

# SAFETY DATA SHEET

## Molsieve 5A filter assy for Micro GC

### 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** : Molsieve 5A filter assy for Micro GC  
**Part No.** : CP742979

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

Identified uses
Analytical chemistry. < 5 ml Tube

#### 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

**Product definition** : Mixture (encapsulated in article)

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

H314 SKIN CORROSION/IRRITATION - Category 1B  
H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
H350 CARCINOGENICITY - Category 1A  
H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [respiratory tract] - Category 1  
H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION [lungs] - Category 1  
H412 AQUATIC TOXICITY (CHRONIC) - Category 3

**Ingredients of unknown toxicity** : Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 100%

**Ingredients of unknown ecotoxicity** : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 19.8%

##### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Carc. Cat. 1; R49  
C; R35

**Date of issue/Date of revision** : 18/07/2013

1/12

## SECTION 2: Hazards identification

**Human health hazards** : May cause cancer by inhalation. Causes severe burns.

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

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Causes severe skin burns and eye damage.  
May cause cancer.  
Causes damage to organs. (respiratory tract)  
Causes damage to organs through prolonged or repeated exposure if inhaled. (lungs)  
Harmful to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Do not breathe dust.

**Response** : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF IN EYES: Immediately call a POISON CENTER or physician.

**Storage** : Store locked up.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Aluminium oxide  
Calcium oxide  
Quartz (SiO<sub>2</sub>)

**Supplemental label elements** : Not applicable.

### Special packaging requirements

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Other hazards which do not result in classification** : Causes digestive tract burns.

## 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.

**Substance/mixture** : Mixture (encapsulated in article)

### SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Aluminium oxide	EC: 215-691-6 CAS: 1344-28-1	35 - <50	Not classified.	STOT RE 1, H372	[1][2]
Calcium oxide	EC: 215-138-9 CAS: 1305-78-8	10 - <20	C; R34	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 1, H370	[1][2]
Disodium oxide	EC: 215-208-9 CAS: 1313-59-3	10 - <20	R14 C; R35	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 2, H371	[1]
Quartz (SiO <sub>2</sub> )	EC: 238-878-4 CAS: 14808-60-7	0.1 - <1	Carc. Cat. 1; R49  <b>See Section 16 for the full text of the R-phrases declared above.</b>	Carc. 1A, H350 STOT SE 2, H371  <b>See Section 16 for the full text of the H statements declared above.</b>	[1][2]

Note: The hazard information listed is based on unbonded silica gel CAS Number 7631-86-9. 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

- [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

Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in

**SECTION 4: First aid measures**

recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**4.2 Most important symptoms and effects, both acute and delayed****Potential acute health effects**

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : Causes severe burns.
- Ingestion** : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

**Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

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

- Hazards from the substance or mixture** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
metal oxide/oxides

**5.3 Advice for firefighters**

- Special precautions for fire-fighters** : 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.
- Special protective equipment for fire-fighters** : 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** : 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : 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".

- 6.2 Environmental precautions** : 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). Water polluting material. May be harmful to the environment if released in large quantities.

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

- Methods for cleaning up** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled 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

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : 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** : Store in accordance with local regulations. 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. Store locked up. 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.

### 7.3 Specific end use(s)

- Recommendations** : Industrial applications, Professional applications.
- Industrial sector specific solutions** : Not applicable.

## 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
Aluminium oxide	<b>ACGIH TLV (United States).</b> TWA: 1 mg/m <sup>3</sup> Form: Respirable
Calcium oxide	<b>ACGIH TLV (United States, 3/2012).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction
Quartz (SiO <sub>2</sub> )	<b>ACGIH TLV (United States, 3/2012).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2012).</b> TWA: 0.025 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction

**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.

#### Derived effect levels

No DNELs available.

#### Predicted effect concentrations

No PNECs available.

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**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.

## SECTION 8: Exposure controls/personal protection

- 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** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- 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** : Solid.
- Colour** : White.
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : Neutral.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : Not available.
- Solubility(ies)** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Explosive properties** : Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : No specific data.

## SECTION 10: Stability and reactivity

**10.5 Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials, organic materials, acids, alkalis and moisture.

**10.6 Hazardous decomposition products** : 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.

#### Sensitiser

**Conclusion/Summary** : Not available.

#### Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Calcium oxide Disodium oxide Quartz (SiO <sub>2</sub> )	Category 1 Category 2 Category 2	Not determined Not determined Inhalation	respiratory tract respiratory tract lungs

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Aluminium oxide	Category 1	Inhalation	lungs

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

**Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

**Ingestion** : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

**Skin contact** : Causes severe burns.

**Eye contact** : Causes serious eye damage.

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

**Inhalation** : No specific data.

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

**Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur

**Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness

#### Delayed and immediate effects and also chronic effects from short and long term exposure



## SECTION 11: Toxicological information

### 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

**General** : Causes damage to organs through prolonged or repeated exposure if inhaled.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Aluminium oxide	Acute NOEC >100 mg/l	Algae	72 hours
Calcium oxide	Acute NOEC >100 mg/l Chronic NOEC 100 mg/l Fresh water	Daphnia Fish - Oreochromis niloticus - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 46 days

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Calcium oxide	-	2.34	low

### 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** : The classification of the product may meet the criteria for a hazardous waste.

#### 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

This Safety Data Sheet (EU\_English) 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.

#### Regulatory information

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

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

##### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.

#### Other EU regulations

**Europe inventory** : All components are listed or exempted.

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Not listed

**Integrated pollution prevention and control list (IPPC) - Air** : Not listed

**Integrated pollution prevention and control list (IPPC) - Water** : Not listed

## SECTION 15: Regulatory information

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
Quartz (SiO <sub>2</sub> )	Carc. 1A, H350	-	-	-

**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
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Carc. 1A, H350	Calculation method
STOT SE 1, H370	Calculation method
STOT RE 1, H372	Calculation method
Aquatic Chronic 3, H412	Calculation method

**Full text of abbreviated H statements** : H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H350 May cause cancer.  
 H370 Causes damage to organs.  
 H371 May cause damage to organs.  
 H372 May cause damage to organs if inhaled.  
 H372 Causes damage to organs through prolonged or repeated exposure if inhaled.  
 H412 Harmful to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]** : Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3  
 Carc. 1A, H350 CARCINOGENICITY - Category 1A  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B  
 STOT RE 1, H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION [lungs] - Category 1  
 STOT SE 1, H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [respiratory tract] - Category 1  
 STOT SE 2, H371 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [respiratory tract] - Category 2  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [lungs] - Category 2

**Full text of abbreviated R phrases** : R14- Reacts violently with water.  
 R49- May cause cancer by inhalation.  
 R34- Causes burns.  
 R35- Causes severe burns.

**Full text of classifications [DSD/DPD]** : Carc. Cat. 1 - Carcinogen category 1  
 C - Corrosive

**Date of issue/ Date of revision** : 18/07/2013

**Date of previous issue** : No previous validation.

**Version** : 1

### Notice to reader

## **SECTION 16: Other information**

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.