



# SAFETY DATA SHEET

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

**Product Name:** SIALON 21R  
**Supplier:** International Syalons (Newcastle) Limited  
 Stephenson Street  
 Willington Quay  
 Wallsend  
 Tyne & Wear NE28 6TT  
 UK  
**Telephone:** +44(0) 191 295 1010  
**Email:** enquiries@syalons.com  
**Description:** Advanced ceramic powder

## 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:** Handling of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

## 3. Composition / Information on Ingredients

Composition:	Chemical Name	CAS No.	EC No.	Quantity
	21R (SiAl <sub>6</sub> O <sub>2</sub> N <sub>6</sub> )	66402-68-4	266-340-9	>90%
	Aluminium nitride (AlN)	24304-00-05	246-140-8	<10%

## 4. First Aid Measures

### 4.1 Description of First Aid Measures

**Inhalation:** Remove victim to fresh air. Seek medical attention if symptoms occur.

**Eye Contact:** Rinse eyes with water copiously. Seek medical attention if symptoms occur.

**Skin Contact:** Wash thoroughly with soap and water. Seek medical attention if symptoms occur.

**Ingestion:** Extremely unlikely – seek medical advice as necessary.

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

**Symptoms:** No information available.

**Risks:** 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.

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:** As with all powders good industrial hygiene should be observed.  
Avoid dust formation.

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

**Requirements for Storage:** Keep the material dry and reseal open packages. 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:** Powder.  
**Colour:** Grey.  
**Odour:** Slight smell of ammonia.  
**Odour Threshold:** No information available.  
**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.

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### 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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