



**ASSOCIATED DENTAL PRODUCTS LTD**  
**MATERIAL HEALTH AND SAFETY DATA SHEET**

Version: 10

Updated on: 12/01/05

<b>1. PRODUCT AND COMPANY IDENTIFICATION</b>	
<p><b>1.1: Product Name &amp; Codes:</b> ACR920-924, Simplex Liquids(s) ACR911-942Acron Liquid(s), ACR903Orthodontic Liquids(s) Longlast liquid ACR555</p> <p><b>1.2:Use:</b> Dental liquid for manufacture of dental devices.</p> <p><b>1.3: Company Identification:</b> Associated Dental Products Ltd Kemdent Works Purton Swindon Wiltshire SN5 4HT</p> <p><b>Tel:</b> +44 (0) 1793 770 256</p> <p><b>Fax:</b> +44 (0) 1793 772 256</p> <p><b>1.4: Emergency Tel:</b> +44 (0) 1793 770 256</p>	
<b>2. COMPOSITION/INFORMATION ON INGREDIENTS</b>	<b>3. HAZARDS IDENTIFICATION</b>
<p><b>2.1:General Description:</b> Methyl Methacrylate</p> <p><b>2.2: Hazardous Ingredient(s):</b> Methyl Methacrylate 99.5%, CAS No.80-62-6, EC No.201-297-1, EC Classification F, Xi, R11, R37/38, R43</p> <p><b>2.3:</b>The remaining ingredients &lt;1%</p> <p><b>2.4:R Phrases:</b> For full text of R phrases see section 16.</p>	<p>Highly flammable. Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact. Combustible but not readily ignited.</p> <p><b>EC Classification:</b> Flammable, Irritant.</p> <p>For label information see section 15.</p>
<b>4. FIRST AID MEASURES</b>	<b>5. FIRE FIGHTING MEASURES</b>
<p><b>Inhalation:</b> Remove patient from exposure, obtain immediate medical attention if ill effects occur.</p> <p><b>Skin Contact:</b> Remove contaminated clothing. Wash skin with water. If symptoms (irritation or blistering) occur obtain medical attention.</p> <p><b>Eye Contact:</b> Irrigate with eyewash solution or clean water, holding eyelids apart, for at least 15 minutes. Obtain medical attention.</p> <p><b>Ingestion:</b> Do not induce vomiting. Wash out mouth. Obtain medical attention.</p>	<p>Highly flammable, the following vapours may arise during fires: Methacrylate monomer and Carbon monoxide.</p> <p><b>Extinguishing Media:</b> Foam, dry powder or CO2.</p> <p><b>Fire Fighting Protective Equipment:</b> A self-contained breathing apparatus and full protective clothing should be worn in fire conditions.</p>
<b>6. ACCIDENTAL RELEASE MEASURE</b>	<b>7. HANDLING AND STORAGE</b>
<p>Precautions: eliminate sources of ignition. Spillages should be cleaned immediately with suitable absorbent material, e.g. sand or earth and disposed of in accordance with local regulations.</p> <p>Do not allow spillages to enter drains. Ensure that personal protective equipment is worn as advised in section 8.</p>	<p><b>7.1: Handling:</b> Avoid contact with skin and eyes. Avoid inhalation of high concentration of vapours. Use only in well ventilated areas.</p> <p>The vapour is heavier than air; beware of pits and confined spaces.</p> <p><b>7.2: Storage:</b> Store in a cool, dry place away from heat, sparks and direct sunlight. Keep away from sources of ignition.</p> <p><b>7.3: Specific Uses:</b> Monomer for polymer manufacture.</p>
<b>8. EXPOSURE CONTROLS AND PERSONAL PROTECTION</b>	<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
<p><b>8.1: Exposure Limit Values:</b> Occupational exposure limits, Hazardous Ingredient(s) Methyl Methacrylate. TLV-TWA (ACGIH) = 100ppm (410mg/m<sup>3</sup>) PEL-TWA (OSHA) = 100ppm (410mg/m<sup>3</sup>) IDLH = 4000ppm MAK = 50ppm (210mg/m<sup>3</sup>)</p> <p><b>8.2: Exposure Controls:</b> Provide adequate ventilation, including appropriate local extraction to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.</p> <p>The following information is given as general guidance.</p> <p><b>Respirators:</b> Wear suitable respirator protective equipment if exposure to levels above the occupational exposure is likely.</p> <p><b>Gloves:</b> Wear suitable glove.</p> <p><b>Eye Protection:</b> Safety spectacles/goggles.</p> <p><b>Other:</b> Wear suitable protective clothing.</p>	<p><b>Form:</b> Clear liquid</p> <p><b>Colour:</b> Colourless</p> <p><b>Odour:</b> Characteristic, methyl methacrylate</p> <p><b>Ph (Value):</b> N/A</p> <p><b>Boiling Point/Boiling Range:</b> 101°C</p> <p><b>Flash Point:</b> 10°C Din 51758</p> <p><b>Highly Flammable:</b> N/A</p> <p><b>Specific Gravity:</b> 1.011g/cm at 25°C</p> <p><b>Auto Ignition Temperature:</b> 430°C</p> <p><b>Explosive Properties:</b> Lower Limit 2.1%, Upper 12.5%</p> <p><b>Oxidising Properties:</b> N/A</p> <p><b>Vapour Pressure:</b> 5.3Kpa(40mmHg at 25°C)</p> <p><b>Density:</b> 1.1-1.8g/cm<sup>3</sup></p> <p><b>Solubility in Fat:</b> Soluble in MEK, THF, aromatic and chlorinated hydrocarbons.</p> <p><b>Solubility in Water:</b> 1.5 in 100 ml at 20°C</p> <p><b>Oil/Water Partition Coefficient:</b> N/A</p> <p><b>Evaporation Rate (ethyl ether = 1):</b> N/A</p> <p><b>Partition Coefficient:</b> Octanol/Water log Kow = 5.0</p> <p><b>Vapour Density (air =1):</b> 3.45</p> <p><b>Viscosity:</b> Very low Pas 25°C</p> <p><b>Molecular Weight:</b> 100.2</p>

