



MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

1. Product and Supplier Identification

Product: DRYMIX Colour Pigments:

405403 #11 Cashmere	405441 #85 Camel
405405 #14 Cumin	405442 #86 Clay Bluff
405408 #13 Olive Mist	405443 #89 Plymouth Rock
405409 #15 Tranquility	405444 #25 Roasted Sesame
405410 #18 Sea Grass	405446 #33 Cottage Green
405411 #19 China White	405447 #34 Killarney
405412 #20 Pebble Beach	405448 #40 Woodlands
405413 #21 Butternut	405449 #42 Elk Velvet
405416 #24 Antique Crème	405450 #43 Deer Run
405417 #26 Carmella	405451 #52 Sierra Sand
405419 #28 Arizona Dust Storm	405452 #58 Rain Forest
405422 #32 Pewter	405453 #65 Mountain Moss
405423 #35 French Vanilla	405454 #68 Chocolate Mousse
405424 #36 Pistachio	405456 #72 Red Willow
405425 #37 Swan Lake	405458 #74 Prairie Sand
405426 #38 Thunderstorm	405459 #75 Portobello Mushroom
405427 #39 Wheatland	405460 #76 Mocha
405428 #41 Dry Sage	405461 #77 River Canyon
405429 #45 Butter Rum	405462 #78 Meadow Sweet
405430 #46 Mystic Gold	405463 #79 Tuscan Earth
405431 #47 Spritzer	405464 #80 Coastal Fog
405432 #48 Cabernet	405465 #81 Brushed Leather
405433 #49 Ashley Grey	405466 #82 Mortar
405434 #50 Cape Cod Grey	405467 #83 Antique Saddle
405435 #51 Almond Bisque	405468 #88 Chestnut
405436 #54 Nutmeg	405469 #91 Sandstone
405437 #56 Twilight Grey	405470 #92 Appalacian Grey
405438 #62 Southern Shadow	405471 #93 Dakota Brown
405439 #66 Bear Creek Trail	405472 #94 Dark Shadow
405440 #84 Majestic Elk	405473 #95 Charcoal

Product Use: Iron oxide pigments for integrally colouring cementitious materials

Supplier: Target Products Ltd,
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Calgary, AB T2C 2K6
Telephone: 403-279-8189

24-Hour Emergency Response Telephone for Transport Emergencies ONLY:

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2. Hazards Identification

Dry powder of various colours with little to no odor. Will not burn or react. Long-term inhalation can cause lung irritation or siderosis. Packaging material can burn or melt in fire, producing toxic smoke and fumes.

Potential Health Effects:

- Eyes:** Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits.
- Skin:** Will not irritate skin and is not likely to cause allergic skin reaction. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.
- Ingestion:** Small amount (less than one ounce/ 30 grams) swallowed is not likely to cause injury. If large amount ingested, may cause gastric irritation, nausea and diarrhea. Seek medical attention.
- Inhalation:** Not a hazard in normal industrial use. Wear respirator and avoid breathing dust. As with all dusty materials, inhalation may cause respiratory irritation, sneezing, coughing, and runny nose.

Human Effects and Symptoms of Overexposure:

- Acute:** To date, adverse health effects from exposure have not been reported among workers using this pigment. On the basis of Animal Toxicity (see section 11), we would expect this product to be non-irritating to the eyes and skin and essentially non-toxic by ingestion. However, excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits in the eyes, ears and nose. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.
- Chronic:** Prolonged inhalation of amorphous silica may produce x-ray changes in the lungs without disability.
- Other Effects:** No chronic effects are known from repeated exposure to iron oxide pigment. Prolonged inhalation (6-10 years) of iron oxide **fume** has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders, where iron oxide **fumes** are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigment. There is no iron oxide **FUME** contained in this product and none should be generated under normal use.

Medical Conditions

Aggravated by

Exposure: None known

Carcinogenicity: IARC: Not Listed NTP: Not Listed OSHA: Not regulated

Other: IARC and NTP both contain listings for underground hematite mining. These listings are for the occupational exposures associated with the mining process which includes radon, a known lung carcinogen. NIOSH in the Registry of Toxic Effects of Chemical Substances (RTECS) lists Iron Oxide as a suspect human carcinogen. However, the IARC reference to underground hematite mining is the source for this classification. Based on information currently available, this product is not considered to be a carcinogen.

3. Hazardous Ingredients

Components	CAS No.	%	PEL (OSHA) mg/M ³	TLV (ACGIH) mg/M ³
Silicon Dioxide	7631-86-9	(<1%)	6	10
Iron Oxide	1309-37-1 (or)	(25-75%)	Not Established	Not Established
	1332-37-2	(25-75%)	Not Established	Not Established
Calcium Carbonate	1317-65-3	(25-75%)	5	5
May Contain				
Titanium Dioxide	13463-67-7	(0-10%)	Not Established	Not Established

4. First Aid Measures

Eyes: Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. If irritation develops or persists, call physician immediately.

Skin: Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside.

