



## Material Safety Data Sheet (MSDS)

### Section 1: Identification Of The Substance/Mixture And Of The Company/Undertaking

<b>1.1 Product Identifier</b>	<p>Alanine Pellets</p> <p><b>Product Names:</b> Loose alanine pellet dosimeters &amp; Tape Tab dosimeters.</p> <p><b>Brand:</b> Harwell Dosimeters</p> <p><b>REACH No.</b> A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.</p>
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	<p>Alanine dosimeters are an internationally recognised product used for the measurement of radiation dose.</p>
<b>1.3 Details of the supplier of the safety data sheet</b>	<p>Harwell Dosimeters Ltd        Unit 4 Moorbrook        Southmead Industrial Estate        DIDCOT        Oxfordshire OX11 7HP        United Kingdom  <a href="mailto:orders@harwell-dosimeters.co.uk">orders@harwell-dosimeters.co.uk</a></p>
<b>1.4 Emergency Telephone number</b>	<p>+44 01235 819013</p>

### Section 2: Hazards Identification

<b>2.1 Classification of the substance or mixture</b>	<p>Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.</p>
<b>2.2 Label elements</b>	<p>Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.</p>
<b>2.3 Other hazards</b>	<p>This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.</p>

### Section 3: Composition/information on ingredients

<b>3.1 Substances</b>	<p>Active Amino acid L-alpha- alanine        Formula: C3H7NO2        CAS-No. 56-41-7        EC-No. 200-273-8</p> <p>Paraffin wax        CAS-No. 8002-74-2        EC-No. 232-315-6</p>
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**Section 4: First Aid Measures**

<b>4.1 Description of First Aid Measures</b>	After inhalation of dust: Move from exposure to fresh air. After skin contact: Wash off with soap under running water. After eye contact: Rinse out with water plenty of water. Removing contact lenses if worn. After swallowing: Drink plenty of water Consult doctor if feeling unwell.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically

**Section 5: Firefighting Measures**

<b>5.1 Extinguishing media</b>	Water, CO2, Foam, or Powder
<b>5.2 Special hazards arising from the substance or mixture</b>	Keep product and empty container away from heat and sources of ignition
<b>5.3 Advice for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear.
<b>5.4 Further information</b>	Hazardous Combustion Products: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

**Section 6: Accidental Release Measures**

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Avoid the inhalation of dusts & ensure adequate ventilation. Use personal protective equipment as required.
<b>6.2 Environmental precautions</b>	Avoid generation of dust.
<b>6.3 Methods and materials for containment and cleaning up</b>	Sweep up dry.
<b>6.4 Reference to other sections</b>	None required

**Section 7: Handling & Storage**

<b>7.1 Precautions for safe handling</b>	Avoid contact with skin and eyes. Do not breath dust. Wash hands after handling the product. Minimize dust and accumulation. Do not ingest.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Keep in a dry, cool and well-ventilated place, Keep storage containers closed. Incompatible materials: Strong oxidizing agents.
<b>7.3 Specific end use(s)</b>	Dispose of product and packaging in accordance with national regulations

**Section 8: Exposure Controls / Personal Protection**

<b>8.1 Control parameters</b>	This product does not contain any hazardous materials with occupational exposure limits established by the regional specific regulatory bodies.
<b>8.2 Exposure controls</b>	None under normal use conditions.



**Section 9: Physical and chemical properties**

<b>9.1 Information on basic physical and chemical properties</b>	Melting point: 295-297 C Density: 1.4 g/cm3 0.9 g/cm3 Solubility in water: 166.5 g/l insoluble Thermal decomposition: 297C >180C Solid White Odourless
<b>9.2 Other safety information</b>	No protective equipment is needed under normal use conditions.

**Section 10: Stability and Reactivity**

<b>10.1 Reactivity</b>	None know, based on information available
<b>10.2 Chemical stability</b>	Stable under normal conditions (room temperature).
<b>10.3 Possibility of hazardous reactions</b>	Combustible.
<b>10.4 Conditions to avoid</b>	Avoid dust formation
<b>10.5 Incompatible materials</b>	Strong oxidizing agents
<b>10.6 Hazardous decomposition products</b>	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

**Section 11: Toxicological Information**

<b>11.1 Information on toxicological effects</b>	No Acute toxicity information is available for this product.
<b>11.2 Additional Information</b>	<p>The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.</p> <p>To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. This is a non-essential amino acid that occurs in many forms in natural protein. No toxic effects are to be expected when the product is handled in routine use.</p>

**Section 12: Ecological information**

<b>12.1 Toxicity</b>	No Acute toxicity information is available for this product
<b>12.2 Persistence and degradability</b>	Persistence is unlikely
<b>12.3 Bioaccumulative potential</b>	No information available
<b>12.4 Mobility in soil</b>	Will likely be mobile in the environment due to its water solubility
<b>12.5 Results of PBT and vPvB assessment</b>	No information available
<b>12.6 Endocrine disrupting properties</b>	No information available
<b>12.7 Other adverse effects</b>	No ecological problems are expected as the product is handled and used with due care



**Section 13: Disposal Considerations**

<b>13.1 Waste treatment methods</b>	Dispose of product and packaging in accordance with national regulations. For tape tab, any PET film and cardboard packaging material can be recycled if required.
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**Section 14: Transport Information**

<b>14.1 UN number</b>	Not subject to transport regulations
<b>14.2 UN proper shipping name</b>	ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods
<b>14.3 Transport hazard class(es)</b>	Not assigned
<b>14.4 Packaging group</b>	Not assigned
<b>14.5 Environmental hazards</b>	Non-hazardous product
<b>14.6 Special precautions for user</b>	Not classified as dangerous in the meaning of transport regulations.

**Section 15: Regulatory Information**

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	There is no additional information
<b>15.2 Chemical Safety Assessment</b>	No chemical safety assessment has been carried out

**Section 16: Other Information**

<b>Further information</b>	<p>The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product about appropriate safety precautions. It does not represent any guarantee of the properties of the product. STERIS and it's company Harwell Dosimeters Limited shall not be held liable for any damage resulting from handling or from contact with the above product.</p> <p>See the reverse side of Sales Orders for additional terms and conditions of sale.</p> <p>The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered.</p>
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