



# MATERIAL SAFETY DATA SHEET

Ferro Corporation  
Electronic Material Systems  
1789 Transelco Drive  
Penn Yan, NY 14527 USA

**Emergency telephone number**  
CHEMTREC: 1-800-424-9300  
CHEMTREC (outside U.S.): 1-703-527-3887  
Phone Number: 1-315-536-3357

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product Name:** 714YG Americal Plus 4 Gal Case **Date of Preparation:** 04/26/2010  
**Synonym:** Aqueous slurry.  
**CAS-No.:** Mixture  
**Product Code:** 1014770

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Caution

May cause eye/skin irritation. Avoid contact with the skin and the eyes.

		HMIS	NFPA 704
<b>Color:</b>	White	1	1
<b>Physical state:</b>	Slurry	0	0
<b>Odor:</b>	Odorless	0	0
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### Potential Health Effects

**Principle routes of exposure:** Eye contact. Skin contact.  
**Eye contact:** May cause slight irritation.  
**Skin contact:** Prolonged skin contact may cause skin irritation and/or dermatitis.  
**Inhalation:** May cause irritation of respiratory tract.  
**Ingestion:** May irritate digestive tract.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Aluminum Oxide	1344-28-1	70 - 80%
Aluminum trinitrate nonahydrate	7784-27-2	5 - 10%

## 4. FIRST AID MEASURES

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops.  
**Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.  
**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.  
**Ingestion:** Drink plenty of water. Do not induce vomiting. Consult a physician if necessary.  
**Notes to physician:** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Flash point (°C):** Non combustible

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Hazardous decomposition products:** None reasonably foreseeable.

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus (pressure-demand, NIOSH approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Evacuate area of all unnecessary personnel. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

**Methods for cleaning up:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of promptly. Clean contaminated surface thoroughly. Shovel into suitable container for disposal.

## 7. HANDLING AND STORAGE

### Handling:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

### Storage:

Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits

Minimize exposure in accordance with good hygiene practice.

Components	OSHA	ACGIH
Aluminum Oxide	15 mg/m <sup>3</sup> TWA total dust 5 mg/m <sup>3</sup> TWA respirable fraction	1 mg/m <sup>3</sup> TWA respirable fraction
Aluminum trinitrate nonahydrate	Not established	2 mg/m <sup>3</sup> TWA (as Al)

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

**Eye protection:** Safety glasses with side-shields.

**Skin and body protection:** Lightweight protective clothing.

**Hand protection:** Impervious gloves.

**Respiratory protection:** Use NIOSH approved respirator when ventilation is inadequate. In case of insufficient ventilation wear suitable respiratory equipment. Seek professional advise prior to respirator selection and use. NIOSH-approved respirators should be worn where engineering controls and work practices do not reduce exposure to or below the PEL.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Color:</b>	White	<b>Physical state:</b>	Slurry
<b>Odor:</b>	Odorless	<b>Molecular weight:</b>	No data available
<b>Boiling point/range (°C):</b>	212	<b>pH:</b>	3.6
<b>Melting point/range (°C):</b>	No data available	<b>Freezing point/range (°C):</b>	0
<b>Specific gravity (Water =1):</b>	1.2	<b>Vapor pressure (mmHg):</b>	No data available
<b>Water solubility:</b>	No data available	<b>VOC content (%)</b>	No data available

### 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Polymerization:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	None under normal use.
<b>Materials to avoid:</b>	None known.
<b>Conditions to avoid</b>	None known

### 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	No data is available on the product itself
<b>Target Organ Effects:</b>	Aluminum oxide: Eyes, skin, respiratory system.

Component information, if any, is listed below

#### Aluminum Oxide

<b>LD50s and LC50s:</b>	Oral LD50 (Rat) = 5000 mg/kg Oral LD50 Rat: >5000 mg/kg
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#### Aluminum trinitrate nonahydrate

<b>LD50s and LC50s:</b>	Oral LD50 (Rat) = 3671 mg/kg
<b>OSHA - Select Carcinogens:</b>	Present
<b>IARC - Group 2A:</b>	Listed

### 12. ECOLOGICAL INFORMATION

<b>Aquatic toxicity:</b>	Not determined
<b>Persistence and degradability:</b>	Not determined

### 13. DISPOSAL CONSIDERATIONS

<b>Waste from residues / unused products:</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Where possible recycling is preferred to disposal or incineration.
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### 14. TRANSPORT INFORMATION

#### DOT (U.S.)

<b>Proper shipping name:</b>	Not regulated.
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#### TDG (Canada)

<b>Proper shipping name:</b>	Not regulated.
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**15. REGULATORY INFORMATION**

**U.S. Regulations:**

**TSCA:** Not subject to TSCA 12(b) Export Notification

**SARA 313:**

Components	SARA 313:
Aluminum Oxide (70 - 80%)	1.0 percent de minimis concentration (fibrous form only) 1.0 percent de minimis concentration (fume or dust only)
Aluminum trinitrate nonahydrate (5 - 10%)	1.0 % de minimis concentration

**State Regulations**

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Components	State Regulations - NJ; PA
Aluminum Oxide	Listed (NJRTK) Listed (PARTK)
Aluminum trinitrate nonahydrate	Listed (NJRTK) Listed (PARTK)

**Canadian WHMIS**

**WHMIS hazard class:** D2B Toxic materials.

**Canadian Ingredient Disclosure List (IDL):**

Components	Canada - WHMIS Ingredient Disclosure:
Aluminum Oxide	1
Aluminum trinitrate nonahydrate	1

**International Inventories**

- TSCA 8(b):** Listed or exempt.
- Canadian DSL:** One or more ingredient(s) are not on the DSL list.
- EC-No.** Listed or exempt.
- Philippines (PICCS):** One or more ingredient(s) are not on the PICCS list.
- Japan (ENCS):** One or more ingredient(s) are not on the ENCS list.
- Korea (KECL):** Listed.
- China (IECS):** Listed.
- Australia (AICS):** Listed.
- New Zealand (NZIoC):** Listed.

**16. OTHER INFORMATION**

**For Industrial Use Only**

**Prepared by:** Ferro Technical Center

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

**End of Safety Data Sheet**