



MATERIAL SAFETY DATA SHEET

1. Identification of the Product and the Company

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| <i>Product Name:</i> | SIALON 21R |
| <i>Supplier:</i> | International Syalons (Newcastle) Limited Stephenson Street Willington Quay Wallsend Tyne & Wear NE28 6TT |
| <i>Telephone:</i> | +44(0) 191 295 1010 |
| <i>Description:</i> | Advanced ceramic powder. |

2. Composition / Information on Ingredients

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| <i>Composition:</i> | Major ingredients – >90wt% 21R ($\text{SiAl}_6\text{O}_2\text{N}_6$) and <10wt% aluminium nitride (AlN). |
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3. Hazard Identification

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| <i>Health Hazards:</i> | As the material is a fine powder over exposure to dust should be avoided. |
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4. First Aid Measures

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| <i>Inhalation:</i> | Dust may be an irritant. |
| <i>Eye Contact:</i> | Rinse eyes with water copiously – seek medical advice as necessary. |
| <i>Skin Contact:</i> | Wash thoroughly with soap and water. |
| <i>Ingestion:</i> | Extremely unlikely – seek medical advice as necessary. |

5. Fire Fighting Measures

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| <i>Special Risks:</i> | Not applicable – material is non-flammable. |
| <i>Extinguishing Media:</i> | Not applicable. |
| <i>Explosive Quality:</i> | None. |

6. Accidental Release Measures

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| <i>Environmental Precautions:</i> | Product is not biodegradable. |
| <i>Clean-up Method:</i> | Brush or vacuum up any spillages. |
| <i>Personal Precautions:</i> | Wear a suitable respirator, gloves and eye protection in dusty conditions. |

7. Handling and Storage

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| <i>Handling:</i> | As with all powders good industrial hygiene should be observed. |
| <i>Storage:</i> | Keep the material dry and reseal open packages. Store at room temperature (15 to 25°C recommended). |

8. Exposure Controls / Personal Protection

Personal Protection: 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

Physical State: Powder.

Colour: Off white, grey.

Melting Point: 1800°C.

Solubility in water: Virtually insoluble.

10. Stability and Reactivity

Stability: Stable.

Decomposition Products: No known hazardous decomposition products.

11. Toxicological Information

O.E.L.: No serious effects are known to be associated with inhaling dust from this material. Mechanical irritation can occur to eyes and skin due to abrasive nature of powder. Relative to other materials a single dose of this product is practically non-toxic by ingestion.

No evidence of carcinogenic properties.

12. Ecological Information

Ecotoxicity: No environmental hazard is anticipated provided that the material is handled and disposed of with due care and attention.

13. Disposal Considerations

Methods of Disposal: Dispose in accordance with all applicable local and national regulations.

14. Transport Information

Transport Regulations: No special conditions apply.

15. Regulatory Information

EU Regulations: Not applicable.

16. Other Information

Notice to Reader: To the best of our knowledge, the information contained herein is accurate. However, the above named supplier does not assume any liability whatsoever for the accuracy or completeness of the information herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.