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ADVANCED POLYMER ALLOYS  
MATERIAL SAFETY DATA SHEET  
ALCRYN<sup>®</sup> MELT-PROCESSIBLE RUBBER – NON-BLACK GRADES

Revised July 17, 2006

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**1. MATERIAL/COMPANY IDENTIFICATION**

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**Material Identification**

"ALCRYN<sup>®</sup>" is a registered trademark of Advanced Polymer Alloys.

**Trade Names and Synonyms**

"ALCRYN" 2060NC, 2060CL, 2070NC, 2080NC, 2090NC, 2095NC  
"ALCRYN" 3055NC, 3065NC, 3075NC  
"ALCRYN" 2160NC, 2165TR, 2170NC, 2180NC  
"ALCRYN" ALR 2245TR (2250UT), 2265TR (2265UT)  
"ALCRYN" 2360NC, 2370NC, 2380NC  
"ALCRYN" 4060NC, 4070NC, 4080NC, 4070WH  
"ALCRYN" 4660NC, 4670NC, 4680NC  
"ALCRYN" 5070NC, 5080NC  
"ALCRYN" ALR 7063, ALR 7083NC, ALR 7343, ALR 7373, ALR 9000  
"ALCRYN" ALR 7132, ALR 7133, ALR 7453, ALR 7161 #

**Company Identification**

Manufacturer/Distributor  
Advanced Polymer Alloys  
Division of Ferro Corporation  
3521 Silverside Road - Suite 2E  
Wilmington, DE 19810

**Telephone Number**

**Product Information: 1-888-663-6005**

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

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**Components**

<u>Material</u>	<u>CAS Number</u>	<u>%</u>
Halogenated Polyolefin Compositions	NA	100

**Components (Remarks)**

Material is not known to contain Toxic Chemicals pursuant to Title III, §313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 C.F.R., part 372.

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**3. HAZARDS IDENTIFICATION**

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Before using this product, read the "Safe Handling Guide" for ALCRYN<sup>®</sup> Melt Processible Rubber.

**Safety Hazards:**

**Pellet Spills:** Pellet spills can be a slipping hazard, especially on smooth floors.

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**Human Health Hazards:****Contact with Molten Product/Degradation/Combustion Vapors:**

Contact of molten polymer with any human tissue will result in thermal burns.

Vapors generated in polymer degradation will contain hydrogen chloride and other irritants which can cause temporary eye and respiratory irritation.

Vapors generated in the combustion of the polymer will contain toxic chemicals in addition to the hydrogen chloride. Fire fighters should wear self-contained breathing apparatus. All unprotected personnel should leave the area.

**Chronic Effects:**

None are known.

**Medical Conditions Aggravated By Exposure:**

None are known.

**Carcinogenicity:**

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

**Environmental Hazards:**

None are known.

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**4. FIRST AID MEASURES**

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**First Aid****Inhalation:**

If vapors from the degradation or combustion of the product are inhaled, remove personnel to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain professional medical attention.

**Skin Contact:**

In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse. If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

**Eye Contact:**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

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## 5. FIRE FIGHTING MEASURES

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### Flammable Properties

**Flash Ignition Temperature:** No data available, but > 249°C (480°F).

**Fire and Explosion Hazards:** The solid polymer can only be combusted with difficulty. No explosion hazard.

### Hazardous Combustion Products:

Complete combustion gives off carbon dioxide, water and hydrogen chloride. Incomplete combustion gives off, in addition, carbon monoxide and hydrocarbon oxidation products including organic acids, aldehydes and alcohols.

**Extinguishing Media:** Water, Foam, Dry Chemical, CO<sub>2</sub>.

### Fire Fighting Instructions

Use self-contained breathing apparatus and protective clothing to avoid exposure to hydrogen chloride and toxic combustion vapors.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES (5) and Handling (Personnel) (7) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

**Spill Clean-Up:** Sweep up to avoid slipping hazard.

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## 7. HANDLING AND STORAGE

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**Handling (Personnel):** See FIRST AID (4) and Personal Protective Equipment (8) Sections.

**Storage:** Store in a cool, dry place. Keep containers tightly closed to prevent moisture absorption and contamination.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Engineering Controls:

Use sufficient ventilation to keep employee exposure below recommended limits.

**Ventilation:** Local ventilation should be used over processing equipment.

### Personal Protective Equipment

**Eye/Face Protection:** Wear safety glasses.

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**Respirators:** Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

**Skin Protection:** Wear protective gloves to minimize skin contamination. Wash hands and contaminated skin thoroughly after handling.

### Exposure Guidelines

#### Exposure Limits

"Alcryn" Melt-Processible Rubber - All In Synonym List in Section 1

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Physical Data

Melting Point	: NApp
Volatiles	: NApp
Solubility in Water	: Negligible
Odor	: Mild ester-like
Form	: Pellets
Specific Gravity Range	: 1.06 to 1.35

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## 10. STABILITY AND REACTIVITY

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**Chemical Stability:** Stable at normal temperatures and storage conditions.

### Conditions to Avoid:

Rapid heating to temperatures above 249°C (480°F) or prolonged heating at temperatures above 204°C (400°F) will result in polymer degradation and the evolution of hydrogen chloride.

### Incompatibility with Other Materials

**MATERIALS TO AVOID:** Acetal homopolymer and acetal copolymers. At processing temperatures, these materials will react with Alcryn, causing mutual polymer degradation and the evolution of hydrogen chloride and formaldehyde – both strong eye and respiratory irritants.

### Decomposition

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen chloride, carbon monoxide, and hydrocarbon oxidation products including organic acids, aldehydes, and alcohols.

**Polymerization:** Polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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Specific data have not been obtained for all grades. Based on similarities of ingredients, all grades can be expected to conform to the following generalities:

**Acute Toxicity – Oral:**

ALD > 5,000 mg/kg. of body weight, as tested in rats. Ingestion is not a probable route to toxic exposure.

**Acute Toxicity – Dermal:** ALD > 5,000 mg/kg of body weight.

**Acute Toxicity – Inhalation:** N/A. - Pellets cannot be inhaled.

**Skin Irritation:** Tests on rabbits indicated the product is not a skin irritant.

**Eye Irritation:** Tests on rabbits indicated only mechanical eye irritation.

**Mutagenicity:** Product is not considered to be a mutagenic hazard.

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## 12. ECOLOGICAL INFORMATION

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### Eco-toxicological Information

**Aquatic Toxicity:** No information is available. Toxicity is expected to be low, based on insolubility in water.

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## 13. DISPOSAL CONSIDERATIONS

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### Waste Disposal

Preferred options for disposal are:

- (1) recycling,
- (2) incineration with energy recovery, and
- (3) landfill.

The high fuel value of this product makes option 2 very desirable for material that cannot be recycled, but incinerator must be capable of scrubbing out acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

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## 14. TRANSPORT INFORMATION

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### US Department of Transportation Classification:

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

**International Air Transportation Association Classification:**

This material is not classified as hazardous under IATA regulations.

**International Maritime Organization - IMDG:**

This material is not classified as hazardous under IMDG regulations.

**UN, IMO, ADR/RID, ICAO Code:**

This material is not dangerous for conveyance under these codes.

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**15. REGULATORY INFORMATION**

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**U.S. Federal Regulations**

TSCA Inventory Status: In compliance with TSCA Inventory requirements for commercial purposes.

**State Regulations (U.S.)**

**State Right-To-Know Laws**

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated.

Substances on The Pennsylvania Hazardous Substances List Present at a Concentration of 1% or More (0.01% For Special Hazardous Substances): None are known.

Substances Known to the State of California To Cause Cancer, Birth Defects or Other Reproductive Harm- None are known.

Substances on The New Jersey Workplace Hazardous Substance List Present at a Concentration Of 1% Or More (0.1% For Substances Identified as Carcinogens, Mutagens or Teratogens): - None are known.

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**16. OTHER INFORMATION**

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**Medical Use Caution:** Do not use in medical applications involving implantation in the human body.

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS  
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