



SAFETY DATA SHEET

Issue Date 19-Aug-2019

Revision Date 01-Jul-2020

Version 2

BPC

Brickform Powdered Color

1. IDENTIFICATION

Product identifier

Product Name Brickform Powdered Color

Other means of identification

Product Code BPC

Recommended use of the chemical and restrictions on use

Recommended Use Restricted to professional users.

Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address	Manufacturer Address
Solomon Colors, Inc. 4050 Color Plant Road Springfield, IL 62702	Solomon Colors, Inc. 4050 Color Plant Road Springfield, IL 62702

Company Phone Number 800-624-0261 (US & Canada); 217-522-3112 (Outside North America)

24 Hour Emergency Phone Number 1-800-373-7543

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This product is classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200 (known as HCS 2012).

Label elements

Emergency Overview

Warning

May form combustible dust concentrations in air

Appearance Granular

Physical state Granular Solid

Odor Slight

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Mixture, This SDS represents all color combinations and the components listed below will vary based on product.

Chemical Name	CAS No.	Weight-%	Trade Secret
Yellow Iron Oxide	51274-00-1	Variable	*
Red Iron Oxide	1309-37-1	Variable	*
Chrome Oxide	1308-38-9	Variable	*
Carbon Black	1333-86-4	Variable	*
Black Iron Oxide	1317-61-9	Variable	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice No hazards which require special first aid measures. If symptoms persist, call a physician.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Wash off immediately with plenty of water.

Inhalation Remove to fresh air. If symptoms persist, call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Self-protection of the first aider Use personal protection recommended in Section 8.

Most important symptoms and effects, both acute and delayed

Symptoms Contact with eyes and skin may cause mild, mechanical irritation. Dust may cause irritation of the respiratory tract. See section 8 of this sheet for exposure limits.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water. Dry chemical, Carbon Dioxide, Foam, Sand. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Thermal decomposition can lead to the release of irritating gases and vapors. Carbon monoxide. Carbon dioxide (CO₂).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes. (as dust).

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Avoid creating dust. With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Use personal protective equipment as required.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Incompatible materials Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Where exposure limits have not been established for specific components of this material, please observe the OSHA and ACGIH established limits for particulates not otherwise classified (PNOC). OSHA PEL: [15 mg/m³ (total dust) 8-hr TWA], [5 mg/m³ (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m³ (inhalable) 8-hr TWA], [3 mg/m³ (respirable) 8-hr TWA].

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Red Iron Oxide 1309-37-1	TWA: 5 mg/m ³ respirable particulate matter	TWA: 10 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ fume and total dust Iron oxide (vacated) TWA: 5 mg/m ³ respirable fraction regulated under Rouge	IDLH: 2500 mg/m ³ Fe dust and fume TWA: 5 mg/m ³ Fe dust and fume
Chrome Oxide 1308-38-9	-	TWA: 0.5 mg/m ³ Cr (vacated) TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III) TWA: 0.5 mg/m ³ Cr
Carbon Black 1333-86-4	TWA: 3 mg/m ³ inhalable particulate matter	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Granular Solid	Odor	Slight
Appearance	Granular	Odor threshold	No information available
Color	Color will vary		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	5-10		
Melting point/freezing point	> 500 °C	estimated	
Boiling point / boiling range	No information available		
Flash point	.	Not applicable (solid)	
Evaporation rate	Not applicable		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	No information available		
Water solubility	< 1%		

Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	Not applicable
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause irritation of respiratory tract. Dust may cause irritation of respiratory tract. See section 8 of this sheet for exposure limits.
Eye contact	May cause mechanical irritation (abrasion).
Skin Contact	May cause mechanical irritation (abrasion).
Ingestion	Not for human consumption. May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Red Iron Oxide 1309-37-1	> 10000 mg/kg (Rat)	-	-
Chrome Oxide 1308-38-9	> 5000 mg/kg (Rat)	-	-
Carbon Black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
Black Iron Oxide 1317-61-9	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms High dust concentration may cause mechanical irritation to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not classified. (Based on mixture components.).
Serious eye damage/eye irritation	Not classified. (Based on mixture components.).
Sensitization	Not Classified. This product does not contain known sensitizers at levels > or equal to 0.1%.
Germ cell mutagenicity	Not classified. (Based on mixture components.).
Carcinogenicity	Not classified. (Based on mixture components.). The table below indicates whether each agency has listed any ingredient as a carcinogen. Carbon Black - Not a hazardous substance or preparation according to the Global Harmonized System (GHS). In 1995 IARC concluded, "There is inadequate evidence in humans for the carcinogenicity of carbon black." Based on rat inhalation studies IARC concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black". IARC's overall evaluation was that "Carbon black is possibly carcinogenic to humans (Group 2B)." This conclusion was based on IARC's guidelines, which require such a classification if one animal species exhibits carcinogenicity in two or more studies. Lung tumors in rats are the result of exposure under "lung overload" conditions. The development of lung tumors in rats is specific to this species. Mouse and hamster showed no carcinogenicity in similar studies. In 2006 IARC re-affirmed its 1995 classification of carbon black as Group 2B (possibly carcinogenic to humans). Overall, as a result of the detailed epidemiological investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated. This view is consistent with the IARC evaluation in 2006. Furthermore, several epidemiological and clinical studies of workers in the carbon black production industries show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black. No dose response relationship was observed in workers exposed to carbon black. Applying the rules of the Globally Harmonized System of Classification and Labeling (GHS, e.g. UN 'Purple Book', EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labeling states, that "lung overload" in animals is listed under mechanism not relevant to humans. This material may contain approximately 100 ppm hexavalent Chromium. Chromium hexavalent (VI) compounds are known to be human carcinogens based on

sufficient evidence of carcinogenicity from studies in humans.

Chemical Name	ACGIH	IARC	NTP	OSHA
Red Iron Oxide 1309-37-1	-	Group 3	-	-
Chrome Oxide 1308-38-9	-	Group 3	-	-
Carbon Black 1333-86-4	A3	Group 2B	-	X

*IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
Group 2B - Possibly Carcinogenic to Humans*

Reproductive toxicity Not classified. (Based on mixture components.)
STOT - single exposure Not classified. (Based on mixture components.)
STOT - repeated exposure Not classified. (Based on mixture components.)
Aspiration hazard Not applicable.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

This product has not been fully evaluated on the product level.

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261). Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status
Chrome Oxide 1308-38-9	Toxic Corrosive Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Green Brickform Dry Integral Colors that contain a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	SARA 313 - Threshold Values %
Chrome Oxide - 1308-38-9	1.0

SARA 311/312 Hazard Categories

See section 2 for more information

CWA (Clean Water Act)

The substance listed below is a regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42). The Green Brickform Integral colors contain Chrome Oxide.

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chrome Oxide 1308-38-9	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Carbon Black - 1333-86-4	Carcinogen
Quartz, Crystalline Silica - 14808-60-7	Carcinogen
Hexavalent chromium - 18540-29-9	Carcinogen Developmental Female Reproductive Male Reproductive

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations. For more information, please contact your sales or technical representative.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 1	Flammability 1	Reactivity 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X

Prepared By Solomon Colors - Lab Technical Services
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Revision Note
Periodic Review

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet