



# SAFETY DATA SHEET

Creation Date 23-Oct-2010

Revision Date 08-May-2017

Revision Number 2

## 1. Identification

**Product Name** 4-(2-Morpholin-4-ylethoxy)benzonitrile

**Cat No. :** CC42116DA; CC42116FL; CC42116ZZ

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**

Maybridge  
Thermo Fisher Scientific  
Bishop Meadow Rd  
Loughborough, Leicestershire, Great Britain  
LE115RG  
Tel: 01509 231166  
Website: www.maybridge.com

**Entity / Business Name**

Maybridge  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01  
/ **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 /  
**Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 /  
**Europe**:001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                             |            |
|---------------------------------------------|------------|
| Acute oral toxicity                         | Category 4 |
| Acute dermal toxicity                       | Category 4 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 |

**Label Elements**

**Signal Word**

Warning

**Hazard Statements**

Harmful if swallowed  
Harmful in contact with skin  
Harmful if inhaled



**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition / information on ingredients

| Component                              | CAS-No     | Weight % |
|----------------------------------------|------------|----------|
| 4-(2-Morpholin-4-ylethoxy)benzonitrile | 34334-04-8 | >=95     |

### 4. First-aid measures

|                                                               |                                                                                                                    |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>General Advice</b>                                         | If symptoms persist, call a physician.                                                                             |
| <b>Eye Contact</b>                                            | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. |
| <b>Skin Contact</b>                                           | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.  |
| <b>Inhalation</b>                                             | Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.         |
| <b>Ingestion</b>                                              | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.              |
| <b>Most important symptoms/effects<br/>Notes to Physician</b> | None reasonably foreseeable.<br>Treat symptomatically                                                              |

### 5. Fire-fighting measures

|                                       |                                                                 |
|---------------------------------------|-----------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>   | Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam. |
| <b>Unsuitable Extinguishing Media</b> | No information available                                        |
| <b>Flash Point</b>                    | No information available                                        |
| <b>Method -</b>                       | No information available                                        |
| <b>Autoignition Temperature</b>       | No information available                                        |
| <b>Explosion Limits<br/>Upper</b>     | No data available                                               |

|                                         |                          |
|-----------------------------------------|--------------------------|
| <b>Lower</b>                            | No data available        |
| <b>Sensitivity to Mechanical Impact</b> | No information available |
| <b>Sensitivity to Static Discharge</b>  | No information available |

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

|               |                     |                    |                         |
|---------------|---------------------|--------------------|-------------------------|
| <b>Health</b> | <b>Flammability</b> | <b>Instability</b> | <b>Physical hazards</b> |
| -             | -                   | -                  | N/A                     |

**6. Accidental release measures**

|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. |
| <b>Environmental Precautions</b> | Should not be released into the environment.                                          |

|                                             |                                                                                                                                  |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for Containment and Clean Up</b> | Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal. |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

**7. Handling and storage**

|                 |                                                                                                                                                                     |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Avoid dust formation. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |                                                                   |
|----------------|-------------------------------------------------------------------|
| <b>Storage</b> | Keep container tightly closed in a dry and well-ventilated place. |
|----------------|-------------------------------------------------------------------|

**8. Exposure controls / personal protection**

|                            |                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|

|                             |                                                                                                                             |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Engineering Measures</b> | Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|

**Personal Protective Equipment**

|                                 |                                                                                                                                                                                                                                                   |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye/face Protection</b>      | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.                                                                       |
| <b>Skin and body protection</b> | Long sleeved clothing.                                                                                                                                                                                                                            |
| <b>Respiratory Protection</b>   | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| <b>Hygiene Measures</b>         | Handle in accordance with good industrial hygiene and safety practice.                                                                                                                                                                            |

**9. Physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical State</b> | Solid                    |
| <b>Appearance</b>     | Light yellow             |
| <b>Odor</b>           | No information available |

|                                        |                             |
|----------------------------------------|-----------------------------|
| Odor Threshold                         | No information available    |
| pH                                     | No information available    |
| Melting Point/Range                    | 87 - 90 °C / 188.6 - 194 °F |
| Boiling Point/Range                    | No information available    |
| Flash Point                            | No information available    |
| Evaporation Rate                       | No information available    |
| Flammability (solid,gas)               | No information available    |
| Flammability or explosive limits       |                             |
| Upper                                  | No data available           |
| Lower                                  | No data available           |
| Vapor Pressure                         | No information available    |
| Vapor Density                          | No information available    |
| Specific Gravity                       | No information available    |
| Solubility                             | No information available    |
| Partition coefficient; n-octanol/water | No data available           |
| Autoignition Temperature               | No information available    |
| Decomposition Temperature              | No information available    |
| Viscosity                              | No information available    |
| Molecular Formula                      | C13 H16 N2 O2               |
| Molecular Weight                       | 232.28                      |

## 10. Stability and reactivity

|                                  |                                                                                |
|----------------------------------|--------------------------------------------------------------------------------|
| Reactive Hazard                  | None known, based on information available                                     |
| Stability                        | Stable under normal conditions.                                                |
| Conditions to Avoid              | Incompatible products.                                                         |
| Incompatible Materials           | Strong oxidizing agents, Strong acids                                          |
| Hazardous Decomposition Products | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ) |
| Hazardous Polymerization         | No information available.                                                      |
| Hazardous Reactions              | None under normal processing.                                                  |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

|                                      |                          |
|--------------------------------------|--------------------------|
| Toxicologically Synergistic Products | No information available |
|--------------------------------------|--------------------------|

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

|                 |                                                                                          |
|-----------------|------------------------------------------------------------------------------------------|
| Irritation      | No information available                                                                 |
| Sensitization   | No information available                                                                 |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component                              | CAS-No     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|----------------------------------------|------------|------------|------------|------------|------------|------------|
| 4-(2-Morpholin-4-ylethoxy)benzonitrile | 34334-04-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

|                       |                           |
|-----------------------|---------------------------|
| Mutagenic Effects     | No information available  |
| Reproductive Effects  | No information available. |
| Developmental Effects | No information available. |

|                                                   |                                                                |
|---------------------------------------------------|----------------------------------------------------------------|
| <b>Teratogenicity</b>                             | No information available.                                      |
| <b>STOT - single exposure</b>                     | None known                                                     |
| <b>STOT - repeated exposure</b>                   | None known                                                     |
| <b>Aspiration hazard</b>                          | No information available                                       |
| <b>Symptoms / effects, both acute and delayed</b> | No information available                                       |
| <b>Endocrine Disruptor Information</b>            | No information available                                       |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated. |

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Persistence and Degradability</b> | No information available  |
| <b>Bioaccumulation/ Accumulation</b> | No information available. |
| <b>Mobility</b>                      | No information available. |

## 13. Disposal considerations

|                               |                                                                                                                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste Disposal Methods</b> | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 14. Transport information

|                 |               |
|-----------------|---------------|
| <b>DOT</b>      | Not regulated |
| <b>TDG</b>      | Not regulated |
| <b>IATA</b>     | Not regulated |
| <b>IMDG/IMO</b> | Not regulated |

## 15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | No |
| Chronic Health Hazard             | No |
| Fire Hazard                       | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard                   | No |

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration  
Not applicable

**CERCLA**  
Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**

|                             |   |
|-----------------------------|---|
| Reportable Quantity (RQ):   | N |
| DOT Marine Pollutant        | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**  
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

**WHMIS Hazard Class** D1B Toxic materials



## 16. Other information

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**Print Date** 08-May-2017

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**