## TECAFORM™ Copolymer Acetal

### EMERGENCY TELEPHONE:
- 724-746-6050 or 856-227-0500

### Issue Date:
- October 1, 1985

### Revised Date:
- June 29, 2004

### TRADE NAME:
- Polyoxymethylene Co-Polymer, POM

### CHEMICAL NAME:
- Polyacetal Resin

### PRODUCT NAME:
- Acetal Co-Polymer

### 1. Hazardous Ingredients & Composition Information

Composition: Polyoxymethylene Co-Polymer. The principle monomer is 1,3,5-trioxan (CAS# 110-88-3). The co-monomer is 1,3-dioxacy-cloheptane (CAS# 505-65-7)

### 2. Health Hazard Summary

**Signs and Symptoms of Exposure:** Acetal itself is harmless, molten material can cause thermal burns. If Acetal is subjected to excessive heat the primary decomposition product is formaldehyde, which has a penetrating odor that can irritate the eyes and throat even at low concentrations.

**Toxicological Properties:** No adverse health effects have been observed in the handling of Acetal provided that the workplace is adequately ventilated and normal safety practices are followed. If formaldehyde is released due to excessive heating, steps must be taken to ensure that the TLV (ACCGIH 1985-86 TLV-TWA: 1ppm) is not exceeded. Formaldehyde is classified as an animal carcinogen by the National Toxicology Program (NTP 3rd Annual Report on Carcinogens).

### 3. Emergency & First Aid Procedures

**Eye Contact:** If contact with decomposition products occurs, flush eyes with water for 15 minutes. Obtain medical attention if irritation persists.

**Skin Contact:** If contact with decomposition produces occurs, flush contaminated skin with soap and water. Obtain medical attention if irritation persists. Thermal burns from contact with molten material should be treated by a physician.

**Inhalation:** If contact with decomposition products occurs, remove to fresh air. Other measures are usually unnecessary. Obtain medical attention if irritation persists.

**Ingestion:** Seek medical attention.

### 4. Physical & Chemical Characteristics

- **Melting Point:** N.A
- **Specific Gravity:** 1.35 - 1.60 @20°C
- **Vapor Pressure:** N.A.
- **Vapor Density:** N.A.
- **Melting Range:** 163 - 168°C
- **Molecular Weight:** Polymer
- **Water Solubility:** Insoluble
- **Appearance / Odor:** Opaque Natural or Colors / Odorless
### 5. Emergency and First Aid Procedures

**Flash Point:** Ignition Temp 320 - 340°C (ASTM D1929)

**Extinguishing Media:** Water mist; CO₂; Dry Chemical; Foam. Use water spray to cool containers.

**Unusual Fire and Explosion Hazards:** Formaldehyde may be released if product is exposed to excessive heat or fire. Firefighters should wear air-supplied or self-contained breathing apparatus. Airborne dust may be explosive. Explosibility of dusts increases with decreasing particle size, so the production of fines should be minimized.

**Conditions to Avoid:** Avoid extreme heat. Decomposition occurs at temperatures above 240°C

**Materials To Avoid:** Avoid contact with polyvinyl chloride (PVC) materials when processing Acetal; acids; strong oxidizers.

**Hazardous Decomposition Products:** Formaldehyde and carbon monoxide when product is exposed to excessive heat.

### 6. Occupational Control Procedures

**Eye Protection:** Safety glasses with side-shields should be worn during industrial operations. A face shield should be worn when handling molten material.

**Skin Protection:** Protective clothing should be worn when handling molten material.

**Respiratory Protection:** NIOSH approved organic vapor cartridge respirator if needed when handling molten materials. Supplied-air or self-contained breathing apparatus in emergency or non-routine situations.

**Ventilation:** Local exhaust ventilation a source may be needed when processing molten material. General ventilation should be adequate for routine handling.

### 7. Spill, Leak, or Disposal Information

**Steps to be taken in case material is released or spilled:** Reclaim for processing if possible.

**Waste Disposal Method:** Permitted landfill or incineration. Comply with local, state, and federal regulations.

**Special Storage / Handling Requirements:** Avoid extreme heat, protect from moisture during transportation and storage. Pellet-handling equipment should be grounded to prevent buildup of electrostatic charge. Pellets on floor may be slippery and cause falls. Avoid dust accumulation.

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