

# Safety Data Sheets



## Burnt Umber Pbr7

Product code: PS-MI0080

Department: iron oxides dry pigments

C.A.S. : 12713-03-0, 1309-37-1, 1317-34-6, 1317-65-3, 1333-86-4, 51274-00-1, 14808-60-7

### Section: 1 Identification

Product name : Umbers, Solid  
Synonyms : burnt umber, umer  
Usage : coloring material, pigmentation or intermédiaire chemical.  
Index de couleur : Pbr7  
Chemical family: inorganic pigment  
Molecular formula :  $\text{Fe}_2\text{O}_3 + \text{MnxO}_y + \text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{H}_2\text{O} (3)$

### Section: 2 Hazard Identification

INGREDIENT	CAS#	ACGIH TLV (TWA)	CONCENTRATION %
Umber	12713-03-0	- 60 100	
C.I. Pigment red 101	1309-37-1	5 mg/m <sup>3</sup> as Fe (Dust and Fume)	10 60
Manganite	1317-34-6	- < 20	
Calcium Carbonate	1317-65-3	- < 10	
Carbon Black	1333-86-4	3.0 mg/m <sup>3</sup> 1 5	
C.I. Pigment yellow 42	51274-00-1	5 mg/m <sup>3</sup> as Fe (Dust and Fume)	< 5
Crystalline silica, Quartz	14808-60-7	0.025 mg/m <sup>3</sup> *A2 1 5	

A2 = Suspected Human Carcinogen (ACGIH-A2).

### HGS Label Elements



**Signal Word**

Danger

**GHS Classification**

Carcinogenicity-Cat.1  
 Carcinogenicity-Cat.1A  
 Carcinogenicity-Cat.2  
 Specific target organ toxicity -repeated exposure-Cat.1  
 Combustible dust-Cat.1

**Precautionary Statements**

P201 Obtain special instructions before use.  
 P202 Do not handle until you read and understand all safety precautions.  
 P280 Wear protective gloves / protective clothing / eye protection / face protection.  
 P281 Use personal protective equipment as required.  
 P308 + P313 IF exposed or concerned: Get medical advice.  
 May form combustible dust concentrations in air

**Hazard statements**

H350 May cause cancer

**Section: 3 Composition / Information on Ingredients**

INGREDIENT	CAS#	ACGIH TLV (TWA))	CONCENTRATION %
Umber	12713-03-0	-	60 100
C.I. Pigment red 101	1309-37-1	5 mg/m <sup>3</sup> as Fe (Dust and Fume)	10 60
Manganite	1317-34-6	-	< 20
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**Section: 4 First Aid Measures**

Inhalation :	If respiratory problems arise, move the victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical advice IMMEDIATELY.
Skin contact :	Start flushing while removing contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice.
Eye Contact:	Immediately flush eyes thoroughly for 15 minutes with running water. Hold eyelids open during flushing. If irritation persists, repeat flushing.
Ingestion :	Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing, rinse mouth out and give 1/2 to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention IMMEDIATELY.
Note to Physicians:	Treat symptomatically. Medical conditions that may be aggravated by exposure to this product include neurological and cardiovascular disorders, diseases of the skin, eyes or respiratory tract, preexisting liver and kidney disorders.

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## Section: 5 Fire Fighting Measures

Flashpoint (°C)	Autolgnition Temperature (°C)	Flammability Limits in Air (%):	
Does not flash.	Not applicable.	LEL	UEL
		Not applicable.	Not applicable.
Flammability Class (WHMIS):		not regulated.	
Hazardous Combustion Products:		Thermal decomposition products are toxic and may include silicon, oxides of aluminum, iron, manganese and irritating gases.	
Unusual Fire or Explosion Hazards:		Minimize air borne spreading of dust. Spilled material may cause floors and contact surfaces to become slippery. Ignites on contact with fluorine. Do not flush with water as aqueous solutions or powders that become wet render surfaces extremely slippery.	
Sensitivity to Mechanical Impact:		Not expected to be sensitive to mechanical impact.	
Rate of Burning:		Not available..	
Explosive Power:		Not available.	
Sensitivity to Static Discharge:		Not expected to be sensitive to static discharge.	
EXTINGUISHING MEDIA			
Fire Extinguishing Media:		Use media appropriate for surrounding fire and/or materials: Foam. Dry chemical, carbon dioxide or water spray.	
FIRE FIGHTING INSTRUCTIONS			
Instructions to the Fire Fighters:		Fire-exposed containers should be kept cool by spraying with water to reduce pressure. Spilled material may cause floors and contact surfaces to become slippery. Do not flush with water as aqueous solutions or powders that become wet render surfaces extremely slippery.	
Fire Fighting Protective Equipment:		Use self-contained breathing apparatus and protective clothing.	

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## Section: 6 Accidental Release Measures

Information in this section is for responding to spills, leaks or releases in order to prevent or minimize the adverse effects on persons, property and the environment. There may be specific reporting requirements associated with spills, leaks or releases, which change from region to region.

