

SAFETY DATA SHEET



MolSieve 5A Packed GC columns

Section 1. Identification

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 Packed GC columns
- Part no.** : G3591-70002, G3591-70003, G3591-70013, G3591-78001, G3591-80017, G3591-81017, G3591-82017, G3591-80022, G3591-81022, G3591-82022, G3591-80046, G3591-81046, G3591-80056, G3591-81056, G3591-80061, G3591-81061, G3591-80062, G3591-81062, G3591-80064, G3591-81064, G3591-82064, G3591-80065, 3591-81065, G3591-80074, G3591-81074, G3591-80075, G3591-81075, G3591-80077, G3591-80090, G3591-80103, G3591-80104, G3591-81104, G3591-80173, G3591-81209, CP1306, CP2045, CP2046, CP2065, CP81025, 391242435, G3591-81223

Validation date : 5/16/2022

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

- Material uses** : Analytical chemistry.
- | | |
|-------------|---|
| GC Column | |
| G3591-70002 | 2m 1/8 2mm Molecular sieve 5A 60/80 |
| G3591-70003 | 2m 1/8 2mm Molecular sieve 5A 80/100 |
| G3591-70013 | 2m 1/8 2mm Molecular sieve 5A 45/60 |
| G3591-78001 | 9Ft 1/8 2mm Molsieve 5A PDHID Column UM |
| G3591-80017 | 6Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81017 | 6Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-82017 | 6Ft 1/8 2mm Molecular sieve 5A 60/80 Ni |
| G3591-80022 | 8Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81022 | 8Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-82022 | 8Ft 1/8 2mm Molecular sieve 5A 60/80 Ni |
| G3591-80046 | 9Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81046 | 9Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-80056 | 20Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81056 | 20Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-80061 | 15Ft 1/8 2mm Molecular sieve 5A 45/60 SS |
| G3591-81061 | 15Ft 1/8 2mm Molecular sieve 5A 45/60 UM |
| G3591-80062 | 7Ft 1/8 2mm Molecular sieve 5A 45/60 SS |
| G3591-81062 | 7Ft 1/8 2mm Molecular sieve 5A 45/60 UM |
| G3591-80064 | 9Ft 1/8 2mm Molecular sieve 5A 80/100 SS |
| G3591-81064 | 9Ft 1/8 2mm Molecular sieve 5A 80/100 UM |
| G3591-82064 | 9Ft 1/8 2mm Molecular sieve 5A 80/100 Ni |
| G3591-80065 | 25Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81065 | 25Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-80074 | 3Ft 1/8 2mm Molecular sieve 5A 80/100 SS |
| G3591-81074 | 3Ft 1/8 2mm Molecular sieve 5A 80/100 UM |
| G3591-80075 | 3Ft 1/8 2mm Molecular sieve 5A 100/120 SS |
| G3591-81075 | 3Ft 1/8 2mm Molecular sieve 5A 100/120 UM |
| G3591-80077 | 1Ft 1/8 2mm MS5A 60/80 straight column SS |
| G3591-80090 | 4Ft 1/8 2mm Molecular sieve 5A 45/60 SS |
| G3591-80103 | 3Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-80104 | 4Ft 1/8 2mm Molecular sieve 5A 60/80 SS |
| G3591-81104 | 4Ft 1/8 2mm Molecular sieve 5A 60/80 UM |
| G3591-80173 | 0.6M 1/4 4mm Molsieve5A 80/100 SS tested |
| G3591-81209 | 7Ft 1/8 2.1mm MolSieve 5A 60/80 UM 41mm |
| CP1306 | 1.5M 1/16 1mm Molecular sieve 5A 80/100 UM tested |
| CP2045 | 10Ft 1/8 2mm Molecular sieve 5A 80/100 UM |
| CP2046 | 5Ft 1/8 2mm Molecular sieve 5A 80/100 UM |
| CP2065 | 6Ft 1/8 2mm Molecular sieve 5A 45/60 UM |
| CP81025 | 1M 1/8 2mm Molecular sieve 5A 60/80 UM pretested |
| 391242435 | Molsieve 5A, 45/60 MESH 6 ft x 1/8 in |

