



**Endex International**

Innovation for the Future

## Endex 4221™ Material Safety Data Sheet

### Section 01 – Product Identity & Company Information

Product Name: Endex 4221™  
Supplier: Endex International, Inc.  
487 Westney Road South, Unit #8  
Ajax, Ontario, Canada L1S 6W8  
Prepared By: Regulatory Affairs Department  
Preparation Date: 15 July 2005  
Chemical Formula: 4,4', polycarbonic acid salt, inorganic carbonate in a  
polymeric carrier.  
Molecular Weight: N.AP  
Chemical Family: N.AP  
Material Use: Plastics  
Emergency Phone Number: 905.686.4335

### Section 02 – Composition/Information on Ingredients

Hazardous Ingredients	%	T.L.V.	C.A.S #	LD/50, Route Species
Polyolefin	~ 55	-	026221-73-8	N.AV

Note: Non hazardous ingredients: The specific chemical identities are being withheld as trade secrets

### Section 03 – Hazards Identification

Route of entry: Molten polymer causes thermal burns.  
Skin contact: N.AV.  
Skin absorption: Low hazard for usual industrial handling.  
Eye contact: Low hazard for usual industrial handling.  
Inhalation: No significant toxicity is expected.  
Effects of acute exposure: No chronic health effects are expected from use of this product.  
Effects of chronic exposure: N.AV.  
Inhalation, chronic: N.AV.

## Section 04 – First Aid Measures

### Instructions:

**Eyes:** Any material which contacts the eyes should be washed out immediately. If symptoms persist, consult a physician.

**Skin:** If burned by contact with molten material, cool as quickly as possible with water and see a physician for treatment of burn; Ingestion: no adverse effects anticipated by this route of exposure incidental to proper industrial handling, in case of inhalation, remove to fresh air. If symptoms persist, consult a physician.

**Burns:** Should be treated as thermal burns. The plastic will come off as healing occurs, therefore immediate removal from the skin is not necessary.

## Section 05 – Fire Fighting Measures

Flammability:	Combustible solid.
Extinguishing media:	Water spray, dry chemical, foam ,CO <sub>2</sub> .
Special procedures:	Wear full protective equipment, including a self-contained breathing apparatus.
Flash point (°C),method:	N.AP
Flash ignition temperature:	350 °C
Auto ignition temperature:	N.AV.
Upper flammable limit (% by vol.):	N.AP
Lower flammable limit (% by vol.):	N.AP.
Explosion data - explosive power:	N.AV.
Rate of burning:	N.AV.
Sensitivity to static discharge:	N.AV.
Sensitivity to impact:	N.AV.
Unusual fire and explosion hazards:	Powdered material may form explosive dust-air mixtures. Minimize dust generation and accumulation.
Hazardous combustion products:	Oxides of carbon (CO,CO <sub>2</sub> ), Hydrocarbon oxidation products including organic acids, aldehydes and alcohol.

## Section 06 – Accidental Release Measures

**Leak/Spill:** Wear protective equipment. Sweep or shovel material into waste container.

## Section 07 – Handling And Storage

**Handling procedures & Equipment:** Handle in accordance with good industrial hygiene and safety practices. Keep away from incompatibles. Minimize dust generation and exposure. Dust layers should not be permitted to accumulate to avoid any potential for dust explosion hazards. Empty containers may contain product residue. Follow labeled warnings even after container is emptied.

**Storage Needs:** Keep container closed when not in use. Store away from incompatible materials. Store in a dry environment away from sources of heat.

## Section 08 – Exposure Controls/Personal Protection

**Gloves/Type:** Protective gloves can be worn to reduce contact with skin.

**Respirator/Type:** A NIOSH/MSMA jointly approved respirator is advised in the absence of proper environmental controls. In a dusty atmosphere, use an approved dust respirator.

**Eye/Type:** Avoid eye contact as good industrial practice.

**Footwear/Type:** No special requirements.

**Clothing/Type:** Wear adequate protective clothes.

**Other/Type:** Eye bath and safety shower.

**Engineering controls:** Good general ventilation (typically 10 air changes per hour) should be sufficient to control airborne levels. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

## Section 09 – Physical And Chemical Properties

Physical state:	Solid
Odor:	No odor
Odor threshold:	N.AP.
Vapor pressure (mmHg):	N.AP.
Vapor density (air=1):	N.AP.
Evaporation rate:	N.AP.
Boiling point:	N.AP.
pH:	N.AP.
Specific gravity (water=1):	85 - 1.00
Solubility in water (%W/W):	Insoluble
Coefficient of water/oil dist:	N.AP.

## Section 10 – Stability And Reactivity

Chemical stability:	Yes: Under usual industrial conditions; No: Degrades above 150°C
Compatibility with other substances:	Yes. No: Reacts with acids to liberate CO <sub>2</sub> .
Reactivity conditions:	Contact with incompatibles.
Hazardous products of decomposition:	See Hazardous combustion products, Section 05.
Hazardous polymerization:	Will not occur.

## Section 11 – Toxicological Information

Exposure limit of material:	See Section 02.
LD50 of material, species and route:	See Section 02.
Carcinogenicity of material:	None.
Reproductive effects:	N.AV.
Irritancy of material:	See Section 03.
Sensitizing capability of material:	N.AV.
Synergistic materials:	N.AV.

## Section 12 – Ecological Considerations

Environmental toxicity information: This material has not been tested for environmental effects.

## Section 13 – Disposal Considerations

Waste Disposal: In accordance with Municipal, Provincial and Federal regulations.

## Section 14 – Transport Information

UN number:	N.A.P.
T.D.G. classification:	Not regulated.
Packing group:	N.A.P.
Special shipping instructions:	N.A.P.

## Section 15 – Regulatory Information

WHMIS Classification:	This is not a controlled product.
CPR Compliance:	This product has been classified in with the Hazard Criteria of the CPR and the Material Safety Data Sheet contains all the information required by the CPR.

## Section 16 – Other Information

N.A.P. = Not applicable.

N.A.V. = Not available.

## Section 17 – Contacting Endex International

### Canada:

487 Westney Road South, Unit #8  
Ajax, Ontario L1S 6W8  
Phone: 905.686.4335  
Fax: 905.686.6691

### USA:

111 Main Street, Box 381  
Kingston, Illinois, USA  
60145  
Phone: 815.784.2446  
Fax: 815.784.6012

### UK:

9 Abbey Close  
Alcester, B49 5QW  
Phone: 01 789 765762  
Fax: 01 789 765572

You can also visit our website at: [www.endexint.net](http://www.endexint.net) or email us at [info@endexint.net](mailto:info@endexint.net) for more information.

Note: The information above is based on our current knowledge of the product. It is provided to describe the product in terms of health and safety standards. It does not represent the product specification data. Users must satisfy themselves as to the suitability and completeness of the information.

Endex International, Inc. makes no representation or warranty regarding the information provided in this Material Safety Data Sheet. The information is however, as at the date of issue, true and accurate to the best of our knowledge. This information is not intended to be all-inclusive. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.

© Endex International, Inc. 2006.