

# SAFETY DATA SHEET



Polar Ion APP Kit - 500Mg - 30/Pk, Part Number 12102057

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

### 1.1 Product identifier

**Product name** : Polar Ion APP Kit - 500Mg - 30/Pk, Part Number 12102057  
**Part No. (Kit)** : 12102057  
**Part No.** :  
Silica gel 30511001  
Organosilane bonded silica gel 32531010  
Organosilane bonded silica gel 32531014  
Organosilane bonded silica gel 32531015  
Organosilane bonded silica gel 32531017  
Organosilane bonded silica gel 32531018

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Analytical chemistry. cartridge	
Silica gel	250 mg
Organosilane bonded silica gel	250 mg
Organosilane bonded silica gel	250 mg
Organosilane bonded silica gel	250 mg
Organosilane bonded silica gel	250 mg
Organosilane bonded silica gel	250 mg

### 1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

### 2.1 Classification of the substance or mixture

Polar Ion APP Kit - 500Mg - 30/Pk, Part Number 12102057

## SECTION 2: Hazards identification

<b>Product definition</b>	: Silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)

### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

<b>Signal word</b>	: Silica gel	No signal word.
	Organosilane bonded silica gel	No signal word.
	Organosilane bonded silica gel	No signal word.
	Organosilane bonded silica gel	No signal word.
	Organosilane bonded silica gel	No signal word.
	Organosilane bonded silica gel	No signal word.

<b>Hazard statements</b>	: Silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.

### Precautionary statements

<b>Prevention</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.

<b>Response</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.

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## SECTION 2: Hazards identification

	Organosilane bonded silica gel	Not applicable.
<b>Storage</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
<b>Disposal</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
<b>Supplemental label elements</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.

### 2.3 Other hazards

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## SECTION 2: Hazards identification

<b>Other hazards which do not result in classification</b>	<b>:</b> Silica gel	May form explosible dust-air mixture if dispersed.
	Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed.
	Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed.
	Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed.
	Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed.
	Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed.

## SECTION 3: Composition/information on ingredients

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

<b>3.1 Substances</b>	<b>:</b> Silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)
	Organosilane bonded silica gel	Mono-constituent substance (encapsulated in article)

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<b>Silica gel</b> Silica, amorphous, precipitated and gel	CAS: 112926-00-8	100	Not classified.	[A]
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	100	Not classified.	[A]
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	100	Not classified.	[A]
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	100	Not classified.	[A]
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	100	Not classified.	[A]
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	100	Not classified.	[A]

Note: The hazard information listed is based on unbonded silica gel CAS Number 112926-00-8. To the best of our knowledge, the acute and chronic toxicological properties of bonded silica gels have not been investigated. This product contains synthetic amorphous silica, and should not be confused with crystalline silica such as quartz, cristobalite, or tridymite, or with diatomaceous earth or other naturally occurring forms of amorphous silica that frequently contain crystalline forms of silica.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

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## SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy
- [A] Constituent
- [B] Impurity
- [C] Stabilising additive

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	: Silica gel	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Organosilane bonded silica gel	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Organosilane bonded silica gel	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
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	Organosilane bonded silica gel	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Organosilane bonded silica gel	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
<b>Inhalation</b>	: Silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: Silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

## SECTION 4: First aid measures

	Organosilane bonded silica gel	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: Silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Organosilane bonded silica gel	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
<b>Protection of first-aiders</b>	: Silica gel	No action shall be taken involving any personal risk or without suitable training.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: Silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.



**SECTION 4: First aid measures**

	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
<b>Inhalation</b>	: Silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
<b>Skin contact</b>	: Silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
<b>Ingestion</b>	: Silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

<b>Eye contact</b>	: Silica gel	Adverse symptoms may include the following: irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:

**SECTION 4: First aid measures**

		irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		irritation redness
<b>Inhalation</b>	: <input checked="" type="checkbox"/> silica gel	Adverse symptoms may include the following: respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:
		respiratory tract irritation coughing
<b>Skin contact</b>	: <input checked="" type="checkbox"/> silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**



## SECTION 4: First aid measures

<b>Notes to physician</b>	: Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	: Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Use dry chemical powder. Use dry chemical powder. Use dry chemical powder. Use dry chemical powder. Use dry chemical powder. Use dry chemical powder. Use dry chemical powder.
<b>Unsuitable extinguishing media</b>	: Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

### 5.2 Special hazards arising from the substance or mixture

<b>Hazards from the substance or mixture</b>	: Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed. May form explosible dust-air mixture if dispersed.
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## SECTION 5: Firefighting measures

<b>Hazardous combustion products</b>	: Silica gel	Decomposition products may include the following materials: metal oxide/oxides
	Organosilane bonded silica gel	Decomposition products may include the following materials:  carbon dioxide carbon monoxide metal oxide/oxides
	Organosilane bonded silica gel	Decomposition products may include the following materials:  carbon dioxide carbon monoxide metal oxide/oxides
	Organosilane bonded silica gel	Decomposition products may include the following materials:  carbon dioxide carbon monoxide metal oxide/oxides
	Organosilane bonded silica gel	Decomposition products may include the following materials:  carbon dioxide carbon monoxide metal oxide/oxides
	Organosilane bonded silica gel	Decomposition products may include the following materials:  carbon dioxide carbon monoxide metal oxide/oxides

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: Silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Organosilane bonded silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Organosilane bonded silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Organosilane bonded silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Organosilane bonded silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	Organosilane bonded silica gel	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

## SECTION 5: Firefighting measures

### Special protective equipment for fire-fighters

: Silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Organosilane bonded silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Organosilane bonded silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Organosilane bonded silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Organosilane bonded silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Organosilane bonded silica gel	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.



## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

: Silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.

**SECTION 6: Accidental release measures**

		Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
	Organosilane bonded silica gel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	:  Silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Organosilane bonded silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Organosilane bonded silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Organosilane bonded silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Organosilane bonded silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Organosilane bonded silica gel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
<b>6.2 Environmental precautions</b>	:  Silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Organosilane bonded silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Organosilane bonded silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Organosilane bonded silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Organosilane bonded silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Organosilane bonded silica gel	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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## SECTION 6: Accidental release measures

silica gel	soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
------------	---

### 6.3 Methods and material for containment and cleaning up

<b>Methods for cleaning up</b> : Silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Organosilane bonded silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Organosilane bonded silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Organosilane bonded silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Organosilane bonded silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Organosilane bonded silica gel	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b> : Silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Organosilane bonded silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.



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## SECTION 7: Handling and storage

Organosilane bonded silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Organosilane bonded silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Organosilane bonded silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
Organosilane bonded silica gel	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
<b>Advice on general occupational hygiene</b> : Silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Organosilane bonded silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.



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## SECTION 7: Handling and storage

Organosilane bonded silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Organosilane bonded silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Organosilane bonded silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Organosilane bonded silica gel	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

: Silica gel

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Organosilane bonded silica gel

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Organosilane bonded silica gel

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Organosilane bonded

Store in accordance with local regulations. Store in a

## SECTION 7: Handling and storage

silica gel	segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Organosilane bonded silica gel	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Organosilane bonded silica gel	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

#### Recommendations

: <input checked="" type="checkbox"/> Silica gel	Industrial applications, Professional applications.
Organosilane bonded silica gel	Industrial applications, Professional applications.
Organosilane bonded silica gel	Industrial applications, Professional applications.
Organosilane bonded silica gel	Industrial applications, Professional applications.
Organosilane bonded silica gel	Industrial applications, Professional applications.
Organosilane bonded silica gel	Industrial applications, Professional applications.

#### Industrial sector specific solutions

: <input checked="" type="checkbox"/> Silica gel	Not applicable.
Organosilane bonded silica gel	Not applicable.
Organosilane bonded silica gel	Not applicable.
Organosilane bonded silica gel	Not applicable.
Organosilane bonded silica gel	Not applicable.
Organosilane bonded silica gel	Not applicable.

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## SECTION 8: Exposure controls/personal protection

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>Silica gel</b> Silica, amorphous, precipitated and gel	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 6 mg/m <sup>3</sup> 8 hours. Form: inhalable dust TWA: 2.4 mg/m <sup>3</sup> 8 hours. Form: respirable dust

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

No DNELs/DMELs available.

#### PNECs

No PNECs available

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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## SECTION 8: Exposure controls/personal protection

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]  
Organosilane bonded silica gel Solid. [Powder.]

**Colour** : Silica gel White.  
Organosilane bonded silica gel White.  
Organosilane bonded silica gel White.  
Organosilane bonded silica gel White.  
Organosilane bonded silica gel White.  
Organosilane bonded silica gel White.

**Odour** : Silica gel Odourless.  
Organosilane bonded silica gel Odourless.  
Organosilane bonded silica gel Odourless.  
Organosilane bonded silica gel Odourless.  
Organosilane bonded silica gel Odourless.  
Organosilane bonded silica gel Odourless.

**Odour threshold** : Silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.

**pH** : Silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.  
Organosilane bonded silica gel Not available.

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## SECTION 9: Physical and chemical properties

		silica gel	
<b>Melting point/freezing point</b>	:	silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
		Organosilane bonded silica gel	>1700°C
<b>Initial boiling point and boiling range</b>	:	silica gel	2230°C
		Organosilane bonded silica gel	2230°C
		Organosilane bonded silica gel	2230°C
		Organosilane bonded silica gel	2230°C
		Organosilane bonded silica gel	2230°C
		Organosilane bonded silica gel	2230°C
<b>Flash point</b>	:	silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Evaporation rate</b>	:	silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Flammability (solid, gas)</b>	:	silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.

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## SECTION 9: Physical and chemical properties

<b>Upper/lower flammability or explosive limits</b>	: <input checked="" type="checkbox"/> Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour pressure</b>	: <input checked="" type="checkbox"/> Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Vapour density</b>	: <input checked="" type="checkbox"/> Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Not available. Not available. Not available. Not available. Not available. Not available. Not available.
<b>Relative density</b>	: <input checked="" type="checkbox"/> Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	2.5 to 3.5 2.5 to 3.5 2.5 to 3.5 2.5 to 3.5 2.5 to 3.5 2.5 to 3.5 2.5 to 3.5
<b>Solubility(ies)</b>	: <input checked="" type="checkbox"/> Silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water.



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## SECTION 9: Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Auto-ignition temperature</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Decomposition temperature</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Viscosity</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Explosive properties</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
<b>Oxidising properties</b>	:	Silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.
		Organosilane bonded silica gel	Not available.

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## SECTION 9: Physical and chemical properties

silica gel  
Organosilane bonded silica gel      Not available.  
silica gel

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: <input checked="" type="checkbox"/> silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: <input checked="" type="checkbox"/> silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	The product is stable. The product is stable. The product is stable. The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel Organosilane bonded silica gel	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: <input checked="" type="checkbox"/> silica gel  Organosilane bonded silica gel  Organosilane bonded silica gel	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during

## SECTION 10: Stability and reactivity

Organosilane bonded silica gel

transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

Organosilane bonded silica gel

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

Organosilane bonded silica gel

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

### 10.5 Incompatible materials

:  Silica gel

Reactive or incompatible with the following materials: oxidizing materials

Organosilane bonded silica gel

Reactive or incompatible with the following materials:

oxidizing materials

Organosilane bonded silica gel

Reactive or incompatible with the following materials:

oxidizing materials

Organosilane bonded silica gel

Reactive or incompatible with the following materials:

oxidizing materials

Organosilane bonded silica gel

Reactive or incompatible with the following materials:

oxidizing materials

Organosilane bonded silica gel

Reactive or incompatible with the following materials:

oxidizing materials

### 10.6 Hazardous decomposition products

:  Silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Organosilane bonded silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Organosilane bonded silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Organosilane bonded silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Organosilane bonded silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Organosilane bonded silica gel

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not available.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

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## SECTION 11: Toxicological information

### Sensitiser

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

: Silica gel	Not available.
Organosilane bonded silica gel	Not available.
Organosilane bonded silica gel	Not available.
Organosilane bonded silica gel	Not available.
Organosilane bonded silica gel	Not available.
Organosilane bonded silica gel	Not available.
Organosilane bonded silica gel	Not available.

### Potential acute health effects

#### Inhalation

: Silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

#### Ingestion

: Silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.

#### Skin contact

: Silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.
Organosilane bonded silica gel	No known significant effects or critical hazards.

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## SECTION 11: Toxicological information

<b>Eye contact</b>	silica gel	
	: silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
	Organosilane bonded silica gel	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	: silica gel	Adverse symptoms may include the following: respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:  respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:  respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:  respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:  respiratory tract irritation coughing
	Organosilane bonded silica gel	Adverse symptoms may include the following:  respiratory tract irritation coughing

<b>Ingestion</b>	: silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.

<b>Skin contact</b>	: silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.
	Organosilane bonded silica gel	No specific data.

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	Organosilane bonded silica gel	No specific data.
<b>Eye contact</b>	: <input checked="" type="checkbox"/> Silica gel	Adverse symptoms may include the following: irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness
	Organosilane bonded silica gel	Adverse symptoms may include the following:  irritation redness

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: <input checked="" type="checkbox"/> Silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Organosilane bonded silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Organosilane bonded silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Organosilane bonded silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Organosilane bonded silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Organosilane bonded silica gel	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> Silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.
	Organosilane bonded silica gel	No known significant effects or critical hazards.



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<b>Mutagenicity</b>	:	☒ Silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	☒ Silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	☒ Silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
<b>Fertility effects</b>	:	☒ Silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.
		Organosilane bonded silica gel	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
☒ Silica gel Silica Gel	-	-	Not readily
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	-	Not readily

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## SECTION 12: Ecological information

<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	-	Not readily
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	-	Not readily
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	-	Not readily
<b>Organosilane bonded silica gel</b> Organosilane bonded silica gel	-	-	Not readily

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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## SECTION 14: Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

**ADR/RID / IMDG / IATA** : Not regulated.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	<b>:</b> Silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.
	Organosilane bonded silica gel	Not applicable.

#### Other EU regulations

##### Ozone depleting substances (1005/2009/EU)

Not listed.

##### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

##### Seveso Directive

This product is not controlled under the Seveso Directive.

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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## SECTION 15: Regulatory information

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: Not determined.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>Malaysia</b>	: All components are listed or exempted.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: <input checked="" type="checkbox"/> Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: <input checked="" type="checkbox"/> Not determined.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

### Full text of abbreviated H statements

Not applicable.

### Full text of classifications [CLP/GHS]

Not applicable.

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**Version** : 2

### Notice to reader

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