: Calculation method**Components:**

**PBS/Biotin**

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/22
1.31	2018/2/26	100000010966	Date of first issue: 2015/02/04

**sodium azide**

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

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**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

**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 : EC50 (Daphnia pulex (Water flea)): 4.2 mg/l

**PBS/Biotin**

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/22
1.31	2018/2/26	100000010966	Date of first issue: 2015/02/04

aquatic invertebrates	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****Product:**

Ozone-Depletion Potential	: Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
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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

## PBS/Biotin

Version	Revision Date:	SDS Number:	Date of last issue: 2016/11/22
1.31	2018/2/26	100000010966	Date of first issue: 2015/02/04

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

Not applicable for product as supplied.

### National Regulations

#### 49 CFR

Not regulated as a dangerous good

## SECTION 15. REGULATORY INFORMATION

### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

DINATRIUMMONOHYD	7558-79-4	0.2 %
ROGEENFOSFAAT		

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

DINATRIUMMONOHYD	7558-79-4	0.2 %
ROGEENFOSFAAT		

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### Massachusetts Right To Know

sodium azide	26628-22-8	0.1 - 1 %
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### Pennsylvania Right To Know

water	7732-18-5	90 - 100 %
DINATRIUMMONOHYDROGEENFOSFAAT	7558-79-4	0.1 - 1 %
sodium azide	26628-22-8	0.1 - 1 %

### New Jersey Right To Know

water	7732-18-5	90 - 100 %
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### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### Other regulations

: Restricted to professional users.

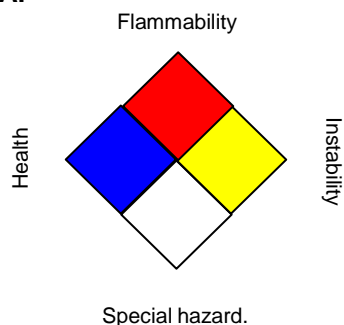
## PBS/Biotin

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 Date of first issue: 2015/02/04

### SECTION 16. OTHER INFORMATION

#### Further information

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	
<b>FLAMMABILITY</b>	
<b>PHYSICAL HAZARD</b>	

0 = not significant, 1 =Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Revision Date : 2016/11/22

#### Date and Number Formats

This document uses the following notation for printing dates and numbers:

**Date:** Dec 31th, 2012 as 2012/12/31  
**Numbers:** 123456,78 as 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.

US / EN



# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



Version 1.38      Revision Date: 2017/12/22      SDS Number: 100000010880      Date of last issue: 2017/08/03  
Date of first issue: 2015/02/04

### SECTION 1. IDENTIFICATION

Product name : Anti-EpCAM ferrofluid  
Substance name : Anti-EpCAM ferrofluid  
7036

#### Manufacturer or supplier's details

Company name of supplier : Menarini Silicon Biosystems, Inc

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

Telephone : 1 (800) 381-4929

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

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

#### 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

None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Liquid

#### Hazardous components

Chemical name	CAS-No.	Concentration (%)
Anti-EpCAM mouse mAb conjugated to Ferrofluid	Not Assigned	< 0.1

### SECTION 4. FIRST AID MEASURES

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

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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- |   |  |
|---|--|
| In case of skin contact   | : Take off contaminated clothing and shoes immediately.<br>Wash off immediately with plenty of water.<br>If symptoms persist, call a physician.<br>Wash contaminated clothing before re-use. |
| 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.   |
- 

### SECTION 5. FIREFIGHTING MEASURES

- |  |  |
|--|--|
| 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.  |
| Further information                              | : No information available.  |
| Special protective equipment<br>for firefighters | : In the event of fire, wear self-contained breathing apparatus.   |
- 

### 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

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



Version 1.38      Revision Date: 2017/12/22      SDS Number: 100000010880      Date of last issue: 2017/08/03  
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- 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.
- 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

Eye protection : No special precautions required.

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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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.

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

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : brown

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 : None known.

Hazardous decomposition products : None known.

### 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

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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### **Germ cell mutagenicity**

No data available

### **Carcinogenicity**

#### **IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### **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**

#### **Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances  
Remarks: This product neither contains, nor was  
manufactured with a Class I or Class II ODS as defined by the  
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

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B).

