

**SAFETY DATA SHEET**

Creation Date 26-Sep-2009

Revision Date 14-Feb-2020

Revision Number 2

**1. Identification****Product Name** alpha-Cyclohexylphenylacetonitrile**Cat No. :** L05350**CAS-No** 3893-23-0**Synonyms** \$1-Phenylcyclohexaneacetonitrile**Recommended Use** Laboratory chemicals.**Uses advised against** Food, drug, pesticide or biocidal product use.**Details of the supplier of the safety data sheet****Company**

Alfa Aesar  
Thermo Fisher Scientific Chemicals, Inc.  
30 Bond Street  
Ward Hill, MA 01835-8099  
Tel: 800-343-0660  
Fax: 800-322-4757  
**Email:** tech@alfa.com  
www.alfa.com

**Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.  
After normal business hours, call Carechem 24 at (866) 928-0789.

**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 |
| Skin Corrosion/Irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system.              |            |

**Label Elements****Signal Word**

Warning

**Hazard Statements**

Causes skin irritation  
Causes serious eye irritation

May cause respiratory irritation  
Harmful if swallowed, in contact with skin or 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  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Ingestion**

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

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**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 % |
|------------------------------|-----------|----------|
| Cyclohexylphenylacetonitrile | 3893-23-0 | 97       |

### 4. First-aid measures

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Immediate medical attention is required.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.  
Immediate medical attention is required.

|                                            |                                                                                                                                    |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ingestion</b>                           | Do NOT induce vomiting. Call a physician or poison control center immediately.                                                     |
| <b>Most important symptoms and effects</b> | . Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                                              |

## 5. Fire-fighting measures

|                                         |                                                                              |
|-----------------------------------------|------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>     | Water spray. 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</b>                 |                                                                              |
| <b>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 (NO<sub>x</sub>). 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

**Health**  
2

**Flammability**  
1

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

|                                             |                                                                                                                                     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>                 | Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid dust formation. |
| <b>Environmental Precautions</b>            | Should not be released into the environment.                                                                                        |
| <b>Methods for Containment and Clean Up</b> | Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation.    |

## 7. Handling and storage

|                 |                                                                                                                                                                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Use only under a chemical fume hood. Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product. |
| <b>Storage</b>  | Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed.                                                                                                    |

## 8. Exposure controls / personal protection

### Exposure Guidelines

| Component                    | ACGIH TLV | OSHA PEL                           | NIOSH IDLH                 | Mexico OEL (TWA) |
|------------------------------|-----------|------------------------------------|----------------------------|------------------|
| Cyclohexylphenylacetonitrile |           | (Vacated) TWA: 5 mg/m <sup>3</sup> | IDLH: 25 mg/m <sup>3</sup> |                  |

Legend

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** 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.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** 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.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|                                        |                             |
|----------------------------------------|-----------------------------|
| Physical State                         | Solid                       |
| Appearance                             | Light yellow                |
| Odor                                   | No information available    |
| Odor Threshold                         | No information available    |
| pH                                     | No information available    |
| Melting Point/Range                    | 49 - 55 °C / 120.2 - 131 °F |
| Boiling Point/Range                    | No information available    |
| Flash Point                            | No information available    |
| Evaporation Rate                       | Not applicable              |
| 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                          | Not applicable              |
| 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                              | Not applicable              |
| Molecular Formula                      | C14 H17 N                   |
| Molecular Weight                       | 199.29                      |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Avoid dust formation.

|                                         |                                                                                             |
|-----------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Incompatible Materials</b>           | Strong oxidizing agents                                                                     |
| <b>Hazardous Decomposition Products</b> | Nitrogen oxides (NO <sub>x</sub> ), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ) |
| <b>Hazardous Polymerization</b>         | No information available.                                                                   |
| <b>Hazardous Reactions</b>              | None under normal processing.                                                               |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

|                                             |                          |
|---------------------------------------------|--------------------------|
| <b>Toxicologically Synergistic Products</b> | No information available |
|---------------------------------------------|--------------------------|

