



## Material Safety Data Sheet (MSDS)

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

<b>1.1 Product Identifier</b>	<p>Red Perspex and Amber Perspex</p> <p><b>Product Names:</b> Harwell Red 4034 Dosimeters. Harwell Amber 3042 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>Perspex 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>Low toxicity under normal conditions</p>
<b>2.2 Label elements</b>	<p>None required</p>
<b>2.3 Other hazards</b>	<p>Thermal decomposition will evolve toxic, irritant, and flammable vapours.</p>

### Section 3: Composition/information on ingredients

<b>3.1 Substances</b>	<p>No classifiable hazardous ingredients</p>
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### Section 4: First Aid Measures

<b>4.1 Description of First Aid Measures</b>	Inhalation: Remove patient from exposure, keep warm And at rest. Skin contact: Wash skin with soap and water Eye contact: Rinse immediately with plenty of water. Ingestion: Do not induce vomiting. Further medical treatment: If symptoms develop obtain further medical attention.
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	None known
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	None known

### Section 5: Firefighting Measures

<b>5.1 Extinguishing media</b>	Water spray, dry powder or carbon dioxide
<b>5.2 Special hazards arising from the substance or mixture</b>	Combustion will evolve toxic, irritant, and flammable vapours
<b>5.3 Advice for firefighters</b>	A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions
<b>5.4 Further information</b>	None known

### Section 6: Accidental Release Measures

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Offcuts, swarf or dust should be collected and disposed of in a safe way
<b>6.2 Environmental precautions</b>	None known
<b>6.3 Methods and materials for containment and cleaning up</b>	None required
<b>6.4 Reference to other sections</b>	Not required



### Section 7: Handling & Storage

<b>7.1 Precautions for safe handling</b>	Broken or chipped edges can be sharp
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Storage temperature below 40 °C
<b>7.3 Specific end use(s)</b>	Can not be recycled after exposure to irradiation.

### 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>	Form:	plaque
	Colour:	coloured
	pH (Value)	Not applicable
	Freezing Point (°C)	Not applicable
	Boiling Point (°C)	Not applicable
	Flash Point (°C)	10 (MMA) plaque has no flash point.
	Relative Evaporation Rate (Ether = 1)	Not applicable
	Flammable limits	Not applicable
	Vapour pressure (Pascal)	Not applicable
	Vapour Density (Air = 1)	Not applicable
	Solubility (Water)	Insoluble
	Solubility (Other)	Soluble in most organic solvent,
	acetone and chlorinated hydrocarbon	
	Partition Coefficient (n-Octanol/water)	Not applicable
	Auto Ignition Temperature (°C)	421 (MMA)
	Viscosity (mPa. s)	Solid
	Explosive properties	Not Explosive
	Oxidising properties	Not oxidising
	Density (g/ml)	1.19
<b>9.2 Other safety information</b>	Softening Point (°C) >100	
	No protective equipment is needed under normal use conditions.	

### Section 10: Stability and Reactivity

<b>10.1 Reactivity</b>	None known
<b>10.2 Chemical stability</b>	Stable at routine temperatures



<b>10.3 Possibility of hazardous reactions</b>	None Known
<b>10.4 Conditions to avoid</b>	Avoid temperatures over 100°C as the material may soften and deform
<b>10.5 Incompatible materials</b>	None known
<b>10.6 Hazardous decomposition products</b>	None known

### Section 11: Toxicological Information

<b>11.1 Information on toxicological effects</b>	<p><b>Inhalation</b> Unlikely route of exposure.</p> <p><b>Skin Contact</b> No evidence of irritant effects from normal handling and use. Sharp edges may cause cuts</p> <p><b>Eye Contact</b> Swarf or dust may cause irritation. Sharp off-cuts may cause eye damage.</p> <p><b>Ingestion</b> Unlikely to be hazardous if swallowed.</p> <p><b>Long Term Exposure</b> No known hazards are associated with the use of this material.</p>
<b>11.2 Additional Information</b>	No further issues

### Section 12: Ecological information

<b>12.1 Toxicity</b>	The product is predicted to have low toxicity to aquatic organism.
<b>12.2 Persistence and degradability</b>	The product is non-biodegradable in oil
<b>12.3 Bio accumulative potential</b>	The product as low potential for bioaccumulation
<b>12.4 Mobility in soil</b>	The product as low mobility in soil
<b>12.5 Results of PBT and vPvB assessment</b>	Not classified as PBT and vPvB
<b>12.6 Endocrine disrupting properties</b>	None known.
<b>12.7 Other adverse effects</b>	None known.



### Section 13: Disposal Considerations

<b>13.1 Waste treatment methods</b>	Disposal should be in accordance with local, state or national legislation. Incineration may be used to recover energy value. Bury on an authorised landfill site or incinerate under approved controlled conditions, using incinerators suitable for the disposal of noxious chemical waste. Large quantities of waste may be recoverable.
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### Section 14: Transport Information

<b>14.1 UN number</b>	Not Classified as Dangerous for Transport
<b>14.2 UN proper shipping name</b>	N/A
<b>14.3 Transport hazard class(es)</b>	N/A
<b>14.4 Packaging group</b>	N/A
<b>14.5 Environmental hazards</b>	None known
<b>14.6 Special precautions for user</b>	None required

### Section 15: Regulatory Information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	This product is an article and as such Article 31 (Requirement for Safety Data Sheets) of Regulation (EC) No 1907/2006 does not apply. Directive 2009/161/EU (third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC).
<b>15.2 Chemical Safety Assessment</b>	A Chemical Safety Assessment has not been carried out for this substance/mixture.

### 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 its 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 the information in the document regarding the product remains unchanged and matches the product ordered.</p>
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