

## IRWIN Chalk - Red, Permanent

October 18, 2010

#### 1. PRODUCT and COMPANY IDENTIFICATION

Commercial Product Name: IRWIN Chalk - Red, Permanent

Company: IRWIN Tools
Use of product: Snap line mark

Emergency contact: 1-800-464-7946 8:00am-5:00pm Monday-Friday

#### 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Non-combustible red solid powder with no odor. Irritating to eyes, skin, and respiratory system. Exposure to large quantities of this material may cause acute irritation of eyes and difficulty breathing.

## **Hazard Ratings:**

## **Hazardous Material Identification System (HMIS):**

Health 1\*, Flammability 0, Reactivity 0 \*chronic effects

## National Fire Protection Association (NFPA):

Health 1, Flammability 0, Reactivity 0

Eye: May cause irritation. Chalk dust is discomforting and abrasive to the eyes.

**Skin:** Prolonged skin contact may cause irritation. When the product is used as intended, it is unlikely to cause discomfort.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. Ingestion is considered an unlikely route of entry in commercial or industrial environments.

**Inhalation:** May cause respiratory tract irritation. When the product is used as intended, it is unlikely to cause discomfort.

**Chronic:** Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). Prolonged inhalation of iron oxide dust is known to produce a benign lung condition known as siderosis. When the project is used as intended, dust levels should not exceed exposure limits. See Sections 8 and 11.





May cause cancer by inhalation. Avoid breathing dust or fume Causes serious eye irritation. Causes mild skin irritation.

Do not handle until all safety precautions have been read and understood.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	Value (%)	CAS No.	EC No.
Calcium carbonate	75 - 80	471-34-1	207-439-9
Red Iron Oxide	20 - 25	1309-37-1	215-168-2
Silica (crystalline quartz) <sup>1</sup>	0.1 - 1	14808-60-7	238-878-4

<sup>&</sup>lt;sup>1</sup> Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

Page 1 of 6 Revision: 0

IRWIN Chalk - Red, Permanent

#### 4. FIRST AID MEASURES

**Inhalation:** Remove from exposure and move to fresh air immediately. Encourage the patient to blow nose to ensure clear breathing passages. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Skin contact:** Wet clothing first to minimize dust generation, then; remove contaminated clothing and shoes. Launder contaminated clothing before wearing again. Wash affected area with water (and soap if available)

Get medical aid in the event of irritation.

**Eye contact:** Do not rub eyes, rubbing may cause abrasions. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Ingestion:** If the victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Additional advice: Show this safety data sheet to the doctor in attendance

#### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Substance is noncombustible, however; the containers may burn, releasing carbon monoxide, and carbon dioxide. Use appropriate extinguishing media for the combustible material involved in a fire.

**Explosion:** No information found.

**Specific hazards:** If oxidation of this product should occur, heat will be liberated which could cause surrounding combustibles to burn.

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear appropriate personal protective equipment as specified in Section 8.

**Environmental precautions:** Do not allow this material to be released to the environment without proper governmental permits.

**Methods for cleaning up:** Recover the product whenever possible. Avoid generating dust when sweeping/shoveling up. If required, wet the material with water to prevent creating dust. Pick up and place in a suitable container for reclamation or disposal. Follow applicable OSHA regulations (29 CFR 1910.120)

#### 7. HANDLING AND STORAGE

**Storage:** Store this product in a tightly-closed container in a dry, well-ventilated area away from incompatible substances.

**Handling:** Avoid creating, or breathing dust. Practice good personal hygiene, (hand washing, etc.) after using this product. Avoid contact with skin and eyes.

Packaging material: No information found.

Page 2 of 6 Revision: 0

IRWIN Chalk - Red, Permanent

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION Exposure Guidelines

Exposure Limit 8-Hour TWA<sup>1</sup> (mg/m<sup>3</sup>)

Component	CAS No.	% by weight	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium Carbonate (Limestone)	471-34-1; (1317-65-3)	70-75	15 <sup>2</sup> 5 <sup>3</sup>	10 <sup>2</sup>	10 <sup>2</sup> 5 <sup>3</sup>
Red Iron Oxide Silica-Crystalline Quartz <sup>4</sup>	1309-37-1 14808-60-7	25-30 0.1-1.0	10 10 <sup>2,5</sup> ,3.3 <sup>3,5</sup>	5 <sup>3</sup> 0.05 <sup>3</sup>	5 0.05 <sup>3</sup>

<sup>&</sup>lt;sup>1</sup> TWA = Time-weighted average

**Exposure and Engineering Controls:** Facilities storing or utilizing this material should have potable water available for washing eyes and skin. Use sufficient general area (or outdoor) ventilation. Local exhaust ventilation should be used if airborne concentrations of dust exceed limits cited in Section 8.

#### Personal protective equipment:

Hand protection: Wear protective gloves

**Eye protection:** Wear safety glasses, or chemical goggles in windy conditions or where eye contact is possible

contact is possible.

**Respiratory protection:** When engineering controls are not sufficient to reduce exposure, seek professional advice prior to respirator selection and use. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**Hygiene measures:** Wash contaminated clothing before reuse. **Environmental exposure controls:** No information found.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder Color: Red Odor: Odorless. pH (at 10% solids): 8.5-9.5.

Boiling point/range: No data available.

Melting point/range: Decomposes at 1,517 °F (825°C).

Flash point: No data available. Evaporation rate: No data available. Vapor density: No data available. Solubility in water: <0.0002 (Trace) Explosive properties: No data available. Oxidizing properties: No data available. Vapor pressure: No data available. Relative density  $(H_2O=1)$ : 3.40-3.45.

