



MATERIAL SAFETY DATA SHEET

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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM

HEALTH HAZARD:	1	Slight	4 = Severe Hazard
FLAMABILITY:	0	Minimal	3 = Serious Hazard
REACTIVITY:	0	Minimal	2 = Moderate Hazard
PERSONAL PROTECTION:	E	Glasses, Gloves, Dust Respirator	1 = Slight Hazard 0 = Minimal Hazard

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: **APC Integral Colors**
CAS No.: 1317-60-8/1309-37-1/1343-81-3/1317-61-91
General Use: Pigmenting Agent
C.I. Pigment: Red 101/Yellow 42
C.I. No.: 77538/77491/77492/77499
Product Description: Iron Oxide / Integral Colors
MANUFACTURER: ALABAMA PIGMENTS COMPANY
P.O. Box 309
Green Pond, AL 35074
Contact: (205) 938-3065

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name/Formula</u>	<u>CAS No.</u>	<u>% WT</u>	<u>OSHA-PEL</u>	<u>ACGIH-TLV</u>
Inert or nuisance dust				
Total dust		100	15 mg/m ³	
Respirable			5 mg/m ³	
Iron oxide fume*	1309-37-1	0	10 mg/m ³ TWA	5 mg/m ³ TWA
Iron oxide (Fe ₂ O ₃)	1309-37-1	96-98		
Total dust			15 mg/m ³ TWA	10 mg/m ³ TWA
Respirable			5 mg/m ³ TWA	
Iron oxide (Fe ₂ O ₃)	1317-60-8	79-84		
Total dust			15 mg/m ³ TWA	10 mg/m ³ TWA
Respirable			5 mg/m ³ TWA	
Iron oxide (Fe ₂ O ₃)	1317-61-91	98		
Total dust			15 mg/m ³ TWA	10 mg/m ³ TWA
Respirable			5 mg/m ³ TWA	

2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)

Iron oxide (Fe ₂ O ₃)	51274-00-1	98		
Total dust			15 mg/m ³ TWA	10 mg/m ³ TWA
Respirable			5 mg/m ³ TWA	
Crystalline silica (SiO ₂)**	14808-60-7	8-15		
Total dust			30 mg/m ³	
Respirable			10 mg/m ³ TWA	0.1 mg/m ³ TWA
HFeO ₂	52-63		1310-14-1	
SiO ₂	20-29		14808-60-7	
MnO ₂	1.5-4.0		1313-13-9	

*Under the normal conditions of use for this product, fumes as Fe₂O₃ are not present. Iron oxide fume conditions are created under extremely high temperature, as with welding or smelting.

**OSHA Hazardous Components (29CFR 1910.1200). This material is considered a carcinogen by IARC because it contains crystalline silica at levels greater than 0.1%. Inhalation of dust in excess of the TLV may cause mild pulmonary irritation. Long term over-exposure may cause silicosis.

3. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Solid powder	COLOR	Various
SPECIFIC GRAVITY	3.5 – 5.1	ODOR	None
BULK DENSITY	0.35 – 1.2 g/cm ³	BOILING POINT	N/A
pH	3.5 – 8.5	MELTING POINT	> 400 F
% VOLATILE	0-1.0	VAPOR PRESSURE	N/A
SOLUBILITY	0-0.6%		

4. HEALTH HAZARD INFORMATION

----INGESTION: Not a normal route of exposure. Ingestion of large amounts may cause gastrointestinal disturbances. Symptoms may include salivation, pain, nausea, vomiting and diarrhea.

----INHALATION: Dust may cause mechanical irritation to the respiratory tract. Excessive exposure above the TLV can cause mild pulmonary irritation.

----EYE CONTACT: Will result in no specific effects other than mechanical irritation due to abrasion.

----SKIN CONTACT: Not absorbed by the body, irritation may occur by mechanical abrasion.

SPECIAL TOXIC EFFECTS: Prolonged and repeated inhalation of iron dust may result in Silicosis or "iron pigmentation". Silicosis is considered to be a benign condition and does not appear to progress to fibrosis. It generally requires 6-10 years of exposure. Little or no change is found upon physical examination.

