

according to Regulation (EC) No. 1907/2006 REGULATION (EC) No 1272/2008

1. PRODUCT AND COMPANY IDENTIFICATION**Product Identifier**

Product Name 714YG Americal Plus 4 Gal Case
Product Code: 1014770

Date of Issue 05/07/2013

| Components | EC-No. | CAS Number |
|---------------------------------|-----------|------------|
| Aluminum Oxide | 215-691-6 | 1344-28-1 |
| Aluminum trinitrate nonahydrate | - | 7784-27-2 |

Pure substance/preparation Preparation
Relevant identified uses of the substance or mixture and uses advised against
Recommended Use Industrial use only

Uses advised against Toys and food contact

Details of the supplier of the safety data sheet**Supplier**

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

For further information, please contact

E-mail address karen.madachik@ferro.com

Emergency telephone number

CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

Emergency telephone §45 - (EC)1272/2008

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**
REGULATION (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

Symbol(s)

This preparation is not classified as dangerous according to Directive 1999/45/EC.

R-phrases(s)

Not applicable

Label Elements

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

Other Hazards

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | EC-No. | CAS Number | Weight % | Classification 67/548/EC | CLP Classification | REACH No. |
|---------------------------------|-----------|------------|----------|-----------------------------|--|-----------|
| Aluminum Oxide | 215-691-6 | 1344-28-1 | 20 - 30% | Not classified | Not classified | --- |
| Aluminum trinitrate nonahydrate | | 7784-27-2 | 1 - 5% | Xi; R36/38 O; R8 | Ox. Sol. 2 (H272) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) | --- |
| Suspension Agent | Listed | | 1 - 5% | Not classified | Not classified | |

For the full text of the R-phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURESDescription of 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. |
| Ingestion: | Drink plenty of water. Do not induce vomiting. Consult a physician if necessary. |
| Inhalation | Move to fresh air in case of accidental inhalation of vapors or decomposition products. |
| Notes to doctor: | Treat symptomatically. |
| Most important symptoms and effects, both acute and delayed | |
| No information available. | |
| Indication of Immediate medical attention and special treatment needed | |
| Protection of first-aiders: | Treat symptomatically |

5. FIRE-FIGHTING MEASURESExtinguishing media

| | |
|---|---|
| Suitable extinguishing media: | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Extinguishing media which must not be used for safety reasons: | No information available. |

Special hazards arising from the substance or mixture

| | |
|--|--------------------|
| Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases | None in particular |
|--|--------------------|

Advice for emergency responders

| | |
|---|--|
| Special protective equipment for fire-fighters | As in any fire, wear self-contained breathing apparatus and full protective gear |
|---|--|

6. ACCIDENTAL RELEASE MEASURESPersonal precautions, protective equipment and emergency procedures

| | |
|------------------------------|--|
| Personal precautions: | Remove all non-essential people from the affected area. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. |
| Other information | See Section 8 for additional information |

Environmental precautions

6. ACCIDENTAL RELEASE MEASURES

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods and materials for containment and cleaning up

Wear personal protective equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Clean contaminated surface thoroughly. Dispose of promptly.

Reference to other sections

See Section 13 for additional information.

7. HANDLING AND STORAGE**Precautions for Safe Handling****Handling:**

Handle in accordance with good industrial hygiene and safety practice. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

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

Specific End Uses**Exposure Scenario**

No information available

Other Guidelines

No information available

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**Control parameters****Exposure Limits**

| Components | EU | UK OEL: | France | Spain | German mak: |
|-----------------------------|----|---------|---------------------------------|------------------------------------|--|
| Aluminum Oxide 1344-28-1 | | | 10 mg/m ³ TWA VME | 10 mg/m ³ TWA VLA-ED | 4 mg/m ³ 1.5 mg/m ³ |

| Components | Italy | Portugal | The Netherlands | Finland | Denmark |
|-----------------------------|-------|--|-----------------|---------|--|
| Aluminum Oxide 1344-28-1 | | 10 mg/m ³ TWA VLE-MP particulate matter containing no Asbestos and < 1% Crystalline silica | | | 5 mg/m ³ TWA 2 mg/m ³ TWA |

| Components | Austria | Switzerland | Poland | Norway | Ireland |
|-----------------------------|---|---|--|--------------------------|---------|
| Aluminum Oxide 1344-28-1 | 10 mg/m ³ STEL KZW alveolar dust, respirable fraction, smoke 2 X 60 min 5 mg/m ³ TWA TMW alveolar dust, respirable fraction, smoke | 24 mg/m ³ STEL KZW respirable, smoke 3 mg/m ³ TWA MAK respirable, smoke | 2.5 mg/m ³ TWA NDS 1.2 mg/m ³ TWA NDS | 10 mg/m ³ TWA | |

| Components | Hungary | Russia | Turkey | New Zealand |
|-----------------------------|-------------------------|-------------------------|--------|--------------------------|
| Aluminum Oxide 1344-28-1 | 6 mg/m ³ TWA | 6 mg/m ³ TWA | | 10 mg/m ³ TWA |

