



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
the 2012 OSHA Hazard Communication Standard.
(29 CFR § 1910.1200).

Date of document:

Origination: 22-Jun-2022	Last Regulatory Review 16-May-2024	Print 16-May-2024
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1. IDENTIFICATION

Product identifier

Product identifier **88N10598**
Product Name: **MUNSELL BROWN PVC DISPERSION**

Other means of identification

CAS Number: Mixture
Synonyms None
Supplied By Penn Color, Inc.
400 Old Dublin Pike
Doylestown, PA 18901

Recommended use of the chemical and restrictions on use

Recommended Use: FOR INDUSTRIAL USE ONLY!
Restrictions on use No information available
Uses advised against: No information available

Details of the supplier of the safety data sheet

<u>Manufacturer:</u> Penn Color, Inc. 400 Old Dublin Pike Doylestown, PA 18901	<u>Company Phone Number</u> +1 (215) 997-2221	<u>Facsimile:</u> +1 (215) 822-5801
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Contact Point Product Stewardship Team
SDS Inquiries: msds@penncolor.com
Regulatory Inquiries: regulatory@penncolor.com
Web Address: www.penncolor.com

Emergency Telephone Number:**Chemtrec USA: 1 (800) 424-9300 or +1 (703) 527-3887****Chemtrec In-Country:**

Argentina: +54 11 5983-9431

Brazil: Rio De Janeiro +55 21 3958-1449

Brazil: Sao Paulo +55 11 4349-1359

Brazil: Toll Free - Mobile Enabled 0800 892 0479

Chile: Santiago +56 2 2581 4934

Colombia: Bogota +57 601 7942539

Columbia: Toll Free 01-800-7102151

Chemtrec Registrant Identifier:**Penn Color, Inc. CCN - 16979****2. HAZARDS IDENTIFICATION****Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

None

EMERGENCY OVERVIEW**Classification**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Signal word

None

Hazard statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Physical state Solid

Appearance: Pellets

Odor: No information available

Precautionary Statements - Prevention

None

Precautionary Statements - Response

None

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

None

Other Information:

Other hazards None

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

ATEmix (oral) 99,999.00 mg/kg

ATEmix (dermal) 99,999.00 mg/kg

ATEmix 99,999.00 ppm

(inhalation-gas)

ATEmix 99,999.00 mg/L

(inhalation-dust/mist)

ATEmix 99,999.00 mg/L

(inhalation-vapor)

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

Acute oral toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Acute dermal toxicity 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

Acute inhalation toxicity - gas 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute inhalation toxicity - vapor - 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Acute inhalation toxicity - dust/mist - 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health

4. FIRST AID MEASURES

Description of first aid measures

- | | |
|---------------------|---|
| Eye contact | <ul style="list-style-type: none">• Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician |
| Skin contact | <ul style="list-style-type: none">• Wash skin with soap and water |
| Inhalation | <ul style="list-style-type: none">• Remove to fresh air |
| Ingestion | <ul style="list-style-type: none">• Clean mouth with water and drink afterwards plenty of water |

Most important symptoms and effects, both acute and delayed

- | | |
|-----------------|--|
| Symptoms | <ul style="list-style-type: none">• No information available |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

- | | |
|---------------------------|---|
| Note to physicians | <ul style="list-style-type: none">• Treat symptomatically |
|---------------------------|---|

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media	<ul style="list-style-type: none">• CO2, dry chemical, dry sand, alcohol-resistant foam
Unsuitable extinguishing media	<ul style="list-style-type: none">• Caution: Use of water spray when fighting fire may be inefficient
Specific hazards arising from the chemical	<ul style="list-style-type: none">• No information available
Hazardous combustion products	<ul style="list-style-type: none">• Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, and other toxic compounds.

Explosion data

Sensitivity to Mechanical Impact	<ul style="list-style-type: none">• None
Sensitivity to Static Discharge	<ul style="list-style-type: none">• None
Special protective equipment for fire-fighters	<ul style="list-style-type: none">• Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	<ul style="list-style-type: none">• Ensure adequate ventilation
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Methods and material for containment and cleaning up

Methods for containment	<ul style="list-style-type: none">• Prevent further leakage or spillage if safe to do so
Methods for cleaning up	<ul style="list-style-type: none">• Pick up and transfer to properly labeled containers
Prevention of secondary hazards	<ul style="list-style-type: none">• Clean contaminated objects and areas thoroughly observing environmental regulations
Reference to other sections	<ul style="list-style-type: none">• See Section 12 for additional Ecological Information

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 None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7 10 - < 20	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
Ba Compound 41 3 - < 5	TWA: 0.5 mg/m ³ Ba	TWA: 0.5 mg/m ³ Ba regulated under CAS 7440-39-3	IDLH: 50 mg/m ³ Ba
Diarylide Pigment 1 - < 3		See Note	
Carbon black 1333-86-4 1 - < 3	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

Note

For more information regarding the hazards of carbon black, please see **Section 11**.

For more information regarding the hazards of titanium dioxide, please see **Section 11**.
For more information regarding the hazards of diarylide pigments processed at elevated temperatures, please see the discussion of hazardous decomposition products in **Section 10**.

Appropriate engineering controls

Engineering controls

- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

General hygiene considerations

- Handle in accordance with good industrial hygiene and safety practice

Eye/face protection

- Wear safety glasses with side shields (or goggles)

Hand protection

- Wear suitable gloves

Skin and body protection

- Wear suitable protective clothing

Respiratory protection

- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance:	Pellets
Color	brown
Odor:	No information available
Odor Threshold:	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No data available	None known	
Melting point / freezing point	No data available	None known	
Boiling point / boiling range °C	No data available	None known	
Flash point	No data available	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	

Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Bulk Density	No data available	None known
Relative Density	No data available	None known
Water Solubility	No data available	None known
Solubility in Other Solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Hyphen	No data available	None known
Kinematic Viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No data available
Oxidizing Properties	No data available
Softening Point	No data available
Molecular weight	No data available

10. STABILITY AND REACTIVITY

Reactivity	Stable
Chemical stability	Stable
Possibility of hazardous reactions	None under normal processing
Conditions to avoid	Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation, freezing temperatures.
Incompatible materials	None known based on information supplied
Hazardous decomposition products	Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, and other toxic compounds, Information supplied to Penn Color indicates that diarylide pigments in polymers can decompose at temperatures above 200° C to produce trace amounts of 3,3'

Dichlorobenzidine. The amount and species of degradation products formed depends on the temperature, dwell time, formulation and processing conditions of the product

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available
Eye contact	Specific test data for the substance or mixture is not available
Skin contact	Specific test data for the substance or mixture is not available
Ingestion	Specific test data for the substance or mixture is not available

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available
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Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral)	99,999.00 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-dust/mist)	99,999.00 mg/L
ATEmix (inhalation-vapor)	99,999.00 mg/L

Unknown Acute Toxicity	0 % of the mixture consists of ingredient(s) of unknown toxicity
Acute oral toxicity	0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
Acute dermal toxicity	0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

Acute inhalation toxicity - 0 % of the mixture consists of ingredient(s) of unknown acute inhalation

gas toxicity (gas)

Acute inhalation toxicity - vapor 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Acute inhalation toxicity - dust/mist 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)		= 5.09 mg/L (Rat) 4 h
Ba Compound 41	> 1000 mg/kg (Rat)		> 5.24 mg/L (Rat) 4 h
Diarylide Pigment		> 3000 mg/kg (Rat)	> 230 mg/L (Rat) 4 h
Carbon black 1333-86-4	> 15400 mg/kg (Rat)		> 4.6 mg/m ³ (Rat) 4 h

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

Skin corrosion/irritation No information available

Serious eye damage/eye irritation No information available

Respiratory or skin sensitization No information available

Germ cell mutagenicity No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7	A3	Group 2B		X
Carbon black 1333-86-4	A3	Group 2B		X
Paraffinic Solvent	A2	Group 1		X

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Other information

This product has not been reviewed for carcinogenicity by IARC, NTP or OSHA. It contains carbon black, which is considered hazardous, and for which exposure limits have been established. IARC classifies carbon black as a category 2B carcinogen (known animal carcinogen, possible human carcinogen) based on inhalation studies with animals. At this time neither NTP nor OSHA has classified carbon black as a carcinogen. All of the hazards attributed to carbon black relate to inhalation of respirable size particles when it is in its powdered form. Our products, in the form provided (liquid, paste, or pellets), do not contain carbon black in a powder form, and it is not expected that carbon black particles of respirable size would be generated during normal use of this product. For additional information, see **Section 15**.