Containment and Clean-Up Procedures:	<p>In all cases of leak or spill contact vendor at Emergency Number shown on the front page of this MSDS. Minimize air borne spreading of dust. Wear respirator, protective clothing and gloves. Avoid dry sweeping. Do not use compressed air to clean surfaces. Vacuuming or wet sweeping is preferred. Return all material possible to container for proper disposal. Do not allow to enter sewers or watercourses. Collect product for recovery or disposal. Ventilate enclosed spaces. Notify applicable government authority if release is reportable or could adversely affect the environment.</p> <p>Where a package (drum or bag) is damaged and / or leaking, repair it, or place it into an over-pack drum immediately so as to avoid or minimize material loss and contamination of surrounding environment. Any recovered product can be used for the usual purpose, depending on the extent and kind of contamination.</p>
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## Section: 7 Handling And Storage

Handling Practices:	Use normal "good" industrial hygiene and housekeeping practices. Minimize air borne spreading of dust. Clean up immediately to eliminate slipping hazard.
Ventilation Requirements:	See Section 8, "Engineering Controls".
Other Precautions:	Use only with adequate ventilation and avoid breathing dusts. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing thoroughly before reuse. Use only with adequate ventilation and avoid breathing dusts. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing thoroughly before reuse.
<b>STORAGE</b>	
Storage Temperature (°C):	See below.
Ventilation Requirements:	General exhaust is acceptable.
Storage Requirements:	Store in a cool, dry and well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Prolonged storage may result in lumping or caking. Protect from direct sunlight. Protect against physical damage.
Packaging material :	Materials of construction for storing the product include: Multi-layer paper bags or sacks. Confirm suitability of any material before using.

## Section: 8 Exposure Control/Personal Protection

INGREDIENTS	ACGIH TLV	OSHA PEL	NIOSH
	STEL	TWA STEL	TWA STEL
Umber	-	- -	- -
C.I. Pigment red 101	-	10 mg/m <sup>3</sup> - (fume)	5 mg/m <sup>3</sup> - as Fe (dust and fume)
Manganite	-	- -	- -
calcium carbonate	-	15 mg/m <sup>3</sup> - (total dust)	10 mg/m <sup>3</sup> - (total dust)
Carbon black	-	3.5 mg/m <sup>3</sup> -	3.5 mg/m <sup>3</sup> --
C.I. Pigment yellow 42	-	10 mg/m <sup>3</sup> - (fume)	5 mg/m <sup>3</sup> - as Fe (dust and fume)
Crystalline silica, quartz	-	30 mg/m <sup>3</sup> 10 mg/m <sup>3</sup> (% SiO <sub>2</sub> +total dust)	0.05 mg/m <sup>3</sup> - (breatheable dust)

Recommendations listed in this section indicate the type of equipment, which will provide protection against overexposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

### ENGINEERING CONTROLS

Engineering Controls: Local exhaust ventilation required. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Ventilate low lying areas such as sumps or pits where dense dust may collect.

### PERSONAL PROTECTIVE EQUIPMENT

Eye Protection: Safety glasses with side shields are recommended to prevent eye contact. Use chemical safety goggles when there is potential for eye contact. Contact lenses should not be worn when working with this material.

Skin Protection: Gloves and protective clothing made from leather, neoprene, PVC or rubber should be impervious under conditions of use. Prior to use, user should confirm impermeability. Discard contaminated gloves.

Respiratory Protection: No specific guidelines available. A NIOSH/MSHA-approved air-purifying respirator equipped with dust, mist, fume cartridges for concentrations up to 1.0 mg/m<sup>3</sup> Silica, Crystalline Quartz. An air-supplied respirator if concentrations are higher or unknown.

Other Personal Protective Equipment: Wear regular work clothing. The use of coveralls is recommended. Locate safety shower and eyewash station close to chemical handling area. Take all precautions to avoid personal contact.

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## Section: 9 Physical and Chemical Properties

Physical State:	Solid.
Appearance:	Black to brownish-black granules or powder.
Odour:	Odourless.
Odour Threshold (ppm):	Not available.
Boiling Range (°C):	Not applicable.
Melting/Freezing Point (°C):	Not available.
Vapour Pressure (mm Hg at 20° C):	Not applicable.
Vapour Density (Air = 1.0):	Not applicable.
Relative Density (g/cc):	3.0 to 3.6 g/cc
Viscosity:	Not applicable.
Evaporation Rate (Butyl Acetate = 1.0):	Not applicable.
Solubility:	Not soluble in water.
% Volatile by Volume:	Not available.
pH:	6.5 to 7.5
Coefficient of Water/Oil Distribution:	Not applicable.
Volatile Organic Compounds (VOC):	Not applicable.
Flashpoint (°C):	Does not flash.

