SAFETY DATA SHEET

Issue Date 06-Nov-2018 **Revision Date** 21-Apr-2020 **Version** 3

COLORFLO WHITE **ColorFlo White 600**

1. IDENTIFICATION

Product identifier
Product Name ColorFlo White 600

Other means of identification
Product Code COLORFLO WHITE

Recommended use of the chemical and restrictions on use
Recommended Use Coloring agent for Concrete.
Uses advised against Consumer use

Details of the supplier of the safety data sheet
Manufacturer Address
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 800-373-7542

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This product is NOT 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

Health injuries are not known or expected under normal use.

Appearance White Liquid **Physical state** Liquid **Odor** Characteristic

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Titanium Dioxide	13463-67-7	50-75	*
Water	7732-18-5	20-40	*

The ranges above account for batch-to-batch variability.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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

Skin Contact Wash skin with soap and water.

Inhalation Remove to fresh air.

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

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

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 None.

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 Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

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 Dike to collect large liquid spills. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

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 container tightly closed in a dry and well-ventilated place. Keep from freezing. Protect from sunlight. Store at temperatures not exceeding 80 °C/ 176 °F.

Incompatible materials No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not present an inhalation hazard in its current physical form. However, activities such as spraying, misting, burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates and in those cases the exposure limits listed bellow would apply.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m³ TWA: 2.4 mg/m³ CIB 63 fine TWA: 0.3 mg/m³ CIB 63 ultrafine, including engineered nanoscale

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 In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	White Liquid	**Odor**	Characteristic
Color	White	**Odor threshold**	Not applicable

Property	Values	Remarks • Method
pH	8.0 - 10.0	
Melting point/freezing point	Approximately 0 °C / 32 °F	

Boiling point / boiling range	Approximately 100 °C / 212 °F	
Flash point	No information available	
Evaporation rate	< 1	
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	Miscible	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	180°C / 356°F	
Kinematic viscosity	No information available	
Dynamic viscosity	900-1300 cP	@ 20 °C
Explosive properties	Not an explosive	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	16.0 -16.6 lbs/gal

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
No information available.

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 The product is not known to present an acute toxicity hazard based on known or supplied information for the mixture components.

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin Contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

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). This product exists in a liquid form which prevents particles within the fine fraction size range from becoming airborne. Titanium Dioxide is intrinsically bound to the product matrix. Titanium Dioxide - In 2006, the International Agency for Research on Cancer (IARC) evaluated TiO2 as “possibly carcinogenic to humans” (Group 2B) based primarily on studies in rats. Inhalation exposures to TiO2 in rats can result in lung effects and lung tumors. However, it is generally recognized that the rat is uniquely sensitive to the effects of “lung overload” which is not observed in other species including humans (Ref. 6). These facts are supported by the results from four large epidemiology studies involving more than 20,000 workers in the titanium dioxide manufacturing industry in North America and Europe which indicate no association with an increased risk of cancer or with any other adverse lung effects (Ref. 1,2,3,4,5,7).These studies did not specifically differentiate between the ultrafine and pigmentary TiO2. References: 1. Boffetta P, Gaborieau V, Nadon L, Parent M-E, Weiderpass E, Siemiatycki J. (2001). Exposure to titanium dioxide and risk of lung cancer in a population-based study from Montreal. Scand. J. Work Environ. Health 27:227-232. 2. Boffetta P., Soutar A., Cherrie J., Granath F., Andersen A., Anttila A., Blettner M., Gaborieau V., Klug S., Langard S., Luce D., Merletti F., Miller B., Mirabelli D., Pukkala E., Adami H-O., and Weiderpass E. (2004). Mortality among workers employed in the titanium dioxide industry in Europe. Cancer Causes and Control 15(7):697-706. 3. Chen J, and Fayerweather W. (1988). Epidemiologic study of workers exposed to titanium dioxide. J. Occup.Med. 30(12):937-42. 4. Fryzek J, Chadda B, Marano D, White K, Schweitzer S, McLaughlin J, and Blot W. (2003). A cohort mortality study among titanium dioxide manufacturing workers in the United States. J. Occup. Environ. Med. 45(4): 400-09. 5. Garabrant D.H., Fine L.J., Oliver C., Bernstein L., and Peters J.M. (1987). Abnormalities oof pulmonary function and pleural disease among titanium metal production workers. Scand. J. Work Environ. Health 13(1):47-51. 6. Levy L. S. (1994). Squamous Lung Lesions Associated with Chronic Exposure by Inhalation of Rats to p-Aramid Fibrils (Fine Fiber Dust) and to Titanium Dioxide: Findings of a Pathology Workshop. In: Mohr, U (Ed), Toxic and carcinogenic effects of solid particles in the respiratory tract, ILSI Press, 473-478. 7. Ramanakumar AV, Parent ME, Latreille B, Siemiatycki J. (2008). Risk of lung cancer following exposure to carbon black, titanium dioxide and talc: results from two case-control studies in Montreal. Int J Cancer 122:183-9.

Chemical Name	ACGIH	IARC	NTP	OSHA

Titanium Dioxide 13463-67-7	-	Group 2B	-	X

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

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 classified. (Based on mixture components).

Numerical measures of toxicity - Product Information

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 Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
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): This product does not contain chemicals at levels that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
See section 2 for more information

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

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
1,4-Dioxane - 123-91-1	Carcinogen
Ethylene oxide - 75-21-8	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

NFPA	**Health hazards** 0	**Flammability** 1	**Reactivity** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 0	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

Prepared By Solomon Colors - Lab Technical Services
Issue Date 06-Nov-2018
Revision Date 21-Apr-2020
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