This material is considered carcinogenic by its content of crystalline silica. Long-term exposure to airborne silica can cause silicosis, a form of progressive and disabling pulmonary fibrosis. Individuals with silicosis are predisposed to develop tuberculosis.

5. FIRST AID

----INGESTION: Give large amounts of water to induce vomiting. Seek medical attention.

----INHALATION: Remove victim to fresh air. Give artificial respiration if the victim is not breathing. Seek medical attention with any breathing difficulties.

----EYE CONTACT: Flush thoroughly for 15 minutes with running water. Seek medical attention

----SKIN CONTACT: Remove contaminated clothing. Wash area with soap and water.

6. FIRE FIGHTING AND EXPLOSION DATA

---- FLASH POINT: Non-flammable

---- FLAMMABLE LIMIT: LEL-N/A UEL-N/A

----EXTINGUISHING MEDIA: As appropriate for surrounding for surrounding combustibles. Material does not support combustion.

---- FIRE FIGHTING EQUIPMENT: Self contained breathing apparatus and eye protection.

---- UNUSUAL FIRE OR EXPLOSION HAZARDS: None.

7. STABILITY AND REACTIVITY DATA

STABILITY	Stable	CONDITIONS TO AVOID	None
POLYMERIZATION	Will not occur	CONDITIONS TO AVOID	None
INCOMPATIBILITY (Materials to Avoid)	None		
HAZARDOUS DECOMPOSITION PRODUCTS	None		

8. HANDLING AND STORAGE

----STORAGE TEMPERATURE: Ambient

----SHELF LIFE: Unlimited

----STORAGE PRESSURE: Atmospheric

----GENERAL: Avoid excessive moisture, which causes material to clump.

9. ACCIDENTAL RELEASE MEASURES

----GENERAL: Refer to local, state, or federal regulations for specific disposal information. Pursuant to 40 CFR Part 261 of the Resources Conservation and Recovery Act (RCRA) regulations currently in effect, discarded iron oxide would not be classified as a hazardous waste.

----LAND SPILL: Vacuum or scoop up spilled material for recovery or disposal, avoid dusting conditions and use good ventilation. Wetting the spill area with water spray may help reduce airborne dust levels.

----WATER SPILL: Product is inert and stable. Decomposition nor polymerization will occur.

10. EXPOSURE CONTROL AND PERSONAL PROTECTION

---ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Provide mechanical ventilation of confined spaces.

---PERSONAL PROTECTION:

EYE PROTECTION: Safety glasses or dust tight goggles.

SKIN PROTECTION: Gloves appropriate for the job conditions.

RESPIRATOR: If exposure limits are exceeded, use an appropriate NIOSH dust respirator.

11. REGULATORY INFORMATION

---DISPOSAL: Natural iron oxides are not hazardous wastes per 40 CFR 261.24 or 261.3. However consult with the state environmental regulatory agency before disposing of this material, as state regulations may be stricter than federal regulations.

---SPILL REPORTING: Natural iron oxides are not CERCLA hazardous substances, per 40 CFR 302.4. These are not on the list of hazardous substances under the Clean Water Act (40 CFR 116 and 40 CFR 117), nor are they included on the list of Extremely Hazardous Substances under SARA, 40 CFR 355 Appendix A. Thus, there are no Federal reporting requirements in the event of release of these materials.

---SARA REPORTING: Natural iron oxides are not subject to the reporting requirements of Section 304 of SARA, since they are not Extremely Hazardous Substances. In addition, these iron oxides are not subject to the reporting requirements of Section 313 of SARA. However, due to the presence of up to 5% silica-quartz, natural iron oxides are regulated as mixtures under the reporting requirements of Sections 311 and 312 of SARA.

12. SHIPPING DATA

D.O.T. SHIPPING NAME ... N/A TECHNICAL SHIPPING NAME ... Inorganic Oxide

D.O.T. HAZARD CLASSIFICATION Non-regulated

D.O.T. LABEL REQUIRED...N/A FREIGHT CLASSIFICATION Iron Oxide, NOI

13. SUBSTANCE GOVERNMENTAL REGISTRY

TSCA	(United States)	Yes
EINECS	(European Community)	Yes
DSL	(Canada)	Not Required
[Reasons For Issue: 29 CFR, Part 1910.1200]		

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