This product has not been reviewed for carcinogenicity by IARC, NTP, OSHA or ACGIH. It contains titanium dioxide which is not listed as a carcinogen by NTP, OSHA, or ACGIH. However, in 2006, IARC released Monograph Vol. 93 in which it reclassified titanium dioxide from not classifiable as to its carcinogenicity to humans (Group 3) to possibly carcinogenic to humans (Group 2B). The reclassification was based on two studies in which rats were exposed to extremely high concentrations of titanium dioxide pigment powders in a closed chamber for extended periods of time. It is important to note that the results of epidemiology studies which evaluated more than 20,000 titanium dioxide industry workers in Europe and the US did NOT suggest a carcinogenic effect from titanium dioxide dust on the human lung or mortality from other chronic diseases including respiratory diseases not associated with titanium dioxide dust. Based upon the results of these studies, the pigment manufacturer(s) conclude that TiO₂ will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace. For additional information, see **Section 15**

Reproductive toxicity

No information available

Developmental Toxicity

No information available

Teratogenicity	No information available
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Target organ effects	No information available
Subchronic Toxicity	No information available
Neurological Effects	No information available
Other Adverse Effects	No information available
Aspiration hazard	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component Information

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ba Compound 41		LC50: >500mg/L (96h, Brachydanio rerio)		EC50: >2.2mg/L (48h, Daphnia magna)

Persistence and degradability No information available

Bioaccumulation No information available

Component Information

Chemical name	Partition coefficient
Ba Compound 41	1.69
Diarylide Pigment	0.4

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

- Dispose of in accordance with local regulations
- Dispose of waste in accordance with environmental legislation

Contaminated packaging

- Do not reuse empty containers

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Ba Compound 41	Toxic

14. TRANSPORT INFORMATION

USDOT:

Status Not regulated

ICAO (air)

Status Not regulated

IMO:

Status Not regulated

15. REGULATORY INFORMATION

International Inventories:

United States: All components of this product are designated as “Active” on the TSCA Inventory or are not required to be listed.

Inventory Note: For additional global inventory information, please contact the Product Stewardship Team at regulatory@penncolor.com

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations:

CWA (Clean Water Act):

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	Weight-%	SARA - Section 313:
Ba Compound 41	3 - < 5	= 1.0 % de minimis concentration

SARA 311/312 Hazard Categories:

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

US State Regulations:

California Proposition 65:

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Titanium Dioxide 13463-67-7	Carcinogen
Ba Compound 41	Carcinogen
Carbon black 1333-86-4	Carcinogen

Note:

1.) The listing of carbon black in the CA PROP 65 REGULATION specifically pertains to airborne, unbound, carbon black particles of respirable size, meaning that all three criteria must be met before carbon black would be considered a carcinogen according to the requirements of CA PROP 65. Our products, in the form provided (liquid, paste or pellets), do not contain carbon black in a powder form, and it is not expected that carbon black particles of respirable size would be generated during normal use of this product. For additional information, see **Section 11**.

2.) The listing of titanium dioxide in the CA PROP 65 REGULATION specifically pertains to airborne, unbound, titanium dioxide particles of respirable size, meaning that all three criteria must be met before titanium dioxide would be considered a carcinogen according to the requirements of CA PROP 65. Our products, in the form provided (liquid, paste or pellets), do not contain titanium dioxide in a powder form, and it is not expected that titanium dioxide particles of respirable size would be generated during normal use of this product. For additional information, see **Section 11**.

This product may contain trace levels of metal impurities that are on the California Proposition 65 list. This product may also contain other substances on the California Prop 65 list at levels below 1000 ppm. For some of these substances, their listings are qualified as specifically relating to airborne, unbound particles of respirable size. If additional information is needed please send a request to msds@penncolor.com.

U.S. State Right-to-Know Regulations:

US State Regulations:

Chemical name	Massachusetts Right to Know List:	New Jersey Right to Know List:	Pennsylvania Right to Know List:	Pennsylvania RTK - Special Hazardous Substances:
Titanium Dioxide 13463-67-7	X	X	X	
Ba Compound 41		X	X	
Carbon black 1333-86-4	X	X	X	
Paraffinic Solvent	X			

Note:

For more information regarding the hazards of carbon black, please see **Section 11**.
For more information regarding the hazards of titanium dioxide, please see **Section 11**.

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

HMIS Health Rating:

Health hazards	1
Flammability	1
REACTIVITY:	0
PERSONAL PROTECTION:	X

Key literature references and sources for data used to compile the SDS

- Supplier documentation
- Process documentation

Date of document:

Origination:	22-Jun-2022
Last Regulatory Review	16-May-2024
Print Date:	16-May-2024

Revision Note:

Revision Date:	22-Jun-2022
Revision Number:	1
Reason for Revision	No information available

Disclaimer

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