| | |
|--|---|
| Derivation of DNEL(s) | No information available |
| Derivation of the PNEC | No information available |
| <u>Exposure controls</u> | |
| Engineering measures: | Provide appropriate exhaust ventilation wherever dust, mist, vapors, or fumes can be generated. Ensure that eyewash stations and safety showers are proximal to the work-station location. |
| <u>Personal protective equipment</u> | |
| Eye Protection: | Safety glasses with side-shields. |
| Hand protection: | Impervious gloves. Follow the recommendations given by the manufacturer of protective gloves. |
| Skin and body protection: | Lightweight protective clothing. Keep working clothes separately. Remove and wash contaminated clothing before re-use. |
| Respiratory protection: | In case of insufficient ventilation, wear suitable respiratory equipment. NIOSH-approved respirators should be worn where engineering controls and work practices do not reduce exposure to or below the PEL. Seek professional advice prior to respirator selection and use. |
| <u>Hygiene measures</u> | Do not eat, drink or smoke when using this product. Wash thoroughly after handling. |
| <u>Environmental Exposure Controls</u> | Prevent product from entering drains. Do not allow material to contaminate ground water system. |

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

| | |
|----------------|--------|
| Physical state | Liquid |
| Color: | White |
| Odor: | None |

Important health safety and environmental information

| | |
|---|--------------------------|
| Flash Point | Not combustible |
| Flammability (solid, gas): | No information available |
| Boiling point/boiling range | 100°C |
| pH | 3.6 |
| Vapor pressure : | No information available |
| Viscosity | No information available |
| Partition coefficient (n-octanol/water): | No information available |
| Evaporation Rate (Water = 1) | No information available |
| Relative density : | No information available |
| Vapor density: | No information available |
| Decomposition Temperature | No information available |
| Flammable limits in air - upper (%): | No information available |
| Flammable limits in air - lower (%): | No information available |

Other information

| | |
|-----------------------|--------------------------|
| Refractive index: | No information available |
| Surface tension: | No information available |
| Melting Point/Range | No information available |
| Freezing Point | No information available |
| Explosive properties: | No information available |
| Oxidizing properties | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions**Hazardous Polymerization** None under normal processing.**Conditions to Avoid**

To avoid thermal decomposition, do not overheat

Incompatible materials

None known

Hazardous Decomposition Products

None under normal processing

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute Toxicity**

| | |
|----------------------------|---|
| Product information | Product does not present an acute toxicity hazard based on known or supplied information. |
| Inhalation | May cause irritation of respiratory tract. |
| Eye Contact | Contact with eyes may cause irritation. |
| Skin Contact | May cause skin irritation and/or dermatitis. |
| Ingestion | May cause irritation. |

Irritation

No information available.

Corrosivity

No information available.

Sensitization

No information available

Mutagenic Effects:

No information available

| Components | LD50 Oral | LD50 Dermal | LC50 Inhalation: |
|--|--------------------|-------------|------------------|
| Aluminum Oxide 1344-28-1 | 5000 mg/kg (Rat) | | |
| Aluminum trinitrate nonahydrate 7784-27-2 | 3671 mg/kg (Rat) | | |
| Suspension Agent | 5050 mg/kg (Rat) | | |

Carcinogenic Effects

No information available.

Reproductive Toxicity

No information available

Developmental Toxicity

No information available

STOT - single exposure

No information available

STOT-repeated exposure

No information available

Aspiration Hazard

No information available

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION**Toxicity****Ecotoxicity Effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

12. ECOLOGICAL INFORMATION

| Components | Ecotoxicity - Fish Species Data: | Ecotoxicity - Water Flea Data: | Ecotoxicity - Freshwater Algae Data: | Persistence and degradability: |
|------------------|--|--------------------------------------|--------------------------------------|--------------------------------|
| Suspension Agent | 96 h LC50 (Oncorhynchus mykiss) = 100 mg/L semi-static 96 h LC50 (Pimephales promelas) = 100 mg/L semi-static | 48 h EC50 (Daphnia magna) = 100 mg/L | | |

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

Not classified

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

IMDG/IMO Not regulated

RID Not regulated

Adr: Not regulated

IATA-DGR Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

NWG.

15. REGULATORY INFORMATION

International Inventories

| | |
|-----------------------------|---|
| U.S. EPA TSCA 8(b): | Listed or exempt. |
| Europe (EINECS): | Listed or exempt. |
| Canada DSL/NDSL list | All ingredient(s) are listed on the DSL or NDSL |
| Philippines (PICCS): | Listed. |
| Japan (ENCS): | Listed or exempt. |
| China (IECS): | Listed. |
| Australia (AICS): | Listed. |
| Korea (KECL): | Listed. |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECS - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

Chemical Safety Assessment

Not applicable

16. OTHER INFORMATION

List of relevant R-phrases

R8 - Contact with combustible material may cause fire.
R36/38 - Irritating to eyes and skin.

Key literature references and sources for data

www.ChemADVISOR.com

Prepared by:

Ferro Technical Center.

Date of Issue

05/07/2013

Revision Note

Not applicable

Disclaimer:

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