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

|                        |                                                                                          |
|------------------------|------------------------------------------------------------------------------------------|
| <b>Irritation</b>      | Irritating to eyes, respiratory system and skin                                          |
| <b>Sensitization</b>   | No information available                                                                 |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component                    | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------------------|-----------|------------|------------|------------|------------|------------|
| Cyclohexylphenylacetonitrile | 3893-23-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

|                          |                          |
|--------------------------|--------------------------|
| <b>Mutagenic Effects</b> | No information available |
|--------------------------|--------------------------|

|                             |                           |
|-----------------------------|---------------------------|
| <b>Reproductive Effects</b> | No information available. |
|-----------------------------|---------------------------|

|                              |                           |
|------------------------------|---------------------------|
| <b>Developmental Effects</b> | No information available. |
|------------------------------|---------------------------|

|                       |                           |
|-----------------------|---------------------------|
| <b>Teratogenicity</b> | No information available. |
|-----------------------|---------------------------|

|                                 |                    |
|---------------------------------|--------------------|
| <b>STOT - single exposure</b>   | Respiratory system |
| <b>STOT - repeated exposure</b> | None known         |

|                          |                          |
|--------------------------|--------------------------|
| <b>Aspiration hazard</b> | No information available |
|--------------------------|--------------------------|

|                                                   |                                                                                                                                  |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms / effects, both acute and delayed</b> | Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness, and possible death |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

|                                        |                          |
|----------------------------------------|--------------------------|
| <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

### DOT

UN-No UN2811  
 Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.  
 Technical Name (CYCLOHEXYLPHENYLACETONITRILE)  
 Hazard Class 6.1  
 Packing Group III

### TDG

UN-No UN2811  
 Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.  
 Hazard Class 6.1  
 Packing Group III

### IATA

UN-No UN3439  
 Proper Shipping Name NITRILES, TOXIC, SOLID, N.O.S.\*  
 Hazard Class 6.1  
 Packing Group III

### IMDG/IMO

UN-No UN3439  
 Proper Shipping Name NITRILES, SOLID, TOXIC, N.O.S.  
 Hazard Class 6.1  
 Packing Group III

## 15. Regulatory information

### United States of America Inventory

| Component                    | CAS-No    | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|------------------------------|-----------|------|-----------------------------------------------|-----------------------------|
| Cyclohexylphenylacetonitrile | 3893-23-0 | -    | -                                             | -                           |

#### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

### International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component                    | CAS-No    | DSL | NDL | EINECS    | PICCS | ENCS | AICS | IECSC | KECL |
|------------------------------|-----------|-----|-----|-----------|-------|------|------|-------|------|
| Cyclohexylphenylacetonitrile | 3893-23-0 | -   | -   | 223-442-8 | -     | -    | -    | -     | -    |

### U.S. Federal Regulations

#### SARA 313

| Component                    | CAS-No    | Weight % | SARA 313 - Threshold Values % |
|------------------------------|-----------|----------|-------------------------------|
| Cyclohexylphenylacetonitrile | 3893-23-0 | 97       | 1.0                           |

SARA 311/312 Hazard Categories See section 2 for more information

#### CWA (Clean Water Act)

Not applicable

| Component                    | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|------------------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Cyclohexylphenylacetonitrile | -                          | -                           | X                      | X                         |

Clean Air Act Not applicable

| Component                    | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|------------------------------|-----------|-------------------------|-------------------------|
| Cyclohexylphenylacetonitrile | X         |                         | -                       |

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**

| Component                    | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------------------|---------------|------------|--------------|----------|--------------|
| Cyclohexylphenylacetonitrile | -             | X          | X            | X        | X            |

**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

**16. Other information**

**Prepared By** Health, Safety and Environmental Department  
 Email: tech@alfa.com  
 www.alfa.com

**Creation Date** 26-Sep-2009  
**Revision Date** 14-Feb-2020  
**Print Date** 14-Feb-2020  
**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 3893-23-0.

**Disclaimer**

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**End of SDS**