Section 1. Identification

G3591-81223 9Ft 1/8 2.1mm Molsieve 5A 45/60 UM 41mm

[1.3 Details of the supplier of the safety data sheet](#)

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

[1.4 Emergency telephone number](#)

In case of emergency : CHEMTREC®: 1-800-424-9300

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](#)

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

[Classification of the substance or mixture](#)

Not classified.

[2.2 GHS label elements](#)

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.
Precautionary statements
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

[2.3 Other hazards](#)

Hazards not otherwise classified : None known.

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 : Substance (encapsulated in article)

Ingredient name	%	CAS number
Zeolites	100	1318-02-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

Section 4. First aid measures

4.1 Description of necessary first aid measures

- Eye contact** : 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.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting 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

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
metal oxide/oxides

5.3 Advice for firefighters

- Special protective actions 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.

Section 5. Fire-fighting measures

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.

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 spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized 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 spilled 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).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

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. 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 unlabeled 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 : Industrial applications, Professional applications.

Industrial sector specific solutions : Not available.

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

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Zeolites	ACGIH TLV (United States, 1/2021). TWA: 1 mg/m ³ 8 hours. Form: Respirable fraction

8.2 Exposure controls

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

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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Solid.
- Color** : White.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : 400°C (>752°F) [OECD 102]
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** : Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not applicable.
Vapor pressure	: Not available.
Relative vapor density	: Not applicable.
Relative density	: 2.2 [OECD 109]
Density	: 2.1 g/cm ³ [20°C (68°F)]
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: 0.0014 g/l
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Not applicable.
Particle characteristics	
Median particle size	: Not available.

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.
10.5 Incompatible materials	: May react or be incompatible with oxidizing materials. Reactive or incompatible with the following materials: acids.
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

Product/ingredient name	Result	Species	Dose	Exposure
Zeolites	LC50 Inhalation Dusts and mists	Rat - Male, Female	>18.3 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5110 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Section 11. Toxicological information

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Zeolites	-	3	-

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

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 the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also 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

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

Section 11. Toxicological information

[Numerical measures of toxicity](#)

[Acute toxicity estimates](#)

N/A

Section 12. Ecological information

[12.1 Toxicity](#)

Product/ingredient name	Result	Species	Exposure
Zeolites	Chronic NOEC 200000 µg/l Fresh water	Daphnia - Daphnia magna	21 days

[12.2 Persistence and degradability](#)

Not available.

[12.3 Bioaccumulative potential](#)

Product/ingredient name	LogP _{ow}	BCF	Potential
Zeolites	-	0.59 to 0.95	low

[12.4 Mobility in soil](#)

Soil/water partition coefficient (K_{oc}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

[13.1 Waste treatment methods](#)

Disposal methods : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

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.

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : This material is not listed.

New York : This material is not listed.

New Jersey : This material is not listed.

Pennsylvania : This material is not listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Section 15. Regulatory information

Montreal Protocol

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.

Inventory list

Australia	: This material is listed or exempted.
Canada	:  This material is listed or exempted.
China	: This material is listed or exempted.
Europe	: This material is listed or exempted.
Japan	: Japan inventory (CSCL): This material is listed or exempted. Japan inventory (ISHL): This material is listed or exempted.
New Zealand	: This material is listed or exempted.
Philippines	: Not determined.
Republic of Korea	:  This material is listed or exempted.
Taiwan	: This material is listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	:  This material is active or exempted.
Viet Nam	: Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of issue	: 05/16/2022
Date of previous issue	: 03/24/2019
Version	: 7

Key to abbreviations

: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: N/A = Not available
: UN = United Nations

 Indicates information that has changed from previously issued version.

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.