

City Plastics Pty Ltd  
61 East Street  
Brompton 5007  
South Australia

Ph: (+61) 8, 8346 6500

Fax: (+61) 8, 8346 6711

Email: info@cityplastics.com.au

www.cityplastics.com.au

ABN 20 101 181 793

ACN 101 181 793

- Sheet Plastics
- Cut to size & shape
- CNC Router cutting
- Fabrication
- Vacuum Forming
- Boat Screens & windows
- Signs & Displays
- Engineering Plastics
- Ecoscreen Plastic Lattice
- C/S Acrovyn
- Bld/Lic RL155051

---

## MATERIAL SAFETY DATA SHEET, ACETAL

<b>Section 1</b>	<b>Product and Company Identification</b>
------------------	---

City Plastics Pty Ltd  
61 East Street  
BROMPTON 5007  
South Australia

Phone: +61,8,8346 6500

Fax: +61,8,8346 6711

**Material Identification**

**Product Name:** ACETAL

**Chemical Name:** POLYOXYMETHYLENE, FORMALDEHYDE HOMOPOLYMER (POM)  
ACETAL HOMOPOLYMER.

**CAS Number:** 9002-81-7 (BASE POLYMER)

**Product Use:** Engineering thermoplastic, for fabrication.

<b>Section 2</b>	<b>Composition/Information on Ingredients</b>
------------------	---

NA

<b>Section 3</b>	<b>Hazards Identification</b>
------------------	-------------------------------

**Ingestion:** Not a probable route if ingestion.

**Skin:** Molten material will cause thermal burns.

**Eye:** Mechanical irritation only.

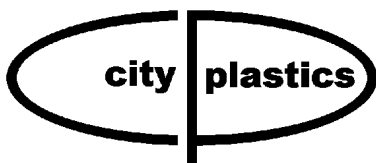
**Inhalation:** Stock shapes are not respirable, avoid breathing dust, as fine particles can be inhaled and retained in the lungs.

<b>Section 4</b>	<b>First Aid Measures</b>
------------------	---------------------------

If exposed to fumes from overheating, move to fresh air. Consult a physician if symptoms persist. Wash skin with soap and plenty of water. Flush eyes with water. Consult a physician if symptoms persist.

If molten acetal contacts skin, cool rapidly with cold water. Do not attempt to peel acetal from skin. Obtain medical attention to thermal burn.

**Chronic effects:** chronic inhalation studies in animals have shown that formaldehyde causes nasal cancer in rats. The international agency for research on cancer has classified formaldehyde as a carcinogen in group 2a.



City Plastics Pty Ltd  
61 East Street  
Brompton 5007  
South Australia  
Ph: (+61) 8, 8346 6500  
Fax: (+61) 8, 8346 6711

## MATERIAL SAFETY DATA SHEET, ACETAL

<b>Section 4</b>	<b>First Aid Measures (continued)</b>
------------------	---------------------------------------

**Medical conditions generally aggravated by this material:** No data is available which addresses medical conditions that are generally recognised as being aggravated by exposure to this product.

<b>Section 5</b>	<b>Fire Fighting Measures</b>
------------------	-------------------------------

**Flash ignition temperature:** 320°C / 608°F

**Method:** ASTM D-1929

**Unusual fire, explosion hazards:** None known.

**Hazardous combustion products:** Formaldehyde may be released if product is exposed to excessive heat or fire.

**Special fire fighting instructions:** Fire fighters and others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

**Extinguishing media:** Water spray or any class 'A' extinguishing agent.

<b>Section 6</b>	<b>Accidental Release Measures</b>
------------------	------------------------------------

**Spill or release:** Clean up by vacuuming or sweeping to prevent falls.

<b>Section 7</b>	<b>Handling and Storage</b>
------------------	-----------------------------

Practice reasonable care and caution in handling.

<b>Section 8</b>	<b>Exposure Controls/Personal Protection</b>
------------------	--

**Eye:** Safety glasses are recommended to prevent particulate matter from entering eyes while grinding or machining.

**Skin:** Protective gloves are required when handling hot polymer. Also, long sleeve cotton shirt and long pants if handling molten polymer.

**Ventilation:** Local exhaust at processing equipment to assure that particulate levels are kept at recommended levels. Also, formaldehyde fumes may be released during fabrication.

**Respirator:** None under normal processing, if ventilation is adequate. If formaldehyde concentration is above 1 ppm, a properly fitted approved respirator is required.

<b>Section 9</b>	<b>Physical and Chemical Properties</b>
------------------	---

**Appearance:** Stock shape may be rod, plate, tube, or strip form.

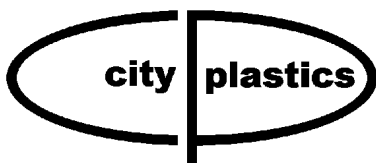
**Odour:** Essentially odourless.

**Melting point:** 172 - 184°C / 342 - 363°F

**Solubility in water:** Insoluble

**Volatile content %:** <1%

**Specific gravity:** 1.39 - 1.44



City Plastics Pty Ltd  
61 East Street  
Brompton 5007  
South Australia  
Ph: (+61) 8, 8346 6500  
Fax: (+61) 8, 8346 6711

## MATERIAL SAFETY DATA SHEET, ACETAL

<b>Section 10</b>	<b>Stability and Reactivity</b>
-------------------	---------------------------------

**Stability at room temperature:** Stable.

**Materials to avoid:** Strong acids and bases, decomposes forming formaldehyde. Strong oxidising agents.

**Conditions to avoid:** Heating above 230°C / 446°F forms formaldehyde.

<b>Section 11</b>	<b>Toxicological Information</b>
-------------------	----------------------------------

**Chronic toxicity:** Acetal product shapes are harmless.

**Medical conditions prone to aggravation by exposure:** No data is available which addresses medical conditions that are generally recognised as being aggravated by exposure to this product.

**Carcinogenicity:** refer to section 4 (chronic effects) for effects observed in animals.

<b>Section 12</b>	<b>Ecological Information</b>
-------------------	-------------------------------

**Aquatic toxicity:** Toxicity is expected to be low based on insolubility of polymer in water.

<b>Section 13</b>	<b>Disposal Considerations</b>
-------------------	--------------------------------

**Spill or release:** Clean up by vacuuming or wet sweeping to minimise dust exposure.

**Waste disposal:** Landfill or incineration in compliance with federal, state, and local regulations.

<b>Section 14</b>	<b>Transport Information</b>
-------------------	------------------------------

**Hazard class:** NA

**Shipping name:** NA

<b>Section 15</b>	<b>Regulatory Information</b>
-------------------	-------------------------------

This product contains no known toxic chemicals.

<b>Section 16</b>	<b>Other Information</b>
-------------------	--------------------------

Prepared by: Steven Cook

Issued: 1 September 2009

The information set forth herein has been gathered from standard reference materials and/or supplier test data and is to the best knowledge and belief of City Plastics Pty Ltd, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones, which exist. City Plastics Pty Ltd makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility.