



# SAFETY DATA SHEET

## 1. Identification of the Product and of the Company

<b>Product Name:</b>	SYALON 101 (SINTERED)
<b>Supplier:</b>	International Syalons (Newcastle) Limited Stephenson Street Willington Quay Wallsend Tyne & Wear NE28 6TT UK
<b>Telephone:</b>	+44(0) 191 295 1010
<b>Email</b>	enquiries@syalons.com
<b>Description:</b>	Sintered silicon nitride ceramic

## 2. Hazard Identification

### 2.1 Classification

**Classification according to Regulation (EC) No. 1272/2008:** Not classified.

**Classification according to Directive 1999/45/EC:** Not classified.

### 2.2 Label Elements

**Labelling according to Regulation (EC) No. 1272/2008:** No labelling required.

### 2.3 Other Hazards

**Other Hazards which do not result in classification:** Dust from grinding can cause mechanical irritation of the eyes, skin, nose and throat.

## 3. Composition / Information on Ingredients

**Composition:** Major ingredients – silicon nitride ( $\text{Si}_3\text{N}_4$ ), aluminium nitride (AlN), aluminium oxide ( $\text{Al}_2\text{O}_3$ ) and yttrium oxide ( $\text{Y}_2\text{O}_3$ ).

## 4. First Aid Measures

### 4.1 Description of First Aid Measures

<b>Inhalation:</b>	Remove victim to fresh air. Seek medical attention if symptoms occur.
<b>Eye Contact:</b>	Rinse eyes with water copiously. Seek medical attention if symptoms occur.
<b>Skin Contact:</b>	Wash thoroughly with soap and water. Seek medical attention if symptoms occur.
<b>Ingestion:</b>	Extremely unlikely – seek medical advice as necessary.

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

<b>Symptoms:</b>	No information available.
<b>Risks:</b>	No information available.

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

**Treatment:** No information available.

## 5. Firefighting Measures

### 5.1 Extinguishing Media

Not applicable – material is non-flammable.

### 5.2 Special Hazards arising from Substance or Mixture

Not applicable – material is non-flammable.

### 5.3 Advice for Firefighters

Not applicable – material is non-flammable.

## 6. Accidental Release Measures

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

**Personal Precautions:** Use personal protective equipment.  
Avoid dust formation.  
Avoid dust accumulation in enclosed space.

### 6.2 Environmental Precautions

**Environmental Precautions:** No special environmental precautions required.  
Product is not biodegradable.

### 6.3 Methods and Materials for Containment and Cleaning Up

**Methods for Cleaning Up:** Brush or vacuum up any spillages.

### 6.4 Reference to other sections

For personal protection see section 8.

## 7. Handling and Storage

### 7.1 Precautions for Safe Handling

**Advice on Safe Handling:** Avoid dust formation when grinding.  
Wash hands thoroughly after handling.

### 7.2 Conditions for Safe Storage, including any Incompatibilities

**Requirements for Storage:** Keep the material dry. Store at room temperature (15 to 25°C recommended).

## 8. Exposure Controls / Personal Protection

### 8.1 Control Parameters

**Occupational Exposure Limits:** No exposure limit value known.

### 8.2 Exposure Controls

**Engineering Controls:** Dust must be extracted directly at point of origin.

**Personal Protective Equipment:** Wear appropriate personal protection equipment – e.g. gloves, overalls, eye protection and suitable respirator. When working with large quantities use appropriate hygiene / extraction system.

**Hygiene:** Wash hands, forearms and face thoroughly after handling material before eating, smoking, using the lavatory and at the end of the working day.

## 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

**Physical State:** Solid.  
**Colour:** Grey.  
**Odour:** None.  
**Melting Point:** >1800°C.  
**Solubility in water:** Virtually insoluble.

### 9.2 Other Information

No additional information.

## 10. Stability and Reactivity

### 10.1 Reactivity

**Conclusion:** Stable under normal conditions.

### 10.2 Chemical Stability

**Conclusion:** Stable under normal conditions.

### 10.3 Possibility of Hazardous Reactions

**Conclusion:** None known.

**10.4 Conditions to Avoid**

**Conclusion:** None known.

**10.5 Incompatible Materials**

**Conclusion:** None known.

**10.6 Hazardous Decomposition Products**

**Decomposition Products:** No known hazardous decomposition products.

**11. Toxicological Information**

**11.1 Information on Toxicological Effects**

**Acute Toxicity:** Not available.

**Skin Irritation:** Contact may cause irritation.

**Carcinogenicity:** None known.

**Eye Contact:** Contact may cause irritation.

**Inhalation:** None known.

**Ingestion:** None known.

**12. Ecological Information**

**12.1 Toxicity**

**Conclusion:** None known.

**12.2 Persistence and Degradability**

**Conclusion:** None known.

**12.3 Bioaccumulative Potential**

**Conclusion:** None known.

**12.4 Mobility in Soil**

**Conclusion:** None known.

**12.5 Results of PBT and vPvB assessment**

**Conclusion:** None known.

**12.6 Other Adverse Effects**

**Conclusion:** None known.

**13. Disposal Considerations**

**13.1 Waste Treatment Methods**

**Product:** Dispose in accordance with all applicable local and national regulations.

**14. Transport Information**

**Transport Regulations:** No special conditions apply.

**15. Regulatory Information**

**15.1 Safety, Health and Environmental Regulations / Legislation Specific for the Substance or Mixture**

**EU Regulations:** Not applicable.

**16. Other Information**

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