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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****49 CFR**

Not regulated as a dangerous good

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**SECTION 15. REGULATORY INFORMATION****Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.  
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know

water      7732-18-5      90 - 100 %

### New Jersey Right To Know

water      7732-18-5      90 - 100 %

### California Prop 65

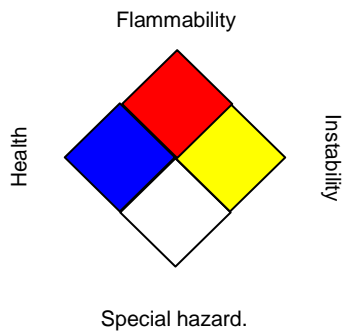
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Other regulations** : Restricted to professional users.

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	
<b>FLAMMABILITY</b>	
<b>PHYSICAL HAZARD</b>	

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 2016/11/22

### Date and Number Formats

This document uses the following notation for printing dates and numbers:

**Date:** Dec 31th, 2012 as 2012/12/31  
**Numbers:** 123456,78 as 123,456.78

# SAFETY DATA SHEET

## Anti-EpCAM ferrofluid



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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.

US / EN



**Dilution buffer**

Version 1.40      Revision Date: 2018/01/09      SDS Number: 100000010879      Date of last issue: 2017/08/04  
Date of first issue: 2015/02/04

**SECTION 1. IDENTIFICATION**

Product name : Dilution buffer  
Substance name : Dilution buffer  
7039

**Manufacturer or supplier's details**

Company name of supplier : Menarini Silicon Biosystems, Inc

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

Telephone : 1 (800) 381-4929  
E-mail address Responsible/issuing person : Us-info@siliconbiosystems.com

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

**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**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Liquid

**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
sodium azide	26628-22-8	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

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

## Dilution buffer

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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, 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 conscious).<br>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.   |
| Further information                           | : 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.<br>Small spills: Gently cover the spill with an absorbent towel or pad.<br>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 |
|------------------------------|---------------------|

## Dilution buffer

Version 1.40      Revision Date: 2018/01/09      SDS Number: 100000010879      Date of last issue: 2017/08/04  
Date of first issue: 2015/02/04

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.

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	C	0.1 ppm (HN <sub>3</sub> )	NIOSH REL
		C (Vapour)	0.11 ppm (Hydrazoic acid)	ACGIH
		C	0.1 ppm (Ammonia)	OSHA P0
		C	0.29 mg/m <sup>3</sup> (Sodium azide)	ACGIH
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	NIOSH REL
		C	0.3 mg/m <sup>3</sup> (Sodium azide)	OSHA P0
		C	0.1 ppm 0.3 mg/m <sup>3</sup>	CAL PEL

**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 re-

**Dilution buffer**

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quired.

Hand protection

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.

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

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : clear

Odour : odourless

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 : Oxidizing agents

Hazardous decomposition products : None known.

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

**Dilution buffer**

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Acute oral toxicity : Acute toxicity estimate: > 5,000 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

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**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

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:**

**Dilution buffer**

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**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****Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances  
Remarks: This product neither contains, nor was  
manufactured with a Class I or Class II ODS as defined by the  
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +  
B).

**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**

## Dilution buffer

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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

#### 49 CFR

Not regulated as a dangerous good

## SECTION 15. REGULATORY INFORMATION

### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

DINATRIUMMONOHD	7558-79-4	0.12 %
ROGEENFOSFAAT		

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

DINATRIUMMONOHD	7558-79-4	0.12 %
ROGEENFOSFAAT		

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

### Massachusetts Right To Know

sodium azide	26628-22-8	0.1 - 1 %
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### Pennsylvania Right To Know

water	7732-18-5	90 - 100 %
DINATRIUMMONOHDROGEENFOSFAAT	7558-79-4	0.1 - 1 %
sodium azide	26628-22-8	0.1 - 1 %

### New Jersey Right To Know

water	7732-18-5	90 - 100 %
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### California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Dilution buffer

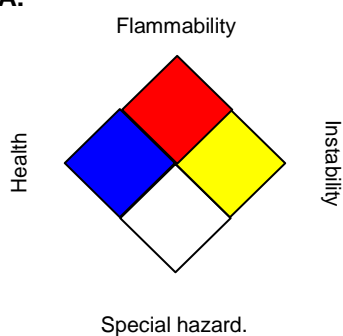
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 Date of first issue: 2015/02/04

**Other regulations** : Restricted to professional users.

### SECTION 16. OTHER INFORMATION

#### Further information

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	
<b>FLAMMABILITY</b>	
<b>PHYSICAL HAZARD</b>	

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Revision Date : 2016/11/22

#### Date and Number Formats

This document uses the following notation for printing dates and numbers:

**Date:**                      Dec 31th, 2012                      as                      2012/12/31  
**Numbers:**                      123456,78                      as                      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.

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