

**1. Identification**

1.1 Product Identifier

**Description** Ceramic Shapes and parts manufactured from Sialon (Silicon Aluminum Oxynitride).  
**Contains** Sialon (CAS 112760-32-4)  
**Synonyms** Sialon ST

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

**Recommended use** Consult the supplier  
**Uses advised against** Users are recommended to seek further advice

1.3 Supplier's details

**McDanel Advanced Ceramic Technologies**  
510 Ninth Avenue  
Beaver Falls, Pa 15010-0560

1.4 Emergency phone number

**McDanel** +1-724-843-8300

**2. Hazards identification**

2.1 Classification of the substance or mixture

**GHS Classification**

Not classified as hazardous

**REGULATION (EC) No 1272/2008**

Not classified

**Classification according to Directive 67/548/EEC or 1999/45/EC**

Not classified

2.2 Label elements

**Symbol(s)**

Not applicable

**Signal word**

None

**Hazard Statements**

None

**Precautionary statements**

In circumstances where dust may be generated from machining or disposal:

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray

P280 – Wear eye protection/face protection

P285 – In case of inadequate ventilation wear respiratory protection

P305 + P351 + P338 – If in eyes, rinse cautiously with water for several minutes

P302 + P352 – If on skin, wash with plenty of soap and water

2.3 Other information

This product is an article, a monolithic material.

### 3. Composition/information on ingredients

#### 3.1 Substances

This product is a monolithic material.

### 4. First aid measures

#### 4.1 Description of first aid measures

In circumstances where dust may be generated from machining or disposal:

<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses if present, and easy to do. Continue rinsing.
<b>Skin Contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	Rinse mouth.
<b>Inhalation</b>	Move to fresh air.
<b>General Advise</b>	If symptoms persist, call a physician. Show this safety data sheet to doctor in attendance.

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

No information available

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

#### Notes to physician

Treat symptomatically

### 5. Fire-fighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

##### Extinguishing media which must not be used for safety reasons

No information available

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

##### Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Not applicable

### 6. Accidental release measures

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

Avoid dust formation. Wear personal protective equipment when machining.

#### 6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up  
Recover product. Place into appropriate container for disposal.

## **7. Handling and storage**

### 7.1 Precautions for Safe Handling

In circumstances where dust may be generated from machining or disposal:

#### **Handling**

Provide appropriate exhaust ventilation at places where dust is formed.

#### **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

#### **Exposure scenario**

No information available

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

Keep in a dry place.

### 7.3 Specific end use(s)

No information available

## **8. Exposure controls/personal protection**

### 8.1 Control parameters

#### **Exposure limits**

No occupational exposure limits have been established for silicon aluminum oxynitride dust.

### 8.2 Exposure controls

#### **Engineering controls**

Ensure adequate ventilation in circumstances where dust may be generated from machining or disposal, especially in confined areas.

#### **Personal protective equipment**

In circumstances where dust may be generated from machining or disposal:

<b>Eye Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	No special protective equipment required.
<b>Hand Protection</b>	No special protective equipment required.
<b>Respiratory Protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### **Environmental exposure controls**

Avoid dust formation

## **9. Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Solid
<b>Color</b>	Gray
<b>Odor</b>	Not applicable
<b>Odor threshold</b>	Not applicable
<b>pH</b>	Not applicable
<b>Melting point</b>	Not applicable
<b>Freezing point</b>	Not applicable
<b>Initial boiling point</b>	Not applicable
<b>Boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Flammability</b>	Not applicable
<b>Upper explosive limit</b>	Not applicable
<b>Lower explosive limit</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	3.20 to 3.30 g/cm <sup>3</sup>
<b>Solubility</b>	Not applicable
<b>Partition coefficient</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	1850°C

## 10. Stability and reactivity

### 10.1 Reactivity

None under normal processing

### 10.2 Chemical Stability

Stable under normal conditions

### 10.3 Possibility of Hazardous Reactions

None under normal processing

### 10.4 Conditions to Avoid

No known conditions to avoid

### 10.5 Incompatible materials

No incompatible materials known

### 10.6 Hazardous Decomposition Products

None under normal processing

## 11. Toxicological information

### 11.1 Information on toxicological effects

**Note:** The information provided solely pertains to dust exposure.

#### **Acute toxicity**

**Acute oral toxicity** No information available  
**Acute dermal toxicity** No information available  
**Acute inhalation toxicity** No information available

**Chronic toxicity**

**Irritation** No information available  
**Corrosivity** No information available  
**Sensitization** No information available  
**Mutagenic effects** No information available  
**Carcinogenic effects** This substance has no evidence of carcinogenic properties  
**Reproductive effects** No information available  
**Developmental effects** No information available  
**Aspiration hazard** No information available

**12. Ecological information**

12.1 Toxicity

Not water endangering.

12.2 Persistence and degradability

The product is not readily biodegradable.

12.3 Bioaccumulative potential

The product is not bioaccumulating.

12.4 Mobility in soil

Not applicable, due to the form of the product.

12.5 Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6 Other adverse effects

None known

**13. Disposal considerations**

13.1 Waste treatment methods

**Waste from residue/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Avoid dust formation.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information**

**Note:** Not classified as dangerous according to transport regulations.

**DOT (US)** Not regulated

<b>IMDG/IMO</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADR</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IATA</b>	Not regulated

### 15. Regulatory information

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

**Note:** Regulations apply to dust.

#### United States Federal Regulations

<b>OSHA</b>	Non-hazardous
<b>TSCA</b>	Not listed
<b>SARA Title III</b>	Section 302 Extremely Hazardous Substances: Not listed Section 311/312 Hazardous Categories: None Section 313 Toxic Categories: None

#### United States - State Regulations

<b>California Proposition 65</b>	Not listed
<b>Massachusetts Right To Know List</b>	Not listed
<b>New Jersey Right To Know Hazardous Substances List</b>	Listed
<b>Pennsylvania Right To Know Hazardous Substance</b>	Listed

### 16. Other information including information on preparation and revision of the SDS

**Prepared by:** Allura Jiles  
**Revision date:** 5/20/2015

#### Key

##### *Transportation Regulations*

<b>IMDG</b>	International Maritime Dangerous Goods (UN)
<b>IMO</b>	International Maritime Organization (UN)
<b>RID</b>	European Agreement Concerning the International Carriage of Dangerous Goods by Rail
<b>ADR</b>	European Agreement Concerning the International Carriage of Dangerous Goods by Road
<b>ICAO</b>	International Civil Aviation Organization
<b>IATA</b>	International Air Transport Association

#### Updates

The most current version of this Safety Data Sheet is available at this URL:

[http://www.mcdanelceramics.com/pdf/MSDS\\_McD\\_Sialon.pdf](http://www.mcdanelceramics.com/pdf/MSDS_McD_Sialon.pdf)

#### Disclaimer

The information contained 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



# Safety Data Sheet

## SIALON

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