Viscosity: No data available. Partition coefficient (n-octanol/water): No data available.

Page 3 of 6 Revision: 0

<sup>&</sup>lt;sup>2</sup> Total dust.

<sup>&</sup>lt;sup>3</sup> Respirable dust.

Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

Using the OSHA quartz formula, this PEL was calculated assuming crystalline silica content of 1.0% in this ingredient.

IRWIN Chalk - Red, Permanent

#### 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal temperatures and pressures.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, calcium oxide.

**Materials to avoid:** Strong oxidizing agents, acids, aluminum, fluorine, magnesium, peroxides hydrazine, calcium hypochlorite, performic acid, and bromine pentafluoride.

Conditions to avoid: Incompatible materials.

Hazardous Polymerization: Does not occur.

#### 11. TOXICOLOGICAL INFORMATION

Note: Toxicological effects described in this section are those that would be expected based on data from the components of this product.

**Acute toxicity:** Calcium carbonate (CAS# 471-34-1): Draize test, rabbit, eye: 750 ug/24H Severe; Draize test, rabbit, skin: 500 mg/24H Moderate; Oral, rat: LD50 = 6,450mg/kg.

**Inhalation:** (Silica, crystalline quartz) Human: LC<sub>Lo</sub>: 300 μg/m³/ intermittent exposure over a 10-year period produced pulmonary system effects.

**Skin contact:** (Calcium carbonate) Rabbit: 500mg administered for 24 hours produces moderate skin irritation.

**Eye contact:** (Calcium carbonate) Rabbit: 0.750 mg administered for 24 hours produced severe irritation.

**Ingestion:** (Calcium carbonate) Rat: LD<sub>50</sub>: 6,450 mg/kg. (Iron Oxide) Rat: LD<sub>50</sub>: >5,000 mg/kg.

**Chronic toxicity/Carcinogenicity:** Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). When the product is used as intended, dust levels should not exceed exposure limits.

Quartz – crystalline silica:

The International Agency for Research on Cancer (IARC) has designated this substance Group 1, "carcinogenic to humans".

The National Toxicology Program (NTP) has designated this substance: Group K "known to be a human carcinogen"

American Conference of Governmental Industrial Hygienists (ACGIH) has designated this substance A2; suspected human carcinogen. The agent is carcinogenic in experimental animals at dose levels, by route of administration, at sites of histologic type(s) or by mechanism(s) considered relevant to worker exposure. Available epidemiologic studies are conflicting or insufficient to confirm an increased risk of cancer in exposed humans.

## 12. ECOLOGICAL INFORMATION

Bioaccumulation: No information found. Ecotoxicity effects: No information found.

Fish Toxicity: Golden Orfe (Leucisus idus) LC<sub>Lo</sub>: greater than 1,000 mg/l

Limestone (which is primarily composed of calcium carbonate) is <u>not</u> classified as a "Toxic pollutant" or a "hazardous substance under Section 307 and 311 of the United States Clean Water Act.

## 13. DISPOSAL CONSIDERATIONS

Waste from residues: Consult an expert on the disposal of recovered material. Dispose of in a manner consistent with federal, state, and local regulations. Disposal by landfill may be acceptable.

Page 4 of 6 Revision: 0

IRWIN Chalk - Red, Permanent

#### 14. TRANSPORT INFORMATION

U.S. DOT: Not regulated

ADR/RID: Not regulated

**IMDG:** Not regulated

ICAO/IATA: Not regulated

#### 15. REGULATORY INFORMATION

#### **U.S. Federal Regulations**

**OSHA:** Ingredients are listed as air contaminants (29 CFR 1910.1000).

Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**TSCA** (Toxic Substance Control Act): All components of this product are listed on the TSCA inventory.

CERCLA: Hazardous Substance, (40 CFR 302.4): Not Listed.

Extremely Hazardous Substance (40 CFR 355): Not Listed.

**SARA Hazard Category:** This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following category:

"An immediate (acute) and chronic health hazard."

Chemicals subject to the reporting requirements of Section 313 or Title III of SARA and 40 CFR Part 372: None.

#### **STATE REGULATIONS:**

California's "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65)

This product contains the following Proposition 65 regulated materials known to the State of California to cause cancer or reproductive harm. The listed typical amounts are a result of their natural presence in the raw materials from which this product is produced.

Silica-crystalline quartz equal to, or less than 1.0 percent

**CANADA WHIMS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all of the information required by the CPR.

WHIMS Classification: D2B

## **European Union**

Labeling: Directive 1999/45/EC,

The product is not classified as dangerous in accordance with Directive 1999/45/EC, 1967/548/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

Page 5 of 6 Revision: 0

#### IRWIN Chalk - Red, Permanent

Cyrstalline Silica Risk Phrases: "Harmful: danger of serious damage to health by prolonged exposure through inhalation. Avoid breathing dust or fume.

Safety-phrases: Calcium carbonate: S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 "Wear suitable eye/face protection.

Do not handle until all safety precautions have been read and understood.

If exposed or concerned, get medical advice/attention.

Refer to special instructions; Safety Data Sheet.

## **16. OTHER INFORMATION**

The contents and format of this MSDS are in accordance with the U.S. Hazard Communication Standard 29 CFR 1910.1200; the Canadian CPR, and Workplace Hazardous Materials Information System (WHMIS); and EEC Commission Directive 1999/45/EC, and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

**DISCLAIMER OF LIABILITY** The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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Page 6 of 6 Revision: 0