Ingestion: Swallowing less than an ounce (less than 30 grams) will not cause harm. For larger amounts, do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

5. Fire Fighting Measures

Flammability:	No
Flash Point:	Not applicable
Auto-ignition Temperature:	Exposure to excessive heat greater than 80°C (176°F) can cause the portion of Iron Oxide Black contained herein to slowly auto-oxidize, which generates additional heat. Under certain conditions, this heat may be sufficient to cause the bag or combustible materials stored nearby to ignite.
Lower Explosive Limit:	Not applicable
Upper Explosive Limit:	Not applicable
Explosion Data:	
Sensitivity to Impact:	No
Sensitivity to Static Discharge:	No
Hazardous Combustion Products:	None known
Conditions to Avoid:	None
Extinguishing Media:	These materials are not flammable and will not contribute to a conflagration.
Fire Fighting Instructions:	Evacuate area and fight fire from a safe distance or a protected area. Approach fire from upwind and, if possible, isolate materials not involved in the fire. Firefighters must wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Personal Protection: Wear adequate personal protection to prevent inhalation of dusts, contact with skin or eyes. See Section 8 for specific recommendations.

Environmental Precautions: Prevent from spilling into waterways, sewers.

Cleanup Procedures: Restrict access to area until completion of cleanup. Only adequately trained personnel, wearing properly selected personal protective equipment and clothing described in Section 8, should be involved in the spill response and cleanup. If dust is generated, use appropriate respiratory protection. Vacuum or scoop material into an appropriately marked container for re-use or disposal. Spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Handling Procedures: Handle bags in a manner that will ensure minimal generation of dusts. Do not breathe dust, which may generate accidentally. Follow safe work procedures and wear the appropriate personal protective equipment specified in Section 8. The workers must be instructed and trained in the safe work procedures.

Storage: Store dry at ambient temperature away from food and beverages, excessive heat or flame sources.

8. Exposure Controls, Personal Protection

Engineering Controls: Local exhaust can be used, if necessary, to control airborne dust levels.

Personal Protection: The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. The use of safety glasses is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

9. Physical and Chemical Properties

Appearance:	Solid powder of various colours
Odor:	Odorless
pH:	7-10 in 50 g/L H ₂ O aqueous suspension; DIN 787/9
Melting Point:	Greater than 1000°C (1832°F)
Solubility:	Insoluble in water
Specific Gravity:	4.0 – 5.0 g/ml @ 20°C (68°F); DIN787/10
Bulk Density:	650-750 kg/m ³ @ 20°C (68°F)
Particle Size:	0.3 – 0.6 microns
VOC:	0 grams / litre

10. Stability and Reactivity

Chemical Stability:	This product is stable. Keep away from flames and heat. Exposure to excessive heat greater than 80°C (176°F) can cause the portion of Iron Oxide Black contained in this product to slowly auto-oxidize, which generates additional heat. Under certain conditions, this heat may be sufficient to cause the bag or combustible materials stored nearby to ignite.
Hazardous Polymerization:	Will not occur.
Incompatibility:	None known
Hazardous Decomposition Products:	None

11. Toxicological Information

Eyes:	Not irritating to rabbit eyes
Skin:	Not irritating to rabbit skin Demral, LD50 not established
Ingestion:	Non-irritating. The oral, LD50 for rats is greater than 5000 mg/L
Inhalation:	Non-irritating. LC 50 not established for this product
Subchronic:	Data not established for product
Chronic / Carcinogenicity:	Data not established for product
Other (Mutagenic, Teratogenic, Reproductive Tests):	The IARC monograph on underground hematite mining (1972) states, "No carcinogenic effects were observed in mice, hamsters, or guinea pigs given ferric oxide intratracheally."

12. Ecological Information

Environmental Toxicity:	
Ecotoxicological Information:	Fish Toxicity: Golden Orfe (<i>Leuciscus idus</i>) LCo greater than 1000 mg/L
Chemical Fate Information:	No appreciable bioaccumulation is expected in the environment.

13. Disposal Considerations

Review federal, provincial or state, and local government requirements prior to disposal. Store material for disposal as indicated in storage conditions. Disposal by controlled incineration may be acceptable.

14. Transport Information

Canadian Transportation of Dangerous Goods Regulations:	Not regulated
International Air Transport Association (IATA):	Not regulated
International Maritime Organization (IMO):	Not regulated

15. Regulatory Information

OSHA: This product is considered Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200) due to potential to auto-oxidize (self-heat). See section 5.

CERCLA/SUPERFUND: (40 CFR 117,302) Reportable Quantity (RQ): Not reportable, however, we recommend you contact local authorities to verify requirements for your site.

Superfund Amendments and Reauthorization Act (SARA), Title III:

Section 302 (Extremely hazardous substances):	None
Section 311/312 (Hazards Categories):	Delayed Health Hazard
Section 313 (Reportable Toxic Ingredients):	None Reportable

T.S.C.A. This product is listed on TSCA Inventory

16. Other Information

Original Preparation Date: 12 August 2011

Disclaimer: This Material Safety Data Sheet was prepared in accordance with criteria and requirements of the Hazardous Products Act and the Controlled Products Regulations using information provided by the manufacturer and other sources including CCINFO (Chemical Information published by the Canadian Centre for Occupational Health and Safety). The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. TARGET PRODUCTS LTD. expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

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