<b>10. STABILITY AND REACTIVITY</b>	<b>11. TOXICOLOGICAL INFORMATION</b>
<p><b>Hazardous Reactions:</b> Stable under recommended storage conditions.</p> <p><b>10.1: Conditions to Avoid:</b> Keep away from heat, sparks, static electricity, light sources and oxidising agents.</p> <p><b>10.2: Materials to Avoid:</b> Nitrates, oxidants, peroxides, strong alkalies and polymerisation catalysts.</p> <p><b>10.3: Hazardous Decomposition Product(s):</b> Combustion will generate oxides of carbon, carbon dioxide and carbon monoxide.</p>	<p><b>Acute Toxicity:</b> LD50 = 3750 ppm/hr (inhalation-rat) OR 8000 MG/Kg (oral rat). This material may cause irritation of skin, eyes and respiratory tract. In extreme cases it may cause dermatitis and erythema. Aspiration may cause pulmonary edema.</p> <p><b>Toxicity:</b> TCL0 = 109 mg/m<sup>3</sup>/17m (6-15D pregnant inhalation-rat): Effects on foetus and specific developmental abnormalities. TCL0 = 54mg/m<sup>3</sup>/24H (8Wpregnant inhalation-rat): Maternal effects. TCL0 = 4480 mg/m<sup>3</sup>/2H(6-18D pregnant inhalation-rat): Effects fertility.</p>
<b>12. ECOLOGICAL INFORMATION</b>	<b>13. DISPOSAL CONSIDERATIONS</b>
<p><b>12.1: Ecotoxicity, 12.2: Mobility, 12.3: Persistence and Degradability, 12.4: Bioaccumulative &amp; 12.5 Other Adverse effects:</b> Avoid subsoil penetration. Do not let product enter drains. Do not contaminate surface water. It will be lost by volatilisation (half life 6.3). If released into atmosphere it will photodegrade by reaction with photoytically radicals (half life 2.7 hr and &gt;3 hr rural). MMA will not bioaccumulate in organisms. LC50 = 259 mg/196h primephales promelas, 368 mg/1/96h (poecilia reticulata).</p>	<p>Disposal should be in accordance with local or national legislation.</p>
<b>14. TRANSPORT INFORMATION</b>	<b>15. REGULATORY INFORMATION</b>
<p><b>Proper Shipping Name:</b> Methyl Methacrylate Momomer  <b>UN Number:</b> 1247  <b>Land Road/Rail:</b> ADR/RID 3.3b  <b>Inland Waterway:</b> ADNR not classified  <b>Sea:</b> IMDG Class 3.2 Packing group 11  <b>Air:</b> IATA not classified</p>	<p><b>Hazard Symbol:</b> F, Xi, R11, R37/38, R43  <b>Safety Phrases:</b>  <b>S2:</b> Keep out of the reach of children.  <b>S24:</b> Avoid contact with skin.  <b>S37:</b> Wear suitable gloves.  <b>S46:</b> If swallowed, seek medical advice immediately and show this container or label.  <b>EC Classification:</b> Flammable, Irritant.</p> <div style="display: flex; align-items: center; margin-top: 10px;">  <p>F Highly Flammable</p> </div> <div style="display: flex; align-items: center; margin-top: 10px;">  <p>Xi Irritant</p> </div>
<b>16. OTHER INFORMATION</b>	
<p><b>Risk Phrases:</b>  <b>R11:</b> Highly flammable.  <b>R37/38:</b> Irritating to respiratory system and skin.  <b>R43:</b> May cause sensitisation by skin contact.</p>	