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## Section: 10 Stability And Reactivity

Under Normal Conditions:	Stable.
Under Fire Conditions:	Not flammable.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	High temperatures, sparks, open flames and all other sources of ignition. Minimize air borne spreading of dust. Keep tightly closed to protect quality.
Materials to Avoid:	Strong oxidizers. Strong acids. Contact with acids will liberate carbon dioxide gas. Material contains Manganite, which, when exposed to acids, can liberate hazardous gases. (3)
Decomposition or Combustion products:	Thermal decomposition products are toxic and may include silicon, oxides of aluminum, iron, manganese and irritating gases.

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## Section: 11 Toxicological Information

ingredients	LD50 (oral, rat)	LD50 (dermal,rabbit)	LC50
C.I. Pigment red 101	5 000 10 000 mg/kg(3)	-	-
Calcium carbonate	-	-	-
Carbon black	> 15 400 mg/kg(1)	> 3 000 mg/kg(1)	-
C.I. Pigment yellow 42	> 5 000 mg/kg(3)	-	-
Crystalline silica, quartz	500 mg/kg(4)	-	-

Carcinogenicity Data: Silica, Crystalline Quartz is classified as carcinogenic by IARC ( International Agency for Research on Cancer) ( IARC-1 ). Carbon Black is classified as a suspected carcinogen by IARC ( IARC-2B ).

Reproductive Data: No adverse reproductive effects are anticipated.

Mutagenicity Data: No adverse mutagenic effects are anticipated.

Teratogenicity Data: No adverse teratogenic effects are anticipated.

Respiratory / Skin Sensitization Data: None known.

Synergistic Materials: None known.

Other Studies Relevant to Material:

Silica, Crystalline Quartz: Foreign body reactions (granulomas) have been observed after crystalline silica was accidentally introduced under the skin as a result of injury. The effects were often delayed for periods ranging from weeks to more than 50 years. (4)

Silicosis and alveolar proteinosis have been observed in several different species following exposures from one week to 27 months. (4)

Rats exposed for 28 days to 38 and 50 mg/Kg of pure alpha-quartz developed silicosis and alveolar proteinosis after 34 weeks. Silicosis similar to that seen in humans was observed in rats exposed to 30,000 particles/mL quartz dust for up to 420 days. Alveolar proteinosis was observed following exposure of rats to 40 mg/M3 pure quartz for 12 weeks. (4)

Studies have shown an increased incidence of lung tumours in rats following exposure to quartz by inhalation for up to 2 years. Female mice exposed to quartz for up to 570 days had no increased incidence in lung tumors. The International Agency for Research on Cancer has determined that there is sufficient evidence that crystalline silica is carcinogenic to experimental animals. (4)

The frequency of chromosomal aberrations and sister chromatid exchange was elevated in a group of 50 employees exposed to stone dust. The stone dust was mainly composed of silica (50-60%) and other metal oxides. These observations could not be explained by the consumption of alcohol and/or smoking, and other confounding factors were not studied. (4)

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## Section: 12 Ecological Information

Ecotoxicity:	Not available. May be harmful to aquatic life.
Environmental Fate:	Not available. Product has an unaesthetic appearance and can be a nuisance. May be hazardous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds, or rivers.

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## Section: 13 Disposal Considerations

Deactivating Chemicals:	None required.
Waste Disposal Methods:	This information applies to the material as manufactured. Reevaluation of the product may be required by the user at the time of disposal since the product uses, transformations, mixtures and processes may influence waste classification. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.
Safe Handling of Residues:	See "Waste Disposal Methods".
Disposal of Packaging:	Empty containers retain product residue and can be hazardous. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local, provincial and federal regulations.

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## Section: 14 Transport Information

TDG classification	This product is not regulated by TDG. (Canada)
DOT classification	This product is not regulated by DOT.

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## Section: 15 Regulatory Information

### CANADA

CEPA NSNR: All components of this product are included on the DSL.

CEPA NPRI: Not included.

Controlled Products Regulations Classification (WHMIS): D-2A: Very Toxic (carcinogen, chronic effects)

### USA

Environmental Protection Act: All components of this product are included on the TSCA inventory.

OSHA HCS (29CFR 1910.1200):

Chronic Effects, Carcinogenic.

NFPA :

Health, Fire, Reactivity (Not available.)

HMIS :

1 Health, 0 Fire, 0 Reactivity (3)

### INTERNATIONAL

Not available.

Proposition 65 (California)

This product contains a chemical known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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## Section: 16 Other Information

1. RTECS-Registry of Toxic Effects of Chemical Substances, Canadian Centre for Occupational Health and Safety RTECS database.
2. Clayton, G.D. and Clayton, F.E., Eds., Patty's Industrial Hygiene and Toxicology, 3rd ed., Vol. IIA,B,C, John Wiley and Sons, New York, 1981.
3. Supplier's Material Safety Data Sheet(s).
4. CHEMINFO chemical profile, Canadian Centre for Occupational Health and Safety, Hamilton, Ontario, Canada.
5. Guide to Occupational Exposure Values, 2011, American Conference of Governmental Industrial Hygienists, Cincinnati, 2011.

Reference            Manufacturer's material safety data sheet  
Prepared